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Glass taking the lead: glass-informed filmmaking in creative practice

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Abstract

Growing from the extended field of glass, this practice-based research on the relationship between glassmaking and filmmaking in creative practice presents glass-informed filmmaking as an integration of these two disciplines situated in conversation with the fields of glass, craft, fine art, and cinema. Glass-informed filmmaking is a term developed through this thesis and the development of an experimental feature film *Light Keeper* that utilizes the glass-informed approach. Together these describe moving image projects that incorporate these two disciplines in a symbiotic way.

This research project identifies specific qualities of glass-informed filmmaking that are distinct from both glassmaking and filmmaking. These comprise of an approach based in tacit knowledge to developing and producing moving images, an intimate perspective to the materiality of glass as seen through lens-based media, and a necessity of glass-specific artisanal knowledge and its intuitive implementation in navigating successful glass-informed film productions.

Utilizing methodology rooted in autoethnography in examining a glass-informed filmmaker's process of producing a feature-length film, a model of glass-informed filmmaking practice arises. This process is discussed in relation to examples from both filmmaking and glassmaking traditions, including related festivals and publications, thus building a comprehensive perspective to an emerging niche of creative practice with a reference point in the screendance tradition. No prior research exists apart from mentions in exhibition catalogues and essays, as well as papers that touch upon specific aspects of this practice such as exhibiting craft films and optics. This discussion is extended to other creative fields through examining avant-garde cinema and topical debates within the crafts, and further elaborated by addressing pertinent topics such as artistic research, experimentation, and discipline-specific skill, technique, tradition, and knowledge.

The thesis is structured around the stages of film production to reflect the entwined relationship of written research and practice central to this enquiry. Where relevant, aspects of this practice are also discussed in relation to the different stages of creative process to give insight into the particularities of glass-informed practice.

Central contributions to knowledge presented in this thesis are establishing key terminology to describe glass-informed filmmaking, a discussion about this practice and its context as an introduction to academic enquiry, and the production of a pioneering glass-informed feature film and related commentary that highlights the fundamental aspects of glass-informed filmmaking practice, showing that the glass-informed filmmaker is essentially a sculptor of time and an active participant in glassmaking processes. This research describes glass-informed filmmaking as a yet underexplored approach with opportunities for expanding creative practice, and builds a foundation for further research.

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Film: Light Keeper

Light Keeper is a film that accompanies this thesis submission. A digital online screener of it can be viewed via the following link.

<https://sure.sunderland.ac.uk/id/eprint/12996/>

***Light Keeper* (digital edit)**

2020

HD video | b&w and colour | sound

01:02:46

Credits:

Written, directed & produced by

Crew

Original score by

Edited and visual effect by

Cast

The Girl

Student 1

Student 2

Student 3

Glass bubble produced by

Props produced by

Additional footage by

Riikka Haapasaari

Rodrigo Figueiredo

Lewis Harley

Peter Roberts

Riikka Haapasaari

Tom Lee

Natassia Cole

Dian Shi

Antonis Koutouzis

Anthony Amoako Attah

James Maskrey

Riikka Haapasaari

James Maskrey

Rosemary Power

Elmira Abolhassani

Mike Aparicio

Carissa Baktay

Mette Colberg

Duan Dongling
Jamie Gray
Rita Haapasaari
Asuka Ichijo
Ipek Kosova
Monette Larsen
Charlotte Matheson
Lida Marinkova
Maria Morales Lam
Nomonde Mxhalisa
Jenna Parfitt
Danielle M. Potwin
Judith Roux

Song "Selfishly, maybe"

Music by

Lyrics by

Vocals by

Peter Roberts
Riikka Haapasaari
Emilie Bold

Chapter 1: Introduction

This research project grows from my practice as a glass-informed filmmaker. What is a glass-informed filmmaker then? Prior to this research project I could not answer this question in a way that provided true insight into my practice, and a desire to be able to contextualise my own practice launched this research. In addition to my own work, I knew other artists¹ who had produced films² that seemed to be “glassy”, and addressing the lack of research into this emerging approach seemed even more important: not only for my own identity as an artist but also finding ways to best support and understand these practitioners.

“Glass-informed filmmaking” is a term I develop throughout this thesis, but for the sake of clarity, it is important to give the reader a preliminary idea of what this term means so that it can be further defined in the following chapters. Glass-informed films grow from the field of glass, and are produced by artists who have extensive training, skills, and insight into the tradition³ of glass. This enables these artists to have a unique awareness of the material of glass and how it exists in our society, and they incorporate this intimate knowledge about glass in the production of moving image projects and films. However, glass-informed filmmaking is not merely about portraying glass or related processes onscreen but about integrating tacit knowledge as it relates to glass into the filmmaking process in all levels: from storytelling and concept to production and editing of a film. It is a seamless integration of the traditions of filmmaking and glassmaking that gives

¹ To mention a few of these artists: Alexander Rosenberg, Anna Mlasowsky, Jocelyne Prince, Ngaio Fitzpatrick, Justin Ginsberg, and Maria Bang Espersen. I will talk about different artists and their films later on in this thesis where relevant, and primarily in chapter 2.

² I use the term “film” to refer to durational single channel moving image projects, and this includes both digital and analogue film. However, I wish to advise the reader that some writers I have quoted use alternative terms such as “movie” but are talking about the same thing.

³ I recognise the complicated history of the term “tradition”, especially as it relates to anthropology. See for instance Sean Mellon’s *Against Tradition* (2010). In this thesis I am using the term in referring to the well-established and sometimes historical approaches in glass, craft and film. I do not suggest these “traditions” are frozen in time or “pure” (see Mellon, 2010) and acknowledge that these are continuously evolving fields in interaction with practitioners, societies, and technical evolutions. The complexity of tradition is not in the core scope of my thesis and I have not been able to afford a more in-depth discussion about this term in this thesis but aim at using it respectfully and in uncomplicated ways, only when no other word can be used in its place without overly complicating readability.

shape to this emerging practice. Echoing Stanley Cavell's comparison between an actor and an actor onscreen (Cavell, 1979, p.17): a film about glass (such as a glass documentary) is a film *about glass* whereas glass-informed film, even if not in the conventional sense, *is glass* as it is the product of glassmaking processes⁴.

This research is practice-based, and central to it is the production of *Light Keeper*, a glass-informed feature film⁵. The production and aspects of this film are described throughout this thesis as they provide valuable insight into the process of a glass-informed filmmaker and their films, as indeed “[e]very film trains its spectator” (Bordwell, 1987, p.45) and due to the emerging status of glass-informed filmmaking examples of these projects are not plentiful.

This research project took place at the University of Sunderland in 2017-2020. Writing a contextual review that was eventually merged into the body of this thesis, and planning of the project were the main focuses for autumn 2017. The practical work that included the development and production of *Light Keeper* and related short films⁶ that in ways served as tests for the feature but also stand on their own right, was done in 2018 – 2019. Post-production of the feature spanned from 2019 to 2020, while the main emphasis in 2020 was in the writing of this thesis.

⁴ I recognise that glass-informed films are most definitely not glass: they lack the physical presence of the material. What I hope to highlight with this statement is that glassmaking processes and related knowledge are the key ingredients that allow the production of these films. Glassmaking conventionally refers to the making of glass objects, and I am hoping to open discussion about if it is no longer a necessity that the end results of these processes are actual, tangible objects. I am suggesting that glass-informed filmmaking (alongside for instance glass performance) is a potential alternative outlet for glassmaking.

⁵ Feature film is defined as a motion picture with a duration of at least 40 minutes both in the UK (British Film Institute, 2020) and in the USA (Academy of Motion Picture Arts and Sciences, 2019, p.2). However, the exact duration is different in different cultures, for instance Centre national du cinéma et de l'image animée in France requires a runtime of 60 minutes (CNC, 2010). What is important is that the feature film is substantial enough to fill a screening programme on its own. In this thesis, when referring to a feature, I am using the BFI's definition of 40 minutes as my project was produced in the UK.

⁶ As opposed to a feature, a short film is a film with a duration less than 40 minutes (Academy of Motion Picture Arts and Sciences, 2019, p.26). These are often screened within a curated selection of multiple short films.

Today, I can answer my own question regarding the nature of glass-informed film, but as probably is common to many research projects, this research has opened a Pandora's box: "[w]hen we try to pick out anything by itself, we find it hitched to everything else in the universe" (Muir, 1917, p.157). In the conclusions chapter of this thesis, I touch upon points for further research as glass-informed film is a specific yet complex subject to talk about and presents a plethora of exciting opportunities for both the artist and the researcher.

1.1. Research questions

The goal of this research is to understand what constitutes a glass-informed film and provide it a context. I am addressing this issue from different angles that I have formulated as my research questions.

Research question 1. *What are the differences between a moving image work and a moving image work that is informed by glassmaking processes?*

Glass-informed filmmaking does not easily fit within the more established filmmaking practices. While it is filmmaking, it is unclear what the differences and similarities between a glass-informed filmmaking practice and products, and those of different filmmaking genres and approaches are.

Research question 2. *What are the qualities of a piece of moving image that utilizes skills, traditions, and knowledge from glassmaking?*

Glass-informed filmmaking is rooted in or at least in a discussion with the field of glass, and the glass-informed films employ different strategies, techniques, content, and approaches from glass and glassmaking. How does this connection manifest in the glass-informed films? Pinpointing these qualities aids to generate an understanding of what glass-informed film is. My own glass-informed feature production is especially useful in answering this question as it draws from a wide range of strategies related to glass-informed filmmaking.

Research question 3. *How does this kind of work contribute to the field of glass?*

Glass-informed films are at the forefront of new approaches emerging in the field of glass. Understanding how they contribute to the field allows the field and practitioners to better support them.

1.2. Thesis structure

This thesis is narrative and often chronological in terms of the structure, reflecting the feature production and the resulting film. The decision to examine the research questions and related issues through discussion was made to best support how the thesis and the practice are entwined and inseparable rather than two separate entities, the practice providing insight into the thesis and vice versa.

Chapter 1 introduces this research project and outlines central motivations behind it. This is followed by establishing the research questions, thesis structure, and methodology. This chapter includes also a discussion about a glass-informed filmmaker's career to give background for the feature production that was the main practical aspect of this research project.

This thesis has no specific chapter on examining the existing literature or context in practice-based research such as for instance Dawn Bothwell's contextual review (2019) or Keeryong Choi's literature review (2015). Instead, I utilize an approach to merge the discussion regarding the surrounding and related fields and research within the body of the thesis as it relates to issues as they are deliberated throughout the thesis, as employed for instance by Alexander Nevill (2018) and Thereza Stehlíková (2012). However, chapter 2 discusses many relevant issues that relate to this research project and could thus be seen akin or close to a contextual review – it does establish a context for this thesis but is not a contextual review as I continue to examine and present issues relating to the context of this research throughout the thesis. This choice about the structure of the thesis supports the interrelated nature of the issues discussed.

Chapter 2 presents relevant background for the reader to understand the key facets of this thesis: craft, glass, and film. In addition, this chapter examines moving image projects in New Glass Review and refers to different platforms where glass-informed films can be seen as well as discusses approaches within related practices that can be seen as relatives to glass-informed filmmaking. These practices are moving image in the field of ceramics, avant-garde filmmaking, and screendance that is an amalgamation of dance and film. This chapter should be considered as a summary of issues a reader not familiar with both glassmaking and filmmaking requires to comprehend the issues discussed later on in the thesis.

Glassmaking and filmmaking are both creative practices, and this is why stages of creative process as outlined by Marion Botella, Franck Zenasni & Todd Lubart (2018) provide a framework, structure, and clarity for discussing them in chapters 3-5. These chapters chronicle the practical approaches in the research project and the production of *Light Keeper*, and discuss related topics⁷.

Botella, Zenasni & Lubart looked into the creative process of visual arts students and contrasted their data against a wide range of theorists, writers and researchers, ranging from studies into the artistic process by Mary-Anne Mace & Tony Ward (2002) who created a model to describe the “art-making process”, and Sawako Yokochi & Takeshi Okada’s (2005) observational study into a painter’s process, to studies into the creative process such as Howard, Culley & Dekoninck’s (2008) analysis and description of the “creative design process”. Collating the findings from these studies, Botella, Zenasni & Lubart identify and describe 17 different stages in the “process of visual artistic creativity”, starting from “immersion” and concluding in “withdrawal”. However, the last three stages that are “presentation”, “break,” and “withdrawal” are not relevant to this research and will not be discussed in this thesis later on: the first of these three referring to presenting the work to teachers in art schools, the second to moving away from a particular work, and the third to completely abandoning the project at any given

⁷ Similarly to chapter 2, I continue to discuss relevant literature. The reader might find it useful to know that typical to my creative practice is that I read widely around my subjects, and this is reflected in these chapters. Due to the limitations of a PhD thesis, I can neither discuss all this research in here nor is all of it relevant.

stage. The last stage relevant to this research is “judgement” and will be discussed towards the end of this thesis. (Botella, Zenasni and Lubart, 2018, pp.9–11)

Glassmaking and filmmaking encompass a multitude of creative processes, despite there being dispute about where the exact parameters are, about the opaque distinction between glassmaking as craft and as art (Comunian and England, 2019, p.239; Banks, 2010; Margetts, 2018), and about the relationship between commercial filmmaking and more artistically driven approaches to moving image (O’Pray, 2003). Glass and film are two different fields with different techniques and approaches – glass-informed film does not sit comfortably within either traditional glassmaking processes or filmmaking processes and thus examining this emerging practice as situated under the umbrella for creative processes allows for discussing this approach as a creative practice with solid connections to glass and film rather than a practice that is in opposition to either one of the fields it connects to. In addition, by selecting to approach glass-informed filmmaking as situated within the framework of creative practices in this research I choose to be inclusive and respect the multitude of links this approach utilizes not only to glass and film but also to other crafts and visual art. The incorporation of the stages of creative process into the structure of this thesis highlights that this approach is a practice and not only a collection of different techniques.

In addition to the structure of this thesis being informed by the stages of creative process, it is further organised to correspond to the stages in film production – this is to allow the reader to gain a better understanding of the practice-aspect of this research project. However, no definitive or exact models for successful film production exist, but a plethora of professional knowledge and experience do guide filmmakers and production companies in this process (Finney, 2008, p.108). Conventionally, the process of bringing a film into existence is divided into three to twelve stages depending on the level of detail but also on the production type, including stages such as development, financing, pre-production, production, principal photography, wrap, post-production, sales & licencing, marketing, and distribution & exhibition (Steiff, 2005, pp.26–28; Vitkauskaite, 2017; Snyder, 2011, pp.172–173). In this thesis I have included five stages (development, pre-

production, production, post-production, and distribution & exhibition) that reflect my own practice, and added a sixth that takes place before a particular project starts, sometimes referred to as “pre-development” (Semley and Busby, 2014, p.48; Sibley, 2012). These will all be further explained in chapters 2-5.

Describing the creative process as linear would be to simplify it and place equal emphasis on each stage: sometimes this process is cyclical (Botella, Zenasni and Lubart, 2018, p.11), and there is no one model that fits everyone – creativity refers to the ability to create something new and thus by definition the process or the product of creativity is never a replica of something else (Chandler and Munday, 2020, pp.272, 613). However, these models of creative practice and filmmaking process provide a skeleton for glass-informed moving image practice, as well as enable a clearer account for understanding the practice of this research project.

Chapter 6 outlines the conclusions as they pertain to this research project, summarises my contributions to knowledge, and addresses potential areas for future research. While this chapter concludes this thesis, appendix A1 brings closure to the whole research in the form of an epilogue, bridging the thesis and the practice⁸.

1.3. Methodology

This research project begun in 2017 balancing between practice-based and practice-led research, questioning how important my own creative practice was in relation to the research. Early on, I was uncertain if the greatest benefits would be achieved through placing the artefacts produced as a part of the research project as significant contributions to knowledge (practice-based) or focusing on

⁸ Throughout this thesis I keep referring to the practice aspect of this research. While I have clearly referenced and mentioned when I am discussing different parts of the practice, the names are similar and might be confusing if the reader is not aware of the existence of all of the aspects. Thus, for the sake of clarity, I wish to advice the reader that the practice that consists primarily of filmmaking, is composed of a script, an edit for theatre screenings, and another edit for digital screenings. All of these are titled *Light Keeper* as this was both the in-progress name and the final title of the film. The script of this film (appendix A2.) is attached at the end of this thesis and a link to view the edit for digital screenings is in the beginning of this thesis.

examining the process of creating glass-informed projects through a wider lens to develop a comprehension of what this emerging practice was and primarily provide actionable written research for other practitioners (practice-led) (Candy, 2006). My personal underlying motivation was to understand what glass-informed moving image practice meant both in my own practice and in a larger context, and initially was hesitant to focus on the actual projects constituting a significant contribution to knowledge and embarked on a practice-led route.

As I began to develop a collection of short films and soon also a feature it became clear that these projects and my practice as a primarily glass-informed filmmaker held much more weight than I had anticipated, and was reminded that “when artists opt to undertake advanced level research, their art becomes research enquiry” (Macleod and Holdridge, 2006, p.8). I was constantly finding through my review into existing literature on the topic that an understanding of what glass-informed moving image amounted to was hardly comprehended anywhere. The relative rarity of exemplary projects pre-existing in the niche also posed a challenge in regards of having enough data to address glass-informed moving image from the point of view of practice-led research. Despite my initial hesitancy towards practice-based research I soon turned to it as it provided a more appropriate ground for generating a better understanding of what glass-informed moving image is in terms of existing literature and my own practice as a glass-informed filmmaker. (Candy, 2006)

My initial methodology relating to conducting a practice-led research project included a survey of pre-existing glass-informed moving image projects. My MA-thesis (Haapasaari, 2013) on glass performance had a similar approach that consisted of a survey into different glass performances, and a qualitative analysis through which I developed a framework for what constitutes a glass performance and ultimately reached a loose comprehension of how this niche related to the creative field. I found the survey and analysis of the performances to be informative in developing ideas about what glass performance was but also useful in shaping a basis for projecting potential future trends and for creating categories within this field to better understand it against other creative arenas. Over the

course of this research project focusing on glass-informed moving image projects I have amassed information about glass-informed films but rather than conducting a qualitative survey into the material I have collected and focusing on the intricacies and tendencies of what has been done, I have chosen to keep this material as reference only in this thesis. This is firstly because of the limitations relating to the scope and depth a PhD study can reach, and secondly because a study looking into the past of glass-informed moving image practices might be premature at this point in time when this young field is still being established. In the future when there is more diversity, variation and depth to this niche a survey into it might be more appropriate, perhaps from a more historical vantage point.

Practice-based research within the creative field should not be confused with a practitioner's artistic or creative research. Creative practitioners often refer to a portion of their practice as being research in the way they develop new techniques and seek new perspectives towards generating projects (Candy, 2006, p.2; Scrivener, 2002) but this is not practice-based research that is generally accepted to refer to research that generates new knowledge and accompanying artefacts such as artworks or films that embody this knowledge, and establishes context, research questions, and methodology for the enquiry (Barfield, 2006, p.107). Examples of recent successful practice-based research projects are for instance Angela Thwaites' PhD study on kiln-formed glass and 3D printing (2018), and Sheila Labatt's PhD study on ink-like effects in cast glass (2018).

Relating to my methodology in this research project is artistic research that is interwoven into my creative practice: I am a practicing glass-informed filmmaker and because the practical aspects of this research project grow from my artistic practice, my artistic research contributes to how the practice presented and discussed in this thesis take shape. I continuously develop my practice through learning about technological and technical progressions in the fields that relate to my work, develop creative methods that allow me to work more efficiently and consciously as well as allow me to evaluate my own work, experiment, continue to learn about related issues and fields to further my understanding of how my work relates to its context, interpret and critically analyse other artists' work, and

re-evaluate my role as a creative practitioner. These are all goals of artistic research. (Hannula, Suoranta and Vadén, 2005, pp.20–22) As a glass-informed filmmaker, related to this artistic research is what Tim Ingold calls an “art of inquiry” (Ingold, 2013, p.6) or even Glenn Adamson’s “thinking through craft” (Adamson, 2007): the practice and my writing of it grows from my interactions with glass and from the tacit knowledge I have acquired over the years. In addition to the creative process, the artworks themselves are in a key role in artistic research, as successful art projects or “creative apprehensions” “offer ways of seeing the past, present and future, rather than knowledge of the way things were or are” (Scrivener, 2002), thus allowing for further reflection and development, and creating potential points for further artistic research. Integral to creative practice, “artistic research seems to be an ideal tool with which to stretch the boundaries of craft practice” (Wilson, 2018, p.5). Artistic research in this research project as it relates to my methodology is confined to the practice and informs the discussion about practice in subchapter 3.2.

My research methodology is primarily autoethnographic. Autoethnography as a research method evolved from ethnography in the latter part of the 20th century. Ethnographers spent time within a culture they were researching with the aim of becoming an “insider” in these cultures in order to gain insight of the particular culture and then reporting about their observations back in their own culture. The research that implements autoethnographic methods embraces the researcher’s pre-established position as an insider in a particular culture and focuses on the context in which they already are. Autoethnography thus allows research into even marginalized cultures and creates platforms for emerging voices to be heard. (Duncan, 2004, p.30)

The autoethnographic researcher can be seen as a “connoisseur” (Eisner, 2017, pp.6–7): the researcher embraces their “human qualities and virtues such as intention, purpose, and frame of reference” as a fertile ground for generating new knowledge – autoethnographic research portrays the ways in which the researcher understands the world and exists in it (Duncan, 2004, p.30). They perceive and experience the culture or phenomenon they are researching, with “a

particular kind of attention to nuance and detail, to multiple dimensions or aspects – that comes from intimate familiarity with the phenomenon being examined” (Schwandt, 1998, pp.244–245). Despite examining a familiar field or phenomenon, it is important that the researcher considers it widely and is ready to confront their own prejudices and gains enough experience of the particular phenomenon (Sparkes and Smith, 2009, p.496): autoethnography is subjective but it is also about willingness to understand and tell the whole story. After examining, the researcher translates their observations and experiences into a format that “illuminates, interprets, and appraises the qualities that have been experienced” (Eisner, 2017, p.86) often in a narrative form (such as a thesis) and consequently allows their reader’s re-education and potentially generates new knowledge (Schwandt, 1998, p.245). Autoethnography is thus well suited for examining glass-informed filmmaking in this practice-based research project as this is an emerging field in which I am a practicing artist, perhaps one of the most experienced ones as Jeffrey Sarmiento mentions: “Riikka Haapasaari’s endeavour to combine filmmaking principles with her work in glass takes the biggest strides in this direction” (Sarmiento, 2017, p.32).

In this thesis autoethnography is evident especially in chapters 3-5 as these focus on glass-informed filmmaking practice and include details and observations about the process of developing a glass-informed feature film. Autoethnography also allows me to answer my research questions as I draw from my experience and observations about my practice and also about other artists employing similar approaches to their creative practice - this illuminates the differences between film and glass-informed film (research question 1.), the qualities of glass-informed films (research question 2.), and also supply an understanding of how glass-informed films contribute to the field of glass (research question 3.) as I have first-hand experience of being an artist within the glass field, making primarily only films.

Autoethnography has been utilized as a methodology for research in the creative fields. Alexander Nevill’s (2018) successful practice-based doctoral study on cinematography and lighting techniques discusses a new-materialist perspective

and actor-network theory in relation to his profession as a cinematographer through incorporating autoethnography: Nevill illustrates his research with first-person observations about his practical work. Jillian Holt focuses on the creative process of a film editor and educator in her practice-based PhD (2015), and much like Nevill, embraces autoethnography as a methodology. What Holt does differently to Nevill is that she discusses her editing practice in relation to existing research and other practitioners, and utilizes her professional network in the production of the film which is then further elaborated in the thesis. While Nevill gathers his data primarily through recording his own experiences and elaborating on those in his written thesis, Holt focuses on interviewing other film editors and gathering her data through the interviews and interaction which also becomes the practical aspect of her research as she then edits this into a film. Nevill's research can be easily read without seeing the practical work but Holt's research requires a viewing of her film to fully appreciate her autoethnographic methodology. Like Nevill, I have chosen to support my writing with excerpts from my practice, and my thesis can be read on its own – even if it alone is not the whole of my research.

Both Nevill and Holt illustrate that autoethnography as a method to investigate a creative practice “allows the author to write in a highly personalized style, drawing on his or her experience to extend understanding about a societal phenomenon.” (Wall, 2006, p.146) However, this personalised style should account for accessibility: autoethnographic research is not only for the researcher but also for their audiences (Charleson, 2019, p.16). Following this vein, excerpts illustrative of the phenomenon alongside a critical account allow the researcher to describe the phenomenon but also place it into a context. This is where Nevill succeeds. Analogously to Nevill, Carolyn Ellis incorporates a format of contrasting paragraphs detailing first-person accounts of thought processes and observations with detailed analysis and discussion to portray her topic from two different angles in her writing about autoethnography (Ellis, 1997).

My autoethnographic methodology is similar to what Nevill utilized: I am looking at glass-informed filmmaking practice through the lens of a glass-informed filmmaker which is supported by excerpts from the practice that provide insight

into it (such as notes collected during the production of *Light Keeper*). This allows me to identify issues specific to this practice that have particular importance in the practice that might otherwise be invisible to an outsider. However, in addition to this and differently to Nevill, I am building on this by discussing the actual practice and the work I have produced in detail and in first-person where appropriate to provide an account of this practice which is currently not detailed in existing research. This is possible through chronicling the production of *Light Keeper* and includes all the related stages from development through production to post-production and test screenings. I am describing my thinking processes as they relate to the production and practice, which I have chosen to keep in a format similar to “thought experiments” (Elsaesser, 2018) and “creaturely writing” (Lockwood, 2017) concerning glass. While “creaturely writing” or storying is primarily concerned with the human-animal divide and affects generated through encounters with animals (Bartosch, 2017), I have extended the anthropomorphic way of writing to an inanimate material (or object) of glass, and affects initiated by encounters with this material that I have chosen to attribute agency to⁹. Simply put, I am attempting to examine consciousness and experience from the point of view of non-human actors in a manner similar to “active imagination” (Jung, 1997), or touching “the subjective character of experience” as worded by Thomas Nagel, who eloquently employed this and examined its inherent paradoxes in his essay “What is it like to be a bat?” (Nagel, 1974). This all is central to my practice, and these formats allow me to capture the experience of my practice in first-person, further highlight the autoethnographic nature of this research, and elucidate the interwoven relationship between glassmaking and filmmaking in this practice. The combination of these different styles in writing in conjunction with my artistic research and practice allows me to illustrate glass-informed filmmaking in its various contexts from an

⁹ For more details on creaturely writing I would encourage the reader to look at *Beyond the Human-Animal Divide: Creaturely Lives in Literature and Culture* (Ohrem and Bartosch, 2017), and specifically Alex Lockwood’s chapter *The Collaborative Craft of Creaturely Writing* (2017) in which the writer tells a poignant story of a piglet and the relationship between humans and factory farmed pigs, both by addressing the piglet and the reader utilizing exquisitely different literary devices such as foreshadowing and anthropomorphism.

autoethnographic researcher's position, and eventually address my research goals and answer my research questions.

1.4. A glass-informed filmmaker's journey

This research project was ignited by my personal interest in understanding my own practice and the context in which I work in. This is also a practice-based project and as I discuss my practice throughout the thesis, it is useful for the reader to gain an understanding of my practice as a glass-informed filmmaker. This is discussed in the following, and as I lack professional peers with similar practices, I briefly discuss how I see a glass-informed filmmaker's profession in order to address this practice on a more general level to provide a starting point for the following chapters.

I have worked in a close proximity to glass for a decade, refining my practice. As with any filmmaker, a project does not grow from nothing but is the result of everything that has happened before, and thus, leading up to the development of *Light Keeper*, it is useful to understand what brought me to the point in which this feature begun to take shape.

I like to describe my creative process as a forever simmering, bottomless cauldron into which I keep adding ingredients that range from observations about everyday life, studio experiments as well as both real and imagined visual snapshots to social phenomena, material curiosities and characteristics, and expeditions to writings from fact to fiction. Occasionally the cauldron overflows and the splatters and patterns it makes on the floor become the outlines and starting points for my projects upon cooling down. I control the contents of what goes in the cauldron but the spillage itself I am less in control of or consciously directing as it is largely dictated by what happens to float to the surface of the concoction and what ingredients happen to stick together. Most likely, I would be able to conduct the overflow by being more mindful of how I stir the concoction or developing a detailed recipe for the process. However, at the same time I believe that the

surprise, wonder and even chaos in how the splatters and patterns form enables me to find and encounter projects that I am most capable of bringing to fruition, projects that are genuine and tell stories that have the potential to speak to my audiences in ways that touch upon the very core of what it means to experience existence as a human being – as being human is certainly messy and chaotic and sometimes difficult to explain but is rooted in our own experiences of external and internal stimuli much like the ingredients that I choose to put in my cauldron as well as the process of simmering itself.

I majored in glass for both my BA (Aalto University, 2012) and MA (Royal College of Art, 2014), following on a path initially mapped out by a curiosity towards the material, its seemingly transparent or translucent presence in our society, and how it played with light. Often the focus of glass and craft-based programmes around the world is a degree of mastery or understanding of the particular material and how to successfully implement related manufacturing techniques, eventually producing an object or a series of objects in the particular material. After the initial infatuation with, and exhilaration sparked by cups and objects I had managed to produce myself, I became frustrated with the sheer amount of stuff human beings have generated on this planet and did no longer want to contribute to it by producing more stuff myself. For any student in a material-based programme focusing on objects this conflict is a challenge: do I abandon the material altogether or do I find a way to develop an immaterial approach to it?

I was and still am not alone in questioning the ecological imprint of glassmaking: “[g]lassmaking has never been efficient or ecological” (Shales, 2017, p.123) – even today, most glass objects are produced in factories where the sheer scale of manufacture is staggering, the processes eating quantities of natural resources and raw minerals, as well as the shipping of objects around contributing to an environmental cost. Knowing the impact glassmaking has on our environment and future, new technologies and approaches to glassmaking¹⁰ that have a smaller environmental footprint surely are worthwhile avenues to explore and nourish,

¹⁰ And without a doubt, this applies to other craft fields too.

despite the ongoing debate in relation to approaches to craft which surrounds anything new or different.

I had continued to work on moving image experiments alongside my studies in glass – an approach to creative practice I had started cultivating as a teenager, revolving around my interest in storytelling¹¹. Without much assembly, glass and moving image seemed to fit together as a solution to my dilemma with objects. Being stubborn and feeling slightly rebellious I started to experiment with different ways to implement this kind of approach to creative practice: initially in installations and gradually moving all the way to performance documentation, working with movement, light, and sound but with less emphasis on a narrative.

As a young student I was hungry to find other creative practitioners that shared my curiosity but the lack of representation of glass-informed moving image practices in literature and in my networks kept me disappointed. I travelled extensively primarily across and around the Atlantic to glass-oriented venues and institutions and would find an occasional interesting immaterial tactic to glass. Examples throughout the years include for instance educator and artist Michael Rogers' fearlessness and support towards my thoughts regarding a non-object centred approach when I was a young exchange student at RIT in upstate New York in 2012, or an encouraging discussion about non-material approaches to glass with Alexander Rosenberg while he was teaching a course at the Corning Museum of Glass in 2013, or several exchanges with individual students and educators pushing the boundaries of glass in their own and varying ways at the Pilchuck Glass School in Washington state over multiple summers. In hindsight, most of these experiences were linked to educational institutions but rarely the ones I was enrolled in full-time for my degrees. All the experiences were certainly

¹¹ I refer to storytelling throughout this thesis. Storytelling is “innately human”, a way to communicate memories and imagination, rooted in the human perception of time, in an understanding of past, present and future (Carvalko Jr., 2020, pp.273–274). However, due to the limitations of a PhD thesis, I have excluded a discussion about storytelling in detail, and would encourage the reader to see chapter 41 “Storytelling” in *Conserving Humanity at the Dawn of Posthuman Technology* by Joseph R. Carvalko Jr. for further information. The author provides a captivating and concise view to storytelling throughout the history with a focus on the contemporary.

useful in terms of growing as an artist but none truly resonated with my creative interests as these related specifically to focusing solely on producing glass-informed moving image projects.

Having produced short, mainly experimental films throughout my studies to various degrees of success, it was not until doing a year-long artist residency at the Glass department of Edinburgh College of Art in early 2015, a creative practice that felt honest and independent of external approval started to emerge. I found myself feeling sympathetic towards blue glass sheet scraps piled in the glass studio shelves, perhaps a boring colour choice for stained glass windows when compared to more vibrant reds or intense blacks, these offcuts of larger sheets perhaps lacking the potential to become components of impressive windows. I picked up a little blue glass sheet and threw it in my imaginary bottomless cauldron, only for it to spill over with my research into clouds and growing up stories. A year later a finished project materialised as a short film titled *Pieni Sininen* (2016a): the little blue glass had gone through a transformation from a scrap sheet to a short film about a stained-glass cloud with its own voice. Over the year, traveling from Edinburgh to Seattle to Finland and eventually to Dubai where the short film premiered, while developing and producing the story of this little blue cloud I found that the sounding board I had unsuccessfully been looking for in the community to discuss my creative ambitions, had been with me all the time, and it was the material itself. Perhaps a result of spending nearly a decade in a close proximity to glass in all of its forms, perfecting my glass-specific technical skills and sensitivity of material understanding, my quest for talking about glass with someone had evolved into me talking with glass¹². Quite organically, glass became a character of sorts for my films, resolving the problem of producing more stuff into this world, even if I continued to manufacture the occasional glass object

¹² At this time, I was unaware that what I was starting to do in my writing and even in the script for *Pieni Sininen* was making use of aspects of creaturely writing. I was writing about adventures, emotions, and experiences of inanimate objects as a way to investigate the relationship between humans and the world around us, and in doing so, I was attributing agency to the subjects I was writing about - much like creaturely writing, with the difference that my "creatures" were inanimate. It was not until working on this research project I came across with Alex Lockwood's research and creaturely writing (2017) and realised how it related to the practice I had established.

for visual reference in my productions as the motivation for the objects to temporarily exist was to give voice and shape to the material before recycling the glass.

I spent the years following *Pieni Sininen* working on short films that revolved around glass thematically and visually, exploring techniques and integration of skills from glassmaking and filmmaking. I approached my creative practice as a studio-based filmmaker, keeping up a rigorous glass practice to enable and maintain a close connection to glass, but as projects emerged from my practice, I switched to a primarily film production headspace dictated in part by financing as well as crew and cast availability. These times of production would consist of the conventional development-pre-production-production-post-exhibition route, and then I would return to my studio to continue my dialogue with glass. This kind of approach is not much different from any other filmmaker in terms that productions are cushioned with a more uncontrolled time spent in gathering material for future productions.

During the years soon after *Pieni Sininen*, I noticed that my approach not only yielded results that aligned with my artistic ambitions but allowed me to work in a state of flow. The popular concept was formulated by Mihaly Csikszentmihalyi to describe the state of optimal experience: an individual working and intensely concentrating on something that meets their skill-level with a clear set of rules for the action and a goal in mind. The activity brings gratifying experiences to the individual to the degree that they are happy to partake in the activity just for the sake of doing it. (Csikszentmihalyi, 1990, p.71) I kept hearing from seasoned, skilled glassblowers that this description matched their experience of practicing their craft, and it is not unique to craft professions and not unheard of amongst farmers, welders, and cooks to mention a few other vocations (Csikszentmihalyi, 1990, pp.145–152). This aligns with how Tim Ingold describes making: as a process in which the maker is “a participant in amongst a world of active materials” (Ingold, 2013, p.21) – in this way, the maker sits comfortably with their material in understanding how it speaks and responds, but to get to this point, the maker has to cultivate this dialogue over extensive periods of time. I soon came to

the realisation that while I could not see replicas of my practice among my colleagues, I had arrived at a functioning practice that had its own rules and goals, certainly borrowing from glass and filmmaking, yet touching on something that was still to be discovered but it was only through the practice and continued experimentation I could ever achieve a better understanding of what that something was.

I started this research project at the University of Sunderland in the autumn of 2017, with a set goal of producing a glass-informed feature. Transitioning from short films to features at some stage in their career is a very normal and logical move to filmmakers – refining their craft and filling a bank of experiences first in directing shorts, and once they feel established enough, scaling and translating that practice to a feature-length format. Glass-informed moving image practice was still not a widely established approach and no one had gone through this transition in the glass field. One might argue that *Heart of Glass* (Herzog, 1976) is an early example of a glass-informed feature film in the sense it integrates an understanding of the material into the narrative, and even the human characters could be seen as being inspired by the material. However, I would argue this is because Herzog is an extremely talented and experienced filmmaker: he knows his subjects and in the case of this feature the subject was glass (Ames, 2014). What makes a good filmmaker among other qualities is the ability to identify an interesting subject(s) (Cushman, 1971, p.20) and to see the world from the point of view of the subject(s) of the film, and weaving together the smallest details, giving “the impetus that allows cinematographic work to unfold from one end to the other, without breaking down” (Cocteau, 2001, p.33). *Heart of Glass* is a creation of a filmmaker rather than of a glass-informed filmmaker.

I would like to demonstrate the difference with the following analogy: I have never flown a plane yet I can imagine what constitutes the job of a pilot based on my readings, depictions of pilots in media, as well as having seen pilots working. I imagine a pilot manages a technologically sophisticated, gravity-defying, aerodynamic metal can with aerofoil-shaped wings that can house human beings and cargo, by pushing buttons, moving levers and adjusting values on computer

screens that essentially conduct the orchestra of mechanical changes in the metal can that allow it to rise, fall, accelerate, and decelerate in a precise manner while keeping all of its passengers and cargo safe. Today, the (commercial) pilot also has to be a team worker (get along with co-pilots, colleagues, and crew, as well as potentially working for an employer), not abuse substances, endure irregular work schedule that spans over multiple time zones, understand weather, and know procedures for terror threats, medical emergencies, malfunctions in the plane, and so forth. To me, the pilot's job sounds complicated but I can grasp what it entails much like the skilled filmmaker can grasp what working with glass entails through careful observation. But unless I study aviation and practice with actual planes that have the potential to house human beings and cargo let alone fly a commercial plane, I will never know the intricacies of the pilot's experience: how the world looks like from the cockpit in a thunderstorm, how the human heart beats when there is a technical problem with the human-filled plane in mid-air, or how does it feel when you for whatever reason are grounded for a prolonged period of time. The skilled filmmaker can formulate careful and insightful observations about glass that translate to a successful film about glass but they can never develop a true understanding of how the material behaves and how it allows the glassmaker to experience the world in a specific way. The first-hand experience cultivated over a long period of time is what differentiates me from the pilot, and the filmmaker from the glass-informed filmmaker.

The above analogy demonstrates the most essential difference between a filmmaker and a glass-informed filmmaker and aligns with concerns in ethnography and autoethnography: mere instruction or observation of a phenomenon allows only for a "pretence of knowing" (Ingold, 2013, p.1) and does not necessarily lead to knowledge or an understanding of a phenomenon such as glass-informed film. It also follows that a glass artist cannot become a glass-informed filmmaker through pure observation of filmmaking but has to learn the craft, and through experience can potentially develop the skills and knowledge necessary for producing (glass-informed) films. This leads us to a current dilemma in the field of glass: if glass artists do not have opportunities for learning the skills

necessary for making moving image projects, they are doomed to fail in their endeavour to work with moving image.

We all start from somewhere and often this involves experimentation. All films can be seen as experimental to the degree that the exact film with the same people, time, and resources has never been done (Elmes, 2012, p.148), much like any work in the field of glass. In addition, the technology around filmmaking changes comparably fast providing opportunities for technological experimentation – especially in contrast to glass-related technology where some of the tools have been used for thousands of years. Regardless of the tools and techniques having existed for a particular amount of time, they are always new to the person experimenting with them for the first time – however, glass and film traditions have amassed a wealth of existing knowledge and tried and tested approaches over their existence and it is up to the creative practitioner to take advantage of that wealth. It would be foolish to develop a technique from scratch only to arrive at the same conclusion as someone else already has, completely disregarding the existing knowledge. It is only when there is potential in arriving at a different conclusion than someone else, when there is value in re-inventing the wheel.

Chapter 2: Background/ pre-development

In order for the reader to understand issues discussed in this thesis, it is important to establish a framework and context which glass-informed filmmaking practice grows from. In this chapter I discuss related fields, topics, and practice: glass, filmmaking, avant-garde film, and craft to build a foundation for further chapters, as well as present screendance as a close relative to glass-informed filmmaking as it combines dance and filmmaking and shares qualities and concerns with glass-informed filmmaking practice.

This chapter could also be seen as pre-development when viewed from the point of autoethnography. The topics I discuss in this chapter have informed the development and production of my feature *Light Keeper* not only in establishing the context into which the film was produced but also my practice as a glass-informed filmmaker and some of the topics I discuss in the film itself. The concept of pre-development is not widely established as a stage in the filmmaking process but has been used by professionals to refer to the time before a film goes into development (Semley and Busby, 2014, p.48; Sibley, 2012). In this thesis I have interpreted the term to reflect the actions of a practitioner leading up to a focus on a particular project which in my case was concentrated on examining the context of glass-informed film.

Pre-development as discussed in this thesis is comparable to the “immersion” stage of creative process established by Botella, Zenasni & Lubart (2018). Immersion could also be seen as part of development (see chapter 3.), that is the first stage of film production when the focus is already in a particular project. However, as the glass-informed filmmaker has a focus on glass that arches over multiple projects and potentially their whole professional career (as I establish over the course of this thesis), it is important to determine the practice as pre-existing to a particular project. Glass artists are heavily involved with a particular material and always defining and developing their skills and knowledge relating to their material. This is in contrast to the practice of a filmmaker who is equally always learning and refining their mastery of their craft but perhaps more

dependent on a team and financial resources which often encourages them to focus more on projects rather than their practice. This is a difference between the practice of a glass-informed filmmaker and a filmmaker: broadly speaking the glass-informed filmmaker's immersion spans over a career whereas the filmmaker's immersion is attached to the development of a particular project.

2.1. Glass within the crafts – towards the digital and immaterial

"[C]raft is a vital and fertile means to understand relationships between places, people, and time. Craft, like history, is a tool that people use to negotiate their roles and places within the material and social environment."

(Wilkinson-Weber and DeNicola, 2016, p.1)

Craft is an elusive concept. It can refer to the labour relating to playing a musical instrument and making objects (pottery, glassmaking, welding, weaving), as well as indicate a category of objects such as those made of glass, clay, metals, and fibre. Historically, craft objects would be made by hand but this is no longer always true as the rise of computer-aided technologies has enabled the makers to produce their work without having to even touch the material. (Metcalf, 2017) Bruce Metcalf further argues that craft as a class of objects must refer to physical objects that have weight (2017, p.243). Martina Margetts, however, is broader in her definition: "[c]raft means creativity, activity and productivity" (2018, p.137), and directs her focus into the haziness of the materials of craft as material technologies and the way craft is consumed (e.g. online) potentially deceive the consumer in terms of having definitive knowledge of the material of an object (Margetts, 2018). While growing from the tradition of the handmade, tangible, and manual, the definition of craft is not simple either in terms of the labour or the object/project (Twomey, 2017; Clark, 2017; Metcalf, 2017; Dahn, 2017; Shales, 2017; Openshaw, 2015). This is a tremendous shift from physical to digital as the two thousand year old history of glassmaking has traditionally been dependant on teamwork (Shales, 2017, pp.201, 204) especially on the glassblowing workshop floor, and focused around the production of a physical object.

The relationship between art and craft is another, still an on-going debate: Metcalf (2017) argues that craft is most often different from art whereas Clare Twomey (2017) sees the two partially overlapping. Also Garth Clark (2017) and Conor Wilson (2012) propose that ceramics as a field within crafts can produce art but not all ceramics is art. The relationship between art and craft continues to be a touchy subject in different fields of craft: "Sculptural work created from clay by contemporary ceramists is often dismissed as being of little relevance to the field of fine art, creating arguments concerning its position." (Livingstone, 2008, p.34)

Hand-made functional objects fall easily within the realm of craft but the more conceptual, immaterial, or further from conventional craft techniques the object of craft is the more ambiguous and fluid its placement in the craft/art axis becomes. It is not always easy to identify a particular project as purely "craft" or "art". (Dahn, 2017; Shales, 2017) In addition to this, when the fields of craft are experiencing expansion to different directions, not only stretched between art and craft but further reaching out towards performance, digital media, and film, potentially presenting the field in danger of collapsing. This is illustrated by Jerome Harrington's study on the expansion of the glass field (2011): he suggests that this expansion provides fertile grounds for projects to "transcend the field's systems of exhibition, commission, or criticism, whereby the context of glass as an area of activity falls away, and the works stand in their own right, as works of art." (2011, p.11)

The fields of craft and contemporary art (in its widest sense) are increasingly making use of the digital and associated technologies such as 3D printing and generative design as well as embracing the online lives of physical artworks in the form of audiences sharing their encounters with the physical work via social media (Openshaw, 2015, pp.7-9). Sarah Williams even suggests that the "production of objects and images is defined not so much by the maker's hand but the maker's ability to use a computer program, or to instruct an individual in any geographic location" (Williams, 2015, p.155). The engagement of traditional craft disciplines with digital technologies and manufacturing processes is a topical concern amongst craft practitioners: "How do both digital media and the use of

non-ceramic elements fit with ceramic practice and what contribution do they make to contemporary development?” (Livingstone, 2008, p.1)

There has been a surge in the public appreciation of crafts. Between 2005 and 2009 O’Reilly Media published *Craft*: (Rosner, Ames and Fox, 2016), a magazine devoted to the maker movement and the renaissance of the handmade which marked the rise in interest towards crafts. The advent of the maker movement embraced digital technologies and this in turn fed into a revitalisation of traditional approaches to craft. (Rosner, 2016, pp.189–190) While digital manufacturing processes are celebrated or at least accepted by others (Openshaw, 2015), a concern for the future of the craft and its connection to traditional making processes is also clearly articulated: “where does this leave the material?” (Shales, 2017, p.222)

Craft and material are inseparable. Because of their strong historical connection to the object and the container that are essential to human societies, the influx of digital technologies and immaterial approaches will not sever their connection: humans need craft, material, and containers. Even when looking at the history of art (and craft) still largely dominated by the history of the images, those are also containers in the way they contain information and visual cues. (Mathieu, 2017) Gaston Bachelard consoles the worried craft advocate: “Yet besides the image of form, so often evoked by psychologists of the imagination, there are [...] images of matter, images that stem *directly from matter*. The eye assigns them names, but only the hand truly knows them.” (2006, p.1) Craft certainly has a place in the future, and the relationship between an image, a material, and an object as it relates to observing and understanding our surroundings seems fruitful to examine. Can making, and glassmaking rooted in the material of glass specifically, be a way of seeing and understanding, perhaps even generating knowledge that is inaccessible to language and vision? This is further discussed in connection to the development of *Light Keeper* in chapter 3.

2.2. Filmmaking, experimental film, and avant-garde

“Films, and perhaps especially animated films, are ways of thinking. In their own ways, and beyond any intention of human filmmakers, films think. Animations think especially hard about movement, time and, unsurprisingly, animation: what motivates something to move.”

(Cubitt, 2018, p.103)

Glass-informed filmmaking is filmmaking: the end results of glass-informed filmmaking processes are films. In this subchapter I discuss filmmaking and avant-garde in order to outline a foundation for and further establish the context of glass-informed filmmaking. Avant-garde film shares goals and concern with glass-informed filmmaking and thus an understanding of it can present a potential framework for the appreciation of glass-informed film – this will be further examined in subchapter 2.4.

Filmmaking is an umbrella term for a range of approaches to creative practice, including but not limited to: art cinema, video art, new media, commercial film, auteur film, narrative film, experimental film, exploding cinema, and avant-garde film. What is common to all branches of filmmaking is that they are related to moving image, most often the end results being durational pieces of work. The motives, themes, techniques, and content vary greatly depending on the filmmakers and the era as well as geographical and cultural associations. (Meigh-Andrews, 2006; O’Pray, 2003; Rees, 2011; Carroll, 2003, p.9; Moulon, 2018, p.34)

The field of cinema and the extended field of moving image are under constant change: Luc Courchesne looks into the future and places “the media artists” working in installation at “the forefront of those inventing a medium” instead of filmmakers, and believes that the key aspects will be “interactivity and the connectivity coming from late twentieth-century computer and networking technologies; the moving image, inherited from cinema and television; and the immersivity created by the panorama artists of the early nineteenth century” (2002, p.257). Indeed, artists working with moving image have more freedom in

terms of creativity when compared to their colleagues tied to the film industry: “[t]here is little room for playfulness or experimentation in contemporary mainstream filmmaking. The stakes are simply too high; the average film costs between \$50 and \$100 million, and all commercial films must recoup their backers’ investment.” Mainstream films are “triumphs of marketing, not imagination.” (Dixon and Foster, 2002, p.1)

“Man wants to see. Seeing is a direct need.” (Bachelard, 2006, p.27) Cinema answers to this need; in fact, seeing and “the place of look” define cinematic practices (Mulvey, 1999), and certainly have provided their audiences opportunities for expanding their range of seeing beyond their immediate surroundings from the invention of moving image in the late 19th century onwards (Rees, 2011, p.15). Cinema and related practices have had a tremendous impact on the field of arts and our society (Eisenstein, 1970, p.5; Carroll, 2003, pp.53–54; Ruiz, 2005, p.32), and touch upon the lives of audiences around the world as “the moving pictures appeal not merely to the imagination, but that they bring their message also to the intellect” (Münsterberg, 1916, p.21). Gene Youngblood even went as far as to defining (expanded) cinema as not “a movie at all”, suggesting that spearhead moving image practices are all-encompassing, permitting human consciousness to manifest “outside of his mind, in front of his eyes” and encouraging cross-disciplinary creativity that is as grand as life itself, as cinema is “nothing less than the nervous system of mankind” (1970, p.41).

The field of film is continuously developing, and occasionally a branch from this robust tradition separates – one of these branches is avant-garde film with a goal of innovation. Avant-garde film has existed in opposition to mainstream cinema since the 1920s, reaching towards fine art, but also influencing work by mainstream filmmakers. (Rees, 2011, pp.1–3) Avant-garde film, throughout its history has embraced a wide range of styles and techniques (Rogers, 2017, p.1) as well “traded under many [...] names: experimental, absolute, pure, non-narrative, underground, expanded, abstract” none of which is “generally accepted” (Rees, 2011, p.3). For instance, some early 20th century avant-garde films such as futurist cine-poems are significantly closer to conventional fine art than mainstream

cinema (Rees, 2011, pp.33–34). Some avant-garde film styles or directions seem extremely broad in terms of their definition such as experimental cinema referring to everything experimental in moving image (O’Pray, 2003) while others seem to have more succinctly articulated parameters: for instance structural film having the characteristics of “fixed camera position [...], the flicker effect [...], and loop printing” (Sitney, 2002, p.228).

Avant-garde film “involves the senses in ways that are atypical of mainstream films” as “nothing is clearly denoted” for the viewer that has to put more effort into understanding what is happening in the film (Verrone, 2012, p.18). Contrary to the avant-garde of other creative fields, avant-garde films remain in the margin and defy the inclusion to the mainstream: mainstream, commercial films still attract large audiences while avant-garde films often have close-to-none budgets, they are personal to the filmmakers, and are distributed differently (including but not limited to: galleries, film societies, universities, museums) to their mainstream relatives (O’Pray, 2003, pp.1–2). Avant-garde film continues to inspire new generations of filmmakers, resulting in establishing for instance new “micro-cinema collectives” with specific sets of values, such as the Imperfect Cinema “in the intersection between film and do-it-yourself punk”(Gall, 2016, p.vi) that provides alternatives “for participatory activity” (Paolantonio and Gall, 2011).

The avant-garde film has always been a fluid one, without the support of industry, growing from and in the margins, questioning, being alternative, controversial, and artist-led (O’Pray, 2003), inventing itself again and again, and being sensitive to its surroundings and new inventions, as illustrated by Lev Manovich: “In short, the avant-garde becomes software” as a response to how new technologies have changed the way moving image is created (Manovich, 2002, p.11). However, throughout the history of avant-garde cinema, a set of principles seems to apply even if the category itself remains a “fuzzy ‘catch-all” (Buchan, 2013, p.3), as outlined by William Verrone on avant-garde feature film that has: “(a) an idiosyncratic personal vision; (b) stylistic or formal innovation; and (c) a sustained or decipherable narrative” (2012, p.10).

Due to new technologies in relation to moving image, the 1960's visual art scene saw the separation of video art from the experimental and avant-garde film, even "expanded cinema," resulting in a divide between artists working with video and experimental filmmakers (da Costa Ferreira, 2013, pp.12–13; Youngblood, 1970). Video artists went on to operate within a closer proximity to visual art whereas experimental/avant-garde cinema continued to challenge the mainstream cinema (da Costa Ferreira, 2013, p.14).

Most works on video and in digital formats are "by nature ephemeral" as many of the technologies relating to playing them become eventually obsolete. Video does not withstand time in a similar manner as for instance painting. (Meigh-Andrews, 2006, pp.4–5) Video and related technology such as accessible editing software have provided artist a vast ground to explore – especially in contrast to film¹³. Film and video have been different but advancements in cinema industry, artistic motivations, as well as technological developments in all image and sound related media have brought these mediums closer to each other, sometimes the terms used almost interchangeably (Meigh-Andrews, 2006, p.85,165,213, 277, 282–284; Le Grice, 2001a, p.267; Carroll, 2003, p.xxii).

Out of the avant-garde film tradition, experimental film has solidified a position in relation to the mainstream and today, in addition to concerns relating to " the temporal form and of form", experimental film is almost always in discussion with "idea, concept or statement" (Wells, 2018, p.166). While it is tempting to discuss glass-informed film in relation to experimental film, I have chosen to focus primarily on the avant-garde as glass-informed film is a relatively new direction and lacks the established nature of experimental film and thus shares goals with the avant-garde (see subchapter 2.4.). However, there is no clear division between avant-garde and experimental and thus a complete divorce from experimental film is not possible.

¹³ As in moving image practice with film stock.

2.3. Relatives to glass-informed film: cinema, moving image in the crafts, and screendance

“Bring together things that have as yet never been brought together and did not seem predisposed to be so” (Bresson, 1997, p.51).

Glass-informed filmmaking is not unique in combining two practices that together create a third approach to creative practice. In this subchapter I focus on the closest relatives to glass-informed filmmaking from other creative fields that employ similar tactics. Starting from glass in cinema and moving through moving image in the crafts and ceramics I arrive at screendance that is an integration of dance and moving image as well as related techniques and approaches, and is indeed a close relative to glass-informed filmmaking in terms of its approach and motivations.

Glassblowing is a captivating activity to watch (Lehmann, 2018), and glass already plays an important role in contemporary cinema. Examples throughout the history include *Heart of Glass* (Herzog, 1976), a fictional feature about the lost recipe for red ruby glass; *Felice... Felice...* (Delpeut, 1998), another feature that is based on stained glass imagery from the early 20th century (van den Ende, 2012, p.155); and *Glas* (Haanstra, 1958), a short documentary set in a glassblowing factory featuring a captivating soundtrack. Glass is a part of our lives and thus it is no surprise that it is an important and necessary part of cinema and prevalent especially in Hollywood action blockbusters as described by Ezra Shales: “the sound of breaking glass and splintering debris” in action films communicates excitement and rush in car chases and gun fights – the importance of the sound of breaking glass in terms of enveloping the viewer within the world of the film becomes obvious if the sound is muted (2017, p.228).

In cinema glass is included as a prop such as the glass bottle shards one of the main characters dances on in *Sholay* (Sippy, 1975), or as part of the set such as the window onto which a human character falls resulting in the tension-inducing, slowly cracking glass in *The Lost World: Jurassic Park* (Spielberg, 1997).

Sometimes glassmaking processes such as glassblowing are featured, for example in *Three to Tango* (Santostefano, 1999) when the protagonist's glassblower love interest is featured in her studio, or perhaps more commonly in documentaries such as *Degenerate Art: The Art and Culture of Glass Pipes* (Slinger, 2011) that delves into the pipemaking culture. Besides glass being visually present, its material characteristics are utilised as characters such as the stained glass window knight that becomes alive in *Young Sherlock Holmes* (Levinson, 1985), and even as a character's name as in the villain of *Glass* (Shyamalan, 2019) – suggesting a fragile aspect of the character. Glassmaking has even made its way to reality television in *Blown Away* (2019) which perhaps speaks more about reality shows and our society rather than about the craft of glassblowing even if framed as portraying professional glassblowing (Archer, 2020, p.74).

The above are only a handful of examples of glass in mainstream cinema, and there is no shortage of representation of glass in cinema. None of these examples are glass-informed to the degree that they would transcend the division between film and glass-informed film: the portrayal of glass on screen does not involve any skill or knowledge about glass.

Moving on to ceramics, this field has been dealing with expansion towards new media and time-based approaches since the 1950's, while moving image as a standalone project situated within the field of ceramics is relatively new, even "seems to have been almost totally absent from historical ceramic practice" – with a handful of exceptions including Jim Melchert's *Changes* from 1972 (Livingstone, 2008, pp.6, 159). However, the field of ceramics (and craft) is changing as Andrew Livingstone points out "[w]hen ceramics starts to expand the questioning of authenticated discourse a constructed arena begins to appear where the challenge to discipline authenticity becomes central to development" (Livingstone, 2008, p.3). Thomas Elsaesser explains about film in a similar manner: we have to adapt or "much of our knowledge might become obsolete, or at least find itself reframed and rephrased without us, or behind our backs, to the point where what is being rethought and refigured appears merely unthought and disfigured." (Elsaesser, 2018, p.37). Livingstone turns to discipline authenticity while Elsaesser sees film

philosophy as the solution, which further emphasises that there is no one solution that fits all fields when it comes to navigation instructions in the face of change (Livingstone, 2008, p.3; Elsaesser, 2018, p.37).

Moving image is not alien to craft. David Falkner has identified that craft practitioners are exploring moving image: firstly, by placing the material as a subject in a film, and secondly, allowing the moving image to become “the very materiality of their making practice”, current examples being primarily animation (Falkner, 2014). Also documentary (Livingstone, 2017) and process films in museums and artists’ websites (Lehmann, 2018; Cushway, 2015) have already established an important role in how audiences interact and perceive craft-based work. Simply seeing (i.e. watching a film or a video) provides opportunities for extending the viewer’s sensory experiences (Lehmann, 2018). In addition, craft is in Hollywood too, even if often in the form of parody and romanticised play which lacks a true understanding of crafts – their story is one-sided and serves the purposes of entertainment (Archer, 2017) leaving a vast ground between craft and cinema unexplored. However, truly interdisciplinary approach that does not only present craft as the subject of a film but incorporates the craft itself into the making of the film is a less common approach within the existing moving image projects in relation to the field of glass.

The vast majority of craft-based films (including those featuring glass in various ways) are available to view online – which is also becoming more common for the moving image projects growing within contemporary art practices (Williams, 2015; Falkner, 2014, p.7) but is camera simply another instrument in the expanded toolbox of an (glass) artist or is glassmaking a theme gaining popularity among contemporary art practices? Glass-informed moving image projects exist primarily between the fields of glass, visual art, and cinema, but are also influenced by other craft practices such as ceramics and clay. Nevertheless, while this is a vast area of creative practices, there is very little current or existing research that looks either into glass-informed moving image, or moving image and glass simultaneously. Even research and data on numbers of these artists and projects they produce, or how these artists and filmmakers identify themselves is

difficult to come by. Kim Harty (2013) touches on glass-informed moving image from the perspective of using glass as an optical element in artistic work, and Samantha De Tillio reviews a glass-informed moving image festival organised by North Lands Creative (2020). However, these provide no insight into what glass-informed films are or why they are made. Also Jerome Harrington deals with moving image practices in his thesis (2015), discussing “why and how is process [of making] made visible, and what is understood?” and concluding that despite the information, visual materials, and insight the viewer is provided, truly understanding the process of making might not be possible (Harrington, 2015, pp.239–40). Nevertheless, glass-informed films do not necessarily aim at portraying the craft of glassmaking in a truthful manner: glass-informed films merge the two crafts in a symbiotic manner, and it is the work of or a challenge for a skilful documentary filmmaker to present glassmaking in a manner that depicts all facets of the craft - this will be further elaborated in connection to examples later in this chapter. Glass is inseparable from our society, and as long as films are made, glass will continue to play a role in the process of producing them (Fezer, 2020).

Combining dance, movement and choreography with filmmaking, screendance has parallel interests to glass-informed moving image. Much like glass-informed film brings together film and glass, screendance brings together two different fields, dance and film, and it is the symbiotic combination of these two disciplines that allows the emergence of a third approach to creative practice, the screendance. For instance Maya Deren’s *A Study in Choreography for Camera* (1945) features choreography that is brought to life by the camera and editing – the dance could not be performed live to produce even a similar effect (O’Pray, 2003, p.53). This approach creates a dependant, symbiotic relationship between dance and film, and its own genre: the dance film or “screendance” or “dance for camera” (Bench, 2006). A recent example of this kind of work that also references crafts is *The Dance of Making* (Wycherley, 2012), a three-channel triptych by Mary Wycherley and Jürgen Simpson, meant for gallery exhibition, displaying craft processes such as blacksmithing, fishing net making and hand weaving as “choreographic sequences in which the acts of making and not the resulting

artefacts played centre stage”. In the film production, “the intention was solely to respond to the inherent movements of the body, machines and tools.” (Wycherley and Simpson, 2018, pp.146–147)

Dance and film are in opposition to each other in multiple aspects. Apart from screendance, dance happens in real time whereas in film time can be manipulated and stretched, dance is seen from one viewpoint whereas film can be a combination of multiple angles (Conrad, 2006), and dance takes place in the real world while film can be entirely fictional. How can these two practices co-exist and navigate the space between them in tandem? While dance and film together have potential to create something unachievable to each on their own, such as a dancer having a duet with themselves and the film reaching a choreographed flow, they also have to let go of some of their tools and techniques, and merge together to make space for a joint existence. For instance, dance can abandon stage to accommodate locations and camera angles while film can let go of heavy gear and rigidity in shooting to root into the movement and linear time of dance to negotiate the space between these two practices for instance in montage¹⁴. (Conrad, 2006) This does not sound radical at all as all of these approaches are explored in both modern dance and popular cinema to various degrees, which well demonstrates that interdisciplinarity should not be seen as taking away from discipline integrity or value but as an opportunity to expand the field in question and explore new ideas, and perhaps even invent aspects of the practice again in new forms. This will be further elaborated especially in relation to editing in subchapter 5.1.

Projects that combine glassmaking and filmmaking in varying degrees, in which the end result is a standalone moving image project or even a film do exist. However, this is a sliding scale from Hollywood via independent documentaries to glass-informed films. Hollywood clearly does not produce glass-informed films

¹⁴ Montage is an editing technique that can play with the viewer’s perception of time and reality, for instance by juxtaposing different shots. For examples and further discussion see Daniel Conrad’s paper: *Getting Off the Stage* (2006) or Martin Lefebvre & Marc Furstenu’s article *Digital Editing and Montage: The Vanishing Celluloid and Beyond* (2002).

but the presence of glass or glassmaking in these mainstream films discussed before in this subchapter is for the purposes of props, sets, supplementing a story, setting a mood, or in documentary for the purpose of presenting a craft. Documentaries by filmmakers are more often than not purely documentaries but documentaries that are produced by (primarily) glass artists or glass artists in collaboration with filmmakers have potential to be glass-informed. The more successful ones (in terms of being glass-informed) with identifiable relation to the history of either craft or film deal with factory manufacturing, individualism, some even with the “demise of skill” (Shales, 2017, pp.210–212). Examples of these projects will be discussed next throughout the rest of this chapter.

2.4. Glass-motivated avant-garde and interdisciplinary approach

Results of different craft processes no longer necessarily involve a tangible end result (Cushway, 2015). If craft is not inevitably tied to a physical object, the opportunities and options in relation to utilizing tacit knowledge and craft processes seem limitless – including branching to completely different fields such as cinema. Motivations behind embarking on the moving image path are probably as many as there are artists, but curiosity is certainly one.

I distinctly remember thinking in the early days of my glass-informed moving image practice that I wanted to see what happens if I conduct a particular action with or towards glass. Often, filming these actions seemed like an appropriate method of addressing my curiosity, which is in line with thought experiments in film (Elsaesser, 2018). For example, *Another Journey With Glass: A Baseball Bat And A Ball* (Haapasaari, 2011), a short film about me carrying a glass baseball bat and a ball into a snowy field and hitting the ball with the bat that resulted in both breaking, was driven by curiosity: I wonder how much of destruction will happen and how much resemblance the act pays to the original sport? As a student in glass, I was certain the solid glass objects would suffer some damage but curious about the extent of it, equipped with heavy outdoor wear, safety spectacles and the bravery of a naïve twentysomething, the glass objects did indeed break and to my delight the act produced a wonderful sound while I sustained no injuries.

Another artist driven by curiosity is Matthew Szösz. “I started filming to see what was going on” Szösz describes his motivation for recording the making process of his “Inflatables” series of glass sculptures, further explaining that he was “interested in the moment” when these sculptures transformed from a stack of flat, fused sheets of glass to three-dimensional sculptures upon taking the heated stacks from the kiln and inflating them with compressed air, wanting to share this moment of transformation with an audience (Szösz, 2020).

The driving forces behind individual glass-based artists working in moving image can be found by looking at different artists and their specific motivations. Flavie Audi & Samantha Lee’s *Landscapes of Mass Replication* (Audi and Lee, 2016), is an utopian animation drawing from the duo’s fictional term “cultural geology” that delves into planetary bodies and synthetic materials, essentially being an “anachronistic visualisation of the digital and the analogue”. The artists’ motivations behind the film seem to be investigation into this fiction and illustration of it (Audi, 2017). Another motivation related to glass-informed films is the desire to convey the artistic and creative process to a larger audience (Bolaños-Durman, 2017), but further prodding into the motivations of these artists brings to light more radical thinking: a desire to move away from glass altogether – sometimes as a parallel to an artist’s practice in glass (Ginsberg, 2017), and sometimes as a complete break from the material (Nakada, 2018). Artists such as the mentioned Flavie Audi, Juli Bolaños-Durman, Justin Ginsberg, and Kazushi Nakada all have extensive training and experience in glass and thus a complete divorce from the material is hardly possible even if they do not refer to their moving image projects as glass-informed films – their understanding of the material and close proximity to the field means their creative work will be affected by their training and expertise – were it in opposition to the craft or not.

Glass-informed filmmaking does seem rebellious towards the field of glass: it is moving away from the focus on a tangible object that has reigned the field of glass for the history of the craft, and this is where glass-informed film finds a framework in avant-garde filmmaking. The avant-garde (film) aimed at questioning and

challenging traditional art forms and “sought to break down the separation between art forms to expand and synthesise them” (Blunck, 2002, p.54), exploring other forms of creativity in relation to moving image, such as “ballet, painting, poetry, music, sculpture, fashion, literature” as well as “circus, vaudeville, Hollywood silent comedies and puppetry” (O’Pray, 2003, p.8) onscreen, thematically, and in more technical terms. Avant-garde film continues to provide a framework for creative practices that incorporate approaches or aspects of multiple creative practices: for instance Pedro Daniel da Costa Ferreira’s MA thesis on the relationship between avant-garde and experimental cinema and painting (2013) focuses on how painting students can utilize their skill base in producing avant-garde films, and how this cross-disciplinary approach could be incorporated into academic studies or curricula.

Avant-garde film is a fluid approach and often escapes exact definitions, and this is true to the glass-informed film too. The examples discussed later throughout this chapter show that especially at the fringes of glass-informed film practice it is challenging to point out what makes it glass-informed as these films do not necessarily even feature any onscreen glass. Avant-garde film did not have support from the industry, it was artist-led, and existed in opposition to the industry especially in the earlier days of the approach much like glass-informed films are being made without support or even acceptance of the glass field. These glass-informed projects seem to grow from the margins of the glass field: they are questioning the conventional, provide alternative approaches to the material, and some are even controversial (how is this glass?) – these are all qualities of the avant-garde film. Perhaps most importantly, glass-informed film is new, sensitive to changes in its surroundings, and breaks down barriers between different art forms which means it has potential to grow to almost any direction and define its own future without the constraints of pre-established conventions. This is in line with the avant-garde film, but what avant-garde film demonstrated over the years was a potential to invent itself again. Due to the newness of the glass-informed film it remains to be seen if the link to glass is too strong to prevent this emerging field from going through similar metamorphoses during its lifespan. (O’Pray, 2003; Blunck, 2002, p.54)

Probably not unique to glass but the hope of breaking through discipline boundaries gives hope of renewing the field, following in the footsteps of avant-garde. And indeed, glass-informed film fits in the canon of avant-garde film in terms of shared qualities and motivation as discussed earlier in this chapter, and this presents a potential framework to understanding glass-informed moving image both in opposition to glass but also to mainstream cinema. The complete dismantling of discipline boundaries seems unlikely (Wilson, 2015, p.156) and crafts including glass continue to exist in relation to the applied arts and fine art. Even within a framework similar to avant-garde film, in the extended field of glass and crafts, there continues to be voices within that embrace expansion through developing links to other fields rather than being in opposition or trying “to offer ‘everything’” (Wilson, 2012). Following this line of thinking, while the field of glass is expanding as the practitioners within it are reaching out, it is both through accommodating the new approaches and allowing the emerging branches to mature in an teenage-like rebellion against the field, that the field enables a rejuvenation of itself but also the potential existence of new independent creative practices, much like avant-garde film.

2.5. Festivals as a platform for glass-informed films

Apart from distributed productions, where are these glass-informed films and moving image projects? Where did they come from and who produces them?

Since 1998 Ateliers d’Art de France has been organising the International Film Festival on Crafts that has featured primarily documentaries but also experimental moving image projects, fiction, and animation. They have yet to show a glass-informed film even if they have screened multiple glass documentaries. It is worth noting that in 2012 the festival screened *Plastic and Glass* (Joosse, 2009) that is a symbiosis of musical and documentary – while not glass-informed, the film is certainly craft-informed in the way it merges sound with action at the recycling plant as well as with the editing and imagery. The programme is juried and has included fictional and experimental films that

investigate ceramics and fibres, and it seems only a matter of time before a glass-informed experimental film makes the cut.

Elsewhere in Europe, the UK Crafts Council's Real to Reel the Craft Film Festival was in its fourth iteration in 2019, featuring craft documentaries alongside more adventurous fiction and experimental films. Real to Reel is a juried festival in the same manner as its relative in France, but they have screened glass-informed films. For instance *Our Common Humanity* (Almazán de Pablo, 2018) starts as a documentary of the work and process of glass artist Juli Bolaños-Durman but towards the end of the film Bolaños-Durman's sculptures become alive, making use of her approach to glassmaking and essentially utilising filmmaking tools to translate that approach to an audio-visual format. This would be impossible without the integration of skills from both glass and film. The film has been produced by Diego Almazán de Pablo, who is a filmmaker rather than a glass-informed filmmaker but it is through a seamless collaboration of the filmmaker with the glass artist and the true merging of film and glass how this project become a glass-informed film. I will address the qualities of more glass-informed films later in this chapter.

Glass-specific film festivals have also taken place, even if as primarily one-off fringe events. Anjali Srinivasan and Yuka Otani curated "The Post-Glass Video Festival" first at the Heller Gallery in New York, NY in 2010, second iteration taking place alongside the Glass Art Society's annual conference in Seattle, WA in 2011, and third at the Sikka Art Fair in Dubai, UAE in 2016. The curation changed slightly over the lifespan of the festival but most of the selected films screened in all of these three locations, the programme including documentaries and moving image works from glass artists, many of them demonstrating the symbiosis of glass and moving image. (Srinivasan and Otani, 2011; *"How is this glass? The Post-glass video festival 2010" Exhibition*, 2008; Yukanjali, 2018)

Rhode Island School of Design Glass department in Providence, RI hosted a series of events in celebration of their 50th anniversary in 2016-2017, and as a part of this they organised a two-day film festival called RISD Glass Film Festival,

screening two categories of films, “immaterial” and “material”. The programme was composed of projects from more well-known filmmakers and artists such as Maholy Nagy, Len Lye, and Bill Viola alongside alumni including Rui Sasaki, Aaron Pexa, and Stefanie Pender, curated by Rachel Berwick and Jocelyne Prince from the Glass department with Sheri Wills from Film/Animation/Video department. Even though film by its nature is immaterial, the categories seem to reference to the use of physical matter and glass in the selected films in addition to highlighting the department’s experimental and sometimes immaterial approach to glass. The material category included for instance the well-known short documentary *Glas* (Haanstra, 1958) that features glassblowing, and *Coruscating Cinnamon Granules* (Graham, 1996) in which cinnamon is sprinkled on a stove creating a sparkling effect. In the immaterial selection the focus was more on light, and perhaps how glass and light (including the lens through which these films are shot) are in dialogue with the subject matter, such as the delicate shots of glimmering water in *For a Young Filmmaker* (Davis, 2013) and the compression of time through superimposing footage in *WVLNT: Wavelength For Those Who Don’t Have the Time* (Snow, 2003). (*RISD Glass Film Festival*, 2016; Prince, 2020) While interesting screenings, the festival paints an in-depth view of the ethos and pedagogical approaches embraced by the glass department rather than a comprehensive look into glass-informed films – even if featuring also glass-informed moving image projects especially from the younger generation of RISD alumni.

It is worth noting that moving image is taught within some glass programmes, usually as a part of a module or a course, as demonstrated in the senior exhibition at RISD (*2018 Glass + Film / Animation / Video Open Media Senior Exhibition*, 2018) or incorporated into teaching on an as-needed basis when students’ needs require that (Ginsberg, 2017). This is not the norm currently, and film-curious glass students are often directed towards the film and media departments to supplement the education in the glass department - if any steps are taken towards quenching the film-thirsty students.

In 2020, North Lands Creative, a glass studio and gallery in Scotland, organised Glass, Meet the Future Film Festival (GMTFF), composed of a juried selection of

glass-related film work from 26 female artists alongside a commissioned short documentary by Thomas Hogben. The festival “came out of a British Council opportunity to develop film based residency with a glass residency” (Lightley, 2020) but further context or motivations behind the festival were not disclosed. The festival was scheduled to premiere in Toyama, Japan but due to Covid-19 making these kinds of live events impossible to take place in 2020 North Lands Creative moved the festival online and postponed the event in Toyama to 2021. The online festival was divided into five categories: performance, narrative, documentary, experimental, and short narrative – the categories seemingly only indicative of the films in it rather than following established film festival categories. For instance the performance category included films that could be easily defined as experimental such as *Fabric of My Skin – Sculptural Glass Sound* (Beyaert, 2020) featuring a performance with superimposed footage that compresses the time in relation to the creative process of the artist and the duration of the performance, not too different from the experimental film *WVLNT: Wavelength for Those Who Don't Have the Time* (Snow, 2003) that is a shorter version of the original *Wavelength* (Snow, 1967) making use of simultaneous footage rather than a linear progression. *The Shape of the Thing* (Forslund, 2018), another film in the performance category is composed of reversed footage of a glass bubble exploding due to being pressed in between two hands and sending glass shards everywhere. This film, and the performance it features are two different things: the performance is destructive and the film regenerating. The short narrative category includes among other films *Aspiration* (Hove, 2019) in which two hot glass bubbles are “in conversation” with each other. Narrative conventionally refers to films that have a storyline and feature a succession of events (Chandler and Munday, 2020, p.538). However, *Aspiration* focuses on the interaction between these bubbles and the shapes created, and any narrative is missed by the viewer. (*Glass, Meet the Future Film Festival 2020*, 2020)

The documentary category of GMTF festival consists of films in the canon of artist documentaries and aligns with the understanding of what a documentary is in the sense that they depict actual events (Chandler and Munday, 2020, p.310). Similarly, the films in the narrative category conform to what is usually considered

narrative – however, it remains unclear what is the difference between “short narrative” and “narrative” as all the films in these categories are shorts. The experimental category is perhaps most insightful into what glass-informed moving image can be, and borrows from experimental cinema in challenging form and content, many of the films showing an integration of glassmaking and filmmaking skills. For example, *Breath* (Audere, 2016) focuses on a large glass bubble being blown against a metal step, creating a tension between the rigid, cold world and hot glass responding to breathing with the aid of reversed footage while the near-mechanical movements of the offscreen glassblower portrays the glass as almost alive – a vintage-inspired grade further underlining the curiosity factor of the film. *Diaphanous Illusion* (Harris, 2020) draws the viewer into a world of light, juxtaposing water, glass, and air, and eventually blurs the lines between the material qualities in a celebration of fluidity while employing visually strong and dynamic framing and closeups that maintains the ambiguity of what is seen onscreen. Both *Breath* and *Diaphanous Illusion* are demonstrative of what glass-informed moving image can be in combining tacit and intimate knowledge about glass with filmmaking principles and techniques in a symbiotic manner. (*Glass, Meet the Future Film Festival 2020*, 2020)

GMTF in essence is a mix of documentaries and experimental projects, some of which are glass-informed in terms of how they portray a seamless integration of glassmaking and filmmaking skills and make use of the intimate relationship a glassmaker has with their material. It is the first festival screening solely glass-informed films and films that feature glass in a prominent role, embraces the film festival format¹⁵, and will provide valuable information for further research because of its pioneering status. All of the films in the programme apart from Thomas Hogben’s documentary are from female artists – this was a curatorial choice. Nevertheless, the viewer is left wondering how the male-identifying and non-binary artists might approach glass-informed filmmaking. The festival is first of its kind as it focuses on glass-informed films that transcend time and cultures,

¹⁵ GMTF film festival was juried, open call (even if the open call was limited to female filmmakers), scheduled, and screened multiple films. Viewers were not charged and the audience was not limited to invitations only but this is not typical to all film festivals.

and do not grow from a particular educational institution, including work from many generations and disciplines yet all of the featured projects inform us of the potential futures of glass-informed moving image practices. Despite elastic in terminology, the festival shows us that glass-informed at the time of the festival means long takes such as in Chris Bird-Jones' *Silver Lining* (2020), superimposed footage such as in Emily Coulson's *Time & Tea* (2020), non-linear approach to time and progress such as in Karin Forslund's *The Shape of the Thing* (2018), optical effects such as in Rachael Harris' *Diaphanous Illusion* (2020), portrayal of pain and risky human behaviour such as in Alison Lowry's *35 I cant's* (2019) and Natalia Komorowska's *Obsession* (2020), sounds of breaking glass such as in Chenyue Yang's *Dear* (2020), and perhaps most importantly, the tension between a human body and glass in all of its forms such as in Anna Mlasowsky's *4 feet apart* (2020).

Looking at the existing glass-informed work¹⁶ from the position of a filmmaker, it becomes clear that some of these films would have benefitted from more skills in moving image production. Useful points for addressing are issues such as camera operation, editing, casting, sound, narrative, and colour grading. I am deliberately choosing not to address specific projects in pointing out the challenges as this might come across as too rash given the conditions under which these projects have come to fruition: students in glass are still not taught the skills in moving image but as many of us have a camera in our pockets, an access to simple editing software, and chances to sharing whatever we please in the internet (Lehmann, 2018, p.42), moving image might feel like an easy addition to the toolbox of a glass artist hence pointing towards the path of producing moving image projects, further encouraged by “[m]arket forces, or lack thereof” (Sarmiento, 2017, p.32). We are also surrounded by moving image in our daily lives and thus the medium is hardly a novelty but more akin to how we perceive the world around us. It is no surprise glass-informed artists experiment with moving image but because of this speedway to production already at our fingertips it is easy to bypass all the existing knowledge about filmmaking. While the lack of experience and education, and the related fresh perspective to moving image might be a starting point for

¹⁶ Such as the films in the GMTF festival

interesting projects and discussion, unfortunately more often than not these projects come across as underdeveloped if not naïve.

However, success in filmmaking is about being willing to try things (Elmes, 2012, p.147). Trying things leads up to mistakes and coincidences and sometimes it is the unplanned shots that end up being the most successful (van den Ende, 2012, p.152). While utilizing experiments and mistakes as starting points for creating glass-informed films is undoubtedly a positive and useful approach, the artist has to have an understanding of how to implement techniques from filmmaking and position themselves in relation to the filmmaking tradition.

2.6. Other platforms and the rise of moving image in the New Glass Reviews

Apart from festivals, glass-informed films can be seen in exhibitions, recent group exhibition examples including *Young Glass 2017* at Glasmuseet Ebeltoft in Ebeltoft, Denmark (Blach, 2017), *New Glass Now* at Corning Museum of Glass in Corning, NY, USA (Silbert, 2019b), and *Young & Loving* at S12 in Bergen, Norway ('*Young & Loving*', 2019), as well as solo exhibitions such as *Forgiveness* by Carrie Fertig at the National Glass Centre in Sunderland, UK in 2018-2019 (Fertig, 2020), *When you see me, Cry* by Anna Mlasowsky at the Goethe Institute in Seattle, WA, USA in 2019 (Mlasowsky, 2019), and *Under A Glassy Sky* by Riikka Haapasaari at the Glass Factory in Boda, Sweden in 2018 (Norman, 2018, p.44). These are only a handful examples; it is no longer uncommon to see moving image in primarily glass-oriented exhibitions or projects from glass artists in non-glass venues. However, this is a contemporary trend and often these exhibitions are pictured as new and young, showcasing the next generation of glass-based artists.

Many of the projects featured in these exhibitions are available to view online via platforms such as Vimeo and YouTube. This might be due to the artists framing these projects as supplementary to their physical glass projects and seeing presence in these platforms as good publicity, or perhaps it speaks more about how not long ago it was a struggle to show moving image projects in primarily glass-oriented venues. After graduating in 2014 from the Royal College of Art I

experienced years of rejection from glass exhibitions, constantly having been told that my films would not be accepted to glass exhibitions because they were not physical glass objects or that the organisers did not know how to show them. Fortunately, this is changing now and there are more opportunities for the glass-informed filmmaker.

When did this new generation start producing these moving image projects, and what is the motivation behind this trend of exhibitions? This is a complex question which is beyond the scope of this thesis, and perhaps premature to address as there is no established terminology, or even a well-known understanding of what constitutes a glass-informed moving image project. However, to put the rise in the use of moving image in the field of glass into perspective, a survey of the 40 iterations of *New Glass Review* publications from 1980 to 2019 is useful as it shows that this is an emerging practice. This survey might not seem autoethnographic at face value but these publications are viewed by practicing artists and contribute to how they contextualise their own practice and work. This is true also in my practice: what I see in *New Glass Review* is a snapshot of the whole field of glass at the time of each publication – from early on in my education this publication was treated with a status of a holy scripture of glass and this still affects how I position myself in the context of glass.

New Glass Review (NGR) is a yearly international publication of 100 glass works produced in the year before, published by the Corning Museum of Glass in Corning, NY, USA. The projects in the publication are selected through a rigorous jurying process based on open international submissions (Silbert, 2019b) and inclusion in the publication is widely considered to be an accomplishment for practitioners in the glass field. As figure 1 below shows, in 2019 (NGR 40) out of the 100 projects nine projects utilized moving image¹⁷. Compared to previous iterations, collating all the projects that incorporated moving image in different ways: NGR 39 includes four moving image projects (Silbert and Price, 2018), NGR 38 five (The Corning

¹⁷ Here, by moving image I am referring to all approaches to it: installations, site-specific installations, films, and documentary as well as projects that incorporate multiple mediums out of which one is moving image.

Museum of Glass, 2017), NGR 37 two (The Corning Museum of Glass, 2016), and NGR 36 four (The Corning Museum of Glass, 2015). The number of moving image submission inclusions has been increasing from 2005 (seen in NGR 27), and prior to that year 2001 (NGR 22) marks the first time a project incorporating moving image was accepted into the publication – however, the 2001 project was an installation composed of a glass object and a video projection (The Corning Museum of Glass, 2001, p.15) and not a standalone film project¹⁸.

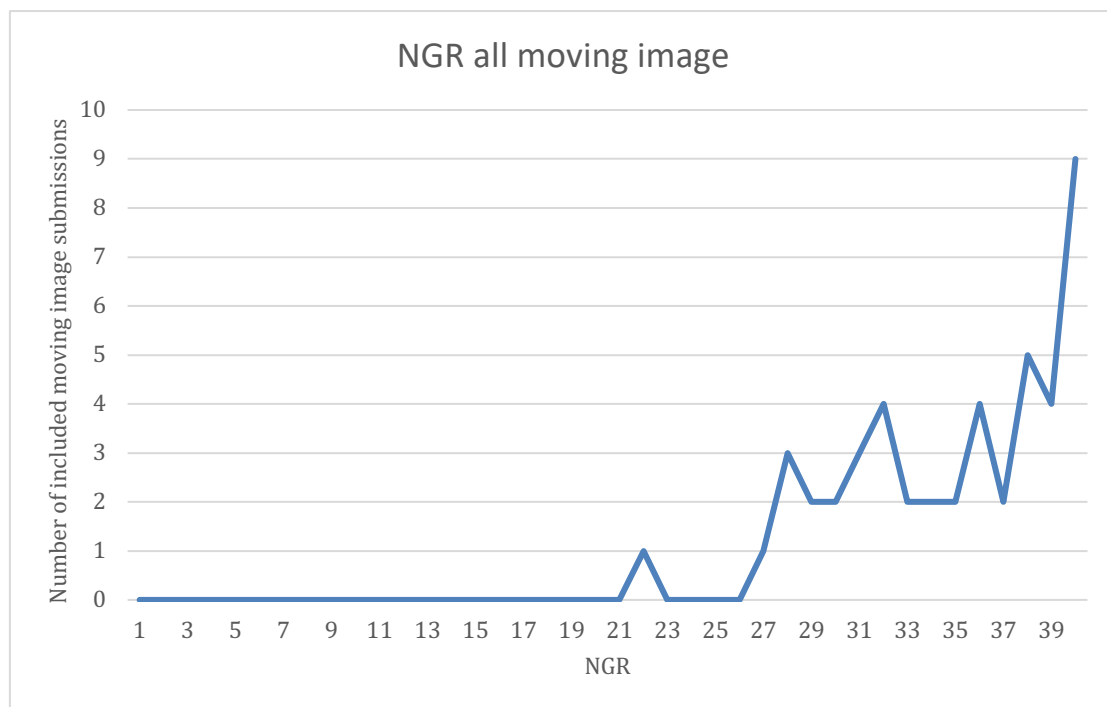


Figure 1. NGR all moving image projects

The inclusion of standalone moving image projects in the New Glass Review has been rising from 2007 (NGR 28) as shown in figure 2. Standalone meaning that the projects are not installations or other site-specific moving image works. Again, as with the number of total moving image projects in the publication, NGR 40 shows an exponential rise in the number of standalone films. Why is this? What happened after the turn of the millennium, from NGR 28 onwards, that sparked the rise in the inclusion of moving image projects?

¹⁸ By a standalone film, I am referring to a single screen moving image project with a set duration that is not an installation – as in, the project can be screened on different kinds of screens, and is not dependant on the set-up like an installation is. Simply put, these are films but I have added “standalone” to emphasis the difference.

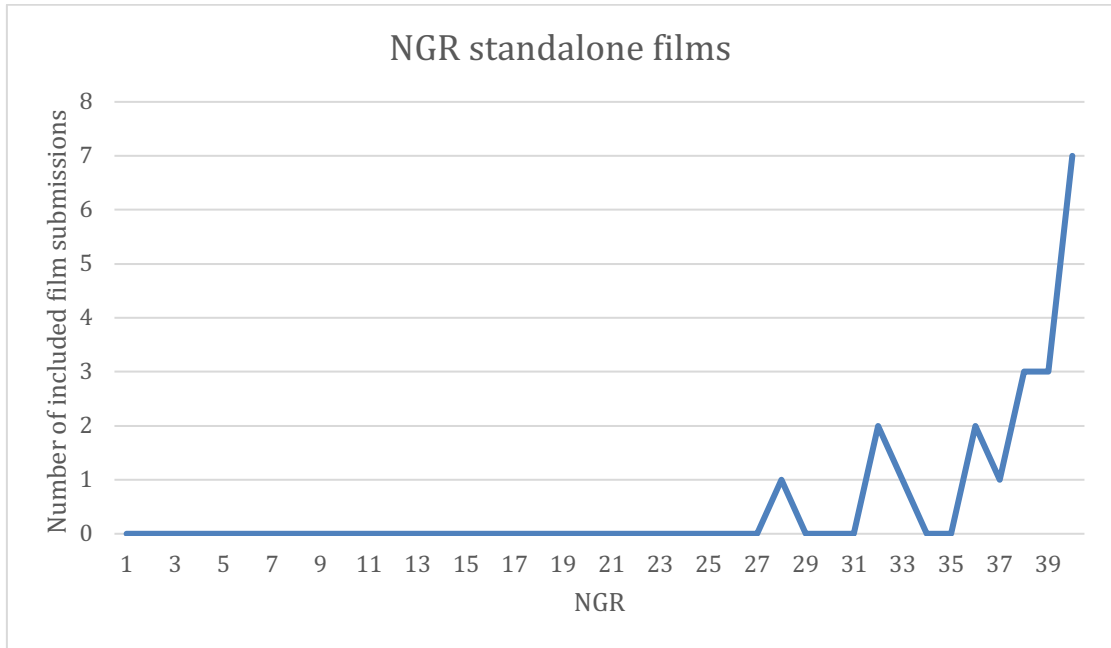


Figure 2. NGR standalone films

One potential answer could be found from the increase in submissions to the publication – but this has not happened. The number of submissions has been on a slight rise throughout the publication’s history as shown in figure 3, gaining traction in this millennium but the numbers do not correlate to the exponential rise in moving image inclusions.

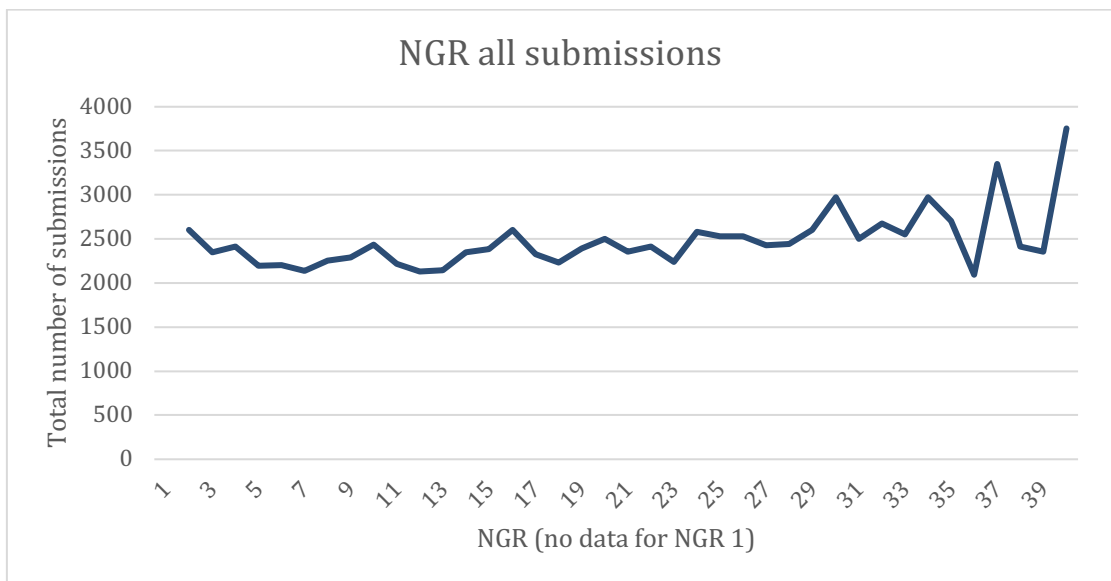


Figure 3. NGR all submissions

Another potential cause for the rise in moving image in NGR could be the jury. The jury has been led by a Corning museum representative throughout the years: Thomas S. Buechner until 2001 (NGR 1-22) alongside William Warmus from 1980 to 1985 (NGR 1-5), and Susanne Franz from 1987 to 1999 (NGR 7-19); Tina Oldknow from 2000 to 2015 (NGR 22-37), and Susie J. Silbert from 2016 (NGR 38 onwards). This means the number of moving image submissions included in the publication started to rise towards the end of Tina Oldknow’s tenure but this does not fully explain the change either: the included submissions are not dictated by the Corning representative but chosen through a voting system in the jurying process. The first ever moving image inclusion in the publication’s history in NGR 22 got in based on votes from external jury members. The projects that incorporate moving image in any way and are included in the publications during Tina Oldknow’s (TO) tenure are divided based on jury votes in figure 4 below¹⁹.

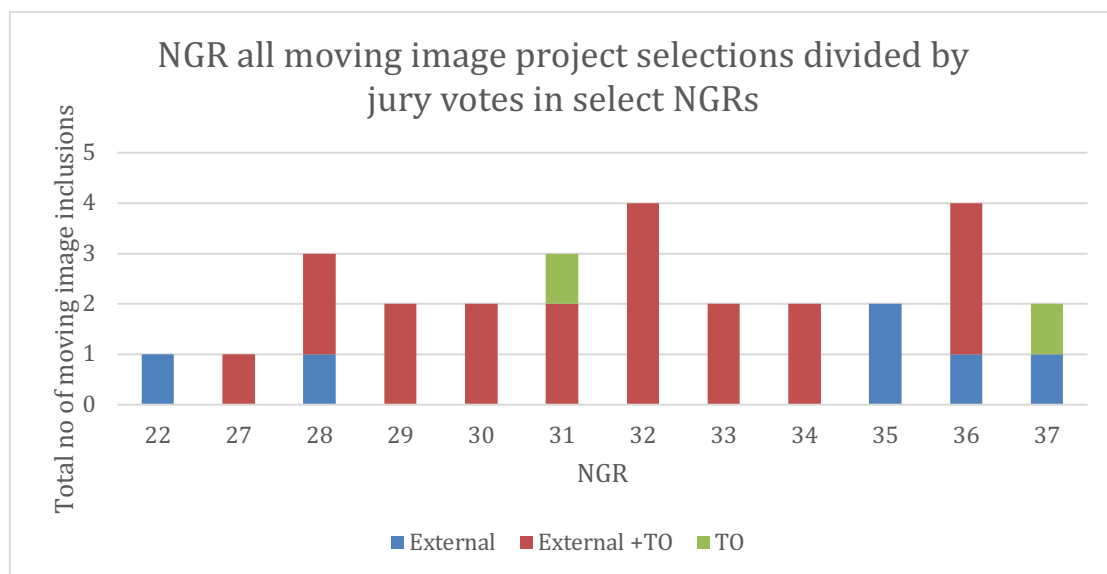


Figure 4. NGR all moving image projects divided by jury selections

Tina Oldknow voted for the second moving image inclusion in NGR, in review 27, alongside another jury member, and for NGR 28 voted for two along other jury members but it is not until NGR 31 she voted for a project that incorporated moving image on her own. The data suggests that she has not been against the inclusion of moving image projects (at least from NGR 27 onwards) but does not

¹⁹ I have included only the New Glass Reviews that include moving image projects in this figure.

definitely indicate that her presence in the jury is the only cause for the rise of moving image in the publication.

It is important to mention that the submissions happened by individual artists and makers sending slides via post throughout most of the history of NGR. The current online system has been in place from year 2013 (NGR 35), and submissions in the form of video files were “*explicitly* allowed” from NGR 39 onwards but this does not mean individuals did not submit moving image projects before NGR 39, either in video format that the online system might have accepted already from 2013 or in the form of still images (Silbert, 2020). This softening or expansions of the requirements certainly falls within the timeframe of the rise within the moving image submission inclusions in NGR but it is worth bearing in mind that the submissions are of existing work. NGR is responsive to artists’ needs and their submissions (Silbert, 2020) and thus it is difficult to say which came first: artists submitting moving image projects or noticing a change in the wording of NGR call outs and subsequently submitting video files and moving image projects, let alone producing moving image projects upon noticing a shift in the review - would a glass artist start producing moving image projects just for the sake of being included in the NGR? Zachary Weinberg did exactly this for his MFA thesis (2015): he looked at the included projects in NGR from 2001 onwards and broke them down into different archetypes ranging from simple ones such as *vessel*, *sculpture flat/painted*, and *installation/architectural* to more complicated categories relating to for instance size, visual characteristics, and symmetry. In addition, he broke down the image characteristics of the submissions and even gender and geographical location of the submitters. On the basis of his data Weinberg developed glass projects and a pseudonym to optimize the chances of being included in NGR but ultimately this approach did not lead to inclusion in NGR. (Weinberg, 2015) As the inclusion in the review is still considered to be a merit in the field of glass, I experimented with a similar approach in 2016. Unhappy with not being able to submit actual films I submitted three images of a salvaged glass core from a decommissioned crucible and fabricated a story around it. To my surprise my submission was accepted (The Corning Museum of Glass, 2017), and later the glass chunk became also the fictional lead of one of my short films that

was loosely based on my NGR experience. While Weinberg's project is an interesting tongue-in-cheek endeavour, and my fictional glass chunk submission a result of frustration with the review itself, this kind of inclusion-driven tactic is hardly indicative of how artists and makers approach NGR submissions as it is not a recipe for success in inclusion in the review.

As *New Glass Review* is perhaps one of the best known and appreciated yearly publications in the field of glass that has had an effect on how glass is "made, thought about, and understood" (Silbert, 2019a, p.10), we can assume that the included projects have some relation to the types of projects produced within the field of glass, and thus there has been a rise in moving image projects in the field of glass in this millennium. Extrapolating further conclusions from these publications such as the motivations of artists, potential changes in access to materials, tools, and techniques, changes in academia and educational programmes, or even shifts in the appreciation of glass-informed creative projects or market forces requires more research and is ultimately beyond the scope of this thesis. Even if this short survey into moving image projects in NGR throughout the history does not give insight into the cause of why moving image has gained popularity within the field of glass, it suggests that this is a trend that is going to continue gaining traction in the coming years and thus research into it is important.

Chapter 3: Development

This chapter focuses on the development of *Light Keeper*. There are no existing examples of glass-informed features to date, but glass-informed short films exist and have gained popularity in the recent years as discussed in the previous chapter. A feature film can stand on its own right and fill a whole screening programme whereas short films are often screened together with other shorts – it is common for filmmakers to develop their skills and personal style in shorts and then move on to produce more ambitious features. This is why the production of a feature is the next logical step within the niche of glass-informed film, and also in my creative practice.

Development in film production conventionally refers to the stage in filmmaking where an idea is turned into a script and prepared for the financing and preparations for production (Steiff, 2005, p.26), loosely corresponding in creative process to the stages of immersion – reflection – research – inspiration – illumination – trials – assembly – ideation – selection – technique specification (Botella, Zenasni and Lubart, 2018). All these stages are further explained and discussed when necessary in this chapter. I have incorporated these stages into this chapter to provide clarity to what is a non-linear, often seemingly messy stage in creative work and in my practice.

The development of *Light Keeper* took place within my creative practice²⁰. However, it is important to remind the reader at this point that this feature is part of my research project with a set of research questions concerning the differences between moving image practice and glass-informed moving image practice, the qualities of glass-informed moving image projects, and how the glass-informed moving image work and practice contributes to the field of glass. This means I have made creative decisions throughout the development and production of *Light Keeper* based on the goal of answering these questions rather than practicing

²⁰ While I have not included images of the development process of *Light Keeper* in this thesis, I have added an appendix (A5), that consists of images that provide insight into the visual aspects of this process and illustrate my experiments relating to character development.

total artistic freedom in a quest to produce the epitome of my creative practice, in favour of providing insight to the particularities and potentials of this approach. These decisions have related to every stage of the process: from developing narrative to choosing specific approaches to editing. These issues are discussed as they arise throughout this chapter and rest of the thesis.

3.1. Immersion and reflection

The development of *Light Keeper* emerged from my practice similarly to my previous projects as discussed in subchapter 1.4. I keep looking into my surroundings gathering information, thoughts, studio experiments, and visual references until a number of these individual aspects cluster together. This point could be identified as immersion (Botella, Zenasni and Lubart, 2018, p.9): I am preparing for a particular project, in a sense having identified a problem. Nevertheless, the plan for how I go about solving it (producing the artwork) is still far in the horizon. Differently to my usual practice, immersion in this project was primarily revolving around my research questions and a goal of producing a glass-informed feature film which established the framework for me to develop this film within. I have unpacked the relevant points in the development of *Light Keeper* that constituted parts of this framework in relation to my research questions below.

Question 1. What are the differences between a moving image work and a moving image work that is informed by glassmaking processes?

In understanding what are the differences between a moving image work and a glass-informed moving image work I had to be mindful of when I was implementing glass-specific or moving image-specific skills and knowledge in developing *Light Keeper*, if there was overlap, and in which ways these expressed themselves. To make sure I was applying both skillsets in the development of this feature, I had to consciously push to use glassmaking skills, traditions, and knowledge about the material in development leading up to all the way to distribution and exhibition. Despite having to be mindful about when I was using

filmmaking approaches in this production, pushing it was less of a concern as the format of the project (feature film) automatically meant I would have to keep my filmmaker hat on throughout the process.

Question 2. What are the qualities of a piece of moving image that utilizes skills, traditions, and knowledge from glassmaking?

As development of a film conventionally consists of coming up with a script and figuring out how that translates to screen in the form of storyboarding (Steiff, 2005, p.26), and the goal of my research project was to demonstrate a true integration of these fields in all levels, I had to ensure I was integrating both sets of skills at all stages. This meant that even before having developed the script I had set out to integrate glass-informed methods, techniques, and related thinking to aspects of filmmaking including narrative, the overall form of the film, the visual aspects, special effects, editing, sound, sets, and even makeup – all of this had to be considered already in development as not to risk the cohesion of the end product.

I was aware that I had set up a tremendous challenge for myself. This film was going to be my first feature dictated by a production schedule that directly correlated to the schedule of my research, providing me very little leverage. In addition, I was going against my tried-and-tested approach to filmmaking that did not include pre-set goals such as form and content let alone answering specific questions about these aspects. Yet I had placed an enormous amount of trust in my own creative process and experience from the past decade in being able to conceive this film alongside producing the related written research.

From the beginning of this research project I knew this feature was going to be my main source for addressing my research question number 2 about the qualities of glass-informed films as it was a major part of the practice-aspect of this research. I took a calculated risk in the development as essentially; I did not know if this feature was going to succeed. To minimise this risk, and to be able to address this research question, I placed emphasis on being invested in the material and the

related processes as well as literature in all possible ways in development. This way the development would be flooded with glass leaving me no other option than to integrate “glassy thinking”²¹ into all aspects of the film.

Question 3. How does this kind of work contribute to the field of glass?

Having struggled with my relationship to the field of glass, I knew I occasionally felt a need to distance myself from the material altogether in my creative practice. The struggle is an excellent motivator in seeing my practice in a different, non-glass light but occasionally means I produce a film that has not much to do with glass. The development of this feature was set within the field of glass and I had surrounded myself with the material but there was still a minor risk that I might find myself in a development rut and feel that the way out would be through abandoning the material and render the resulting film near useless for the field of glass. I chose to take this as a challenge, and a learning opportunity as I had gotten used to having a free range in nearly all aspects of my previous film productions: this film had an audience, and I would take appropriate steps in development, such as mentioned above in relation to questions 1 and 2, to make sure this feature was going to be for the “glassy audiences”.

Following immersion, reflection is a point in the creative process where the individual steps back from the preparation having outlined the problem to be answered, before moving to the next stage and begins cultivating answers to the problem (Botella, Zenasni and Lubart, 2018, p.9). In the development process of *Light Keeper* reflection was a clear point very early on – I had my questions and a loose framework that enabled me to “solve the problem” as in taking the first steps in development.

²¹ “Glassy thinking” is a term coined by Susie J. Silbert used to refer to a creative person’s cognition that is infused with intimate artisanal knowledge and understanding about glass to produce works that are not necessarily glass (Silbert, 2019a, p.10, 2018).

3.2. Artistic research

As already noted in subchapter 1.3., the research as a part of the creative process (Botella, Zenasni and Lubart, 2018, p.9) is artistic research, and should not be confused with practice-based research such as this thesis. Artistic research is well defined by Hannula, Suoranta & Vadén (2005), and refers to the processes of artists amassing information about their surroundings and about their field-specific techniques, materials, tools and processes, as well as about other practitioners. While this artistic research can produce new knowledge, it lacks the rigour provided by an established research methodology that is evident in practice-based research projects such as the successful PhDs already mentioned in subchapter 1.3.: artists acquire their data in non-linear and sometimes illogical ways that serve the purpose of producing new artworks and finessing their craft, not primarily generating new knowledge. In this subchapter I use the term “artistic research” as opposed to “research” used by Botella, Zenasni & Lubart (2018) to avoid confusion about what I am referring to.

Artistic research is taught in art schools and thus it is no wonder that this activity forms the very foundation of many artists’ practice – were they conscious about the application of it or not. This stage is marked by finding information and ways to address their initial problem found during the immersion stage. (Botella, Zenasni and Lubart, 2018, p.9)

As my creative practice is a continuum and I find it impossible to not keep adding items to my imaginary cauldron, the artistic research for this feature had in actuality been happening for years before I even set out to produce the feature – this can be seen when going through my research workbooks²² that chronicle my

²² An integral part of my practice is a collection of what I call as my “research workbooks” – a way of addressing the accumulation of artistic research in a cohesive way that I inherited as a teenager from my International Baccalaureate Visual Art studies (Pound, 2006, p.108). My research workbooks used to be entirely in a physical form and not too different from artist sketchbooks, earmarked with dates and containing drawings, collages, and notes. As my practice became more structured and individual projects started taking more complex forms including longer pieces of writing around 2014-2015, I integrated a digital aspect to the research workbooks, and now they exist in three places: as physical books, as a note folder in a cloud, and within another digital folder that houses longer pieces of writing and includes scripts. These all

own artistic practice (Haapasaari, 2017c, 2018). This is why I did not start from zero after having defined my framework.

While I had a framework and rough goals already in place, I did not feel *Light Keeper* became a project before January 2018, and this is why many of the initial ideas are housed in what I consider to be my practice rather than a project – once a project starts to form within my research workbooks, I move it to a separate project book²³. This is also the reason why some of the artistic research related to this feature is dated prior to the lifespan of it, such as this short observation from the glass studio (dated October 12th, 2017):

You can't see the stringer [a thin filament of glass] all the way, the way light hits it and leaves some bits in the dark... use glass to show what cannot be seen with the bare human eye. (Haapasaari, 2017c)

Despite a simple observation, this became an important point in directing my artistic research for *Light Keeper*: I had discovered that my intimate discussions with glass were not entirely unique. For instance the segments narrated by glassblowers in Martin Sorrell's *The Glass Man* (2005) indicated a two-way relationship between the glassmaker and glass. Not far in the field of ceramics, Conor Wilson expressed curiosity towards a better understanding of the relationship between and object and its viewer, even the maker becoming “an object among objects” (Wilson, 2018, p.1).

My artistic research relating to *Light Keeper* was heavily rooted in glass as outlined before, but as a creative practitioner, my artistic integrity was an aspect I would not risk even for a research project that was important to me. I had been fortunate in my past having resources that supported me and allowed me to not sacrifice my

relate to each other and bind together through dates, and today I call this trifold entity as my research workbook.

²³ In addition to my research workbooks, I also have additional project books for each film I am working on. As explained in subchapter 1.4., I recognise moments in my practice where individual projects start to take form, and it is usually at these moments each project becomes its own project book rather than being housed in an unripe form within the research workbook.

integrity as a creative practitioner, rather than having to bend under financial strains or expectations from my field (Barbour, 2006). Determined to keep my artistic integrity intact in the face of this feature project, I did not restrict thoughts that entered into the development of *Light Keeper*, and allowed ideas seemingly unrelated to glass to enter my radar for the feature development such as this note on birds (dated October 20th, 2017):

The bird flying over the still river, reflection, he in his serenity solitude, all free in the world, no worries. (Haapasaari, 2017c)

Now based in Sunderland, UK by the sea I had gotten used to seeing seagulls everywhere. They were picking apart trash, squawking in the morning when the sun was getting up, and dancing on lawns that I found particularly hilarious and was later told that they stomp the ground to attract their meals.

The occasionally glass-like smooth surface of the River Wear that runs through Sunderland was particularly fertile grounds for my artistic research as I crossed the Wearmouth Bridge and walked by the river on its north bank on a daily basis between my home and the University campus. With the water came the seagulls, their reflections on the water, and then by extension the activities of these birds such as this section within a longer piece of writing (dated October 23rd, 2020):

*I am reminded of a seagull
Gliding on the stillness of a river
With widespread wings
And another seagull
Right below it
Mirroring every tiny adjustment
Its image made
Image, and itself
Infinitely replicating
Every single move
Infinitely,*

Following the curve of the water
And at the same time unaware of being looked at
Free of constraints
Free of worries
Free of all the rocks revolving around him
How is that possible?
(Haapasaari, 2017c)

This segment became a voiceover for a whole scene in the theatre edit of *Light Keeper* (Haapasaari, 2019, pp.31–32) in discussing passing of time, circularity, infinity, and finding contempt within uncertainty. I did not set out to observe these seagulls but quite naturally was drawn to these animals perhaps due to how to me they seemed to be mostly regarded as a nuisance, unworthy birds for the interest of the general public. In retrospect, I can see how this connects with some of the underlying themes in the feature: isolation from humans, misunderstanding, human greed, and perhaps the ignorance of listening to our natural (and otherwise) surroundings.

This connects to the poetry by the Polish Nobel Laureate Wisława Szymborska. Her poems have followed me since a teenager and I still find myself reading poems such as *Conversation with a stone* when developing projects. This poem is literally a conversation the persona of the poem has with a stone, willing to explore the “great, empty halls of the stone”: “I knock at the stone’s front door. / “It’s only me, let me come in. / I’ve come out of pure curiosity. / Only life can quench it. / I mean to stroll through your palace, / then go calling on a leaf, a drop of water. / I don’t have much time. / My mortality should touch you.”” (Szymborska, 1997, p.54) I am fascinated by Szymborska’s endless curiosity towards the world, both material and inhabited by human beings, and this has had a tremendous effect on my practice. Because Szymborska has stayed with me for the duration of my artistic career, I am not certain if it is these poems that have directed my course or if I just happen to be curious about similar themes and ways of constructing thoughts as she illustrates in her poems.

The natural world or a desire to understand our surroundings better is present in many artists' practice and research. Recent examples from the field of glass include Monette Larsen's coral-inspired kiln formed sculpture *Dynamic Breath* (Larsen, 2018), Crista Matteson's kiln cast glass and mixed media sculpture featuring a deer head and fungi *Spring Dew on a Mushroom Tree* (2020), and Dafna Kaffeman's recent exhibition *The Rule of Law* featuring lampworked flora (Kaffeman, 2020).

Nature itself is not a resource of artistic research for me. I am interested in how we as human beings construct meaning in our existence in relation to our physical surroundings and thus nature as a part of these surroundings frequently comes up in my projects such as the cloud in *Pieni Sininen* (Haapasaari, 2016a) or as a reference point and framework for understanding and questioning human behaviour in *The Orb* (Haapasaari, 2016b), or as the location in *Phoenix* (Haapasaari, 2017b). Seagulls in *Light Keeper* serve to this function, as a mirror image to the actions and thinking behind the lead human character and as living beings that help the main (glass) protagonist to understand human behaviour and existence. The film discusses a range of abstract issues and in rooting some of the scenes into events and physical entities of the world we live in, I wanted to help the audience to better grasp the more abstract issues examined.

Thomas Elsaesser argues that films can contribute to discussions in philosophy in the form of thought experiments despite their often fictitious and narrative nature (Elsaesser, 2018), following the footsteps of Thomas Wartenberg (2007) who examined this idea by looking at a range of films such as *The Matrix* (Wachowski and Wachowski, 1999) and the *Eternal Sunshine of the Spotless Mind* (Gondry, 2004). Films that entertain "what if" situations or inspect hypothetical propositions or events impossible to test in real life, and operate according to a set of even arbitrary rules can be seen as thought experiments (Elsaesser, 2018, pp.59–61). Loosely trailing this line of thinking, the development of *Light Keeper* was directed by my curiosity to understand the world around me, and started to take the shape of my version of creaturely writing (November 12th, 2017):

How could glass ever be happy?
It's just being pushed around
According to others' ideas
It doesn't have a say
- What would glass tell me if it could speak?
(Haapasaari, 2017c)

Besides thought experiments, I incorporate movement into my artistic research, primarily in the form of walking but also within my (glass) studio experiments. Walking as an art form and the artists practicing it is widely established and researched (Billingsley, 2003; Ziogas, Sylaiou and Mendolicchio, 2018; Collier, 2011, pp.163–174) as well as the activity's impact of the human body and mind (Hall, Ram and Shoal, 2017). However, in my practice, walking is a way to open my imagination allowing new ideas and solutions to emerge as the act of walking enables my brain to “breathe”.²⁴

Besides walking as an activity that allowed me to sift through ideas, I used the walks from my artistic research to inform the choreography of the feature. Examples of this are the circular thinking and tension building in scene 26 (Haapasaari, 2019, pp.36–45) that was later turned to a different dance-informed choreography altogether ²⁵, another circular choreography in scene 19 (Haapasaari, 2019, pp.25–27) that was edited out from the digital cut, and inspiration for the forest sets in scenes 18²⁶ (Haapasaari, 2019, pp.23–25), and 30 (Haapasaari, 2019, pp.47–48) that was also later edited out from the film.

My artistic research for *Light Keeper* included experiments with glass, such as building structures and small trinkets of pre-made glass, or making my own lenses in the glassblowing studio and experimenting with light, shadow, and optical phenomena. I was conducting most of this out of habit during the first year of this

²⁴ The benefits of this walking activity as a means to develop ideas are captivatingly described by Evija Trofimova & Sophie Nicholls in the article *On Walking and Thinking: Two Walks across the Page* (2018).

²⁵ See *Light Keeper* digital edit 36:00 to 43:13

²⁶ See *Light Keeper* digital edit 26:06 to 29:59

research project, still without a central idea for the feature development while my research question 1. *What are the differences between a moving image work and a moving image work that is informed by glassmaking processes?* was looming in the back of my mind. What is the most striking difference between these two approaches?

Now, already looking at the research question itself the answers seems simple: it is glass. And specifically, the relationship with and intimate knowledge of the material the filmmaker possesses. But I had not had the lightbulb moment (or inspiration of illumination if using Botella, Zenasni & Lubart's terminology (2018, pp.9–10)) yet and kept prodding around the question with my experiments.

I was simultaneously working on three shorts²⁷ that were standalone projects but also served as testing ground for the feature. Each of these films had a “glass lead”, my focus being in examining my relationship with the material. The films were heading to two solo shows I had coming up in the first half of 2018, first at the Finnish Glass Museum in Riihimäki, Finland, and soon after at the Glass Factory in Boda, Sweden. James Maskrey, a talented glassblower and artist at the National Glass Centre in Sunderland, produced three clear, heavy spherical glass bubbles for me to use in these shorts. As customary to me, I develop discussions with my fictional characters to better understand them. This is why it did not take long for me to start having lengthy discussions with these bubbles and create scenarios that enabled my further understanding of them as individuals and as personifications of glass, both me imagining myself in the shoes of these “beings” and as someone having these interactions with them – I will unpack some of my experiments below²⁸. In addition to experiencing these experiments, I usually wrote about them, sometimes during the experiment, sometime later – many of these texts took inspiration from creaturely writing (Lockwood, 2017), and more often than not, were thought experiments (Elsaesser, 2018), and some texts ended up in the script too.

²⁷ These shorts are not included in the submission of this thesis because they are not necessary in answering my research questions. Even if they are standalone films, in relation to this research project they could be seen as experiments.

²⁸ See also appendix A5 for images that illustrate some of these experiments.

I was heavily involved in glassmaking on a daily basis, and thus in my mind these scenarios were relating to the making processes rather than pretending to be a drinking vessel in a restaurant or suspending myself from the ceiling and imagining myself in place of a lightbulb or a chandelier. I did consider these options too but the glassmaking ones were easy to facilitate in the studios and after conceiving scenarios I hurried to test them out. For example, in the coldworking studio I tried to hand-lap²⁹ my own hand as it was the only finishing process specific to glass that would not cause permanent harm to my body. I would also consider becoming a piece within a stained-glass window but felt it was too time and labour intensive given my tight development schedule and was uncertain if this entailed me chopping parts of my body off, which I was not keen to do. My long-time dream had been to hang around inside a glass furnace when it was cold in a make-belief game playing glass. No opportunities in Sunderland presented themselves as all the furnaces were running hot in 1000+ degrees of Celsius. Instead, I settled on sitting in the heat of the glassblowing workshop, visualising myself as molten glass in the furnace, then at the end of a glassblowing iron (I gently shaped my arms with the glassblowing tools), inside the reheating chamber transforming from near-solid to near-molten, and after repetitions of these actions eventually put myself inside an annealing furnace (when it was cold). In the lampworking studio I imagined vertical movements that I likened to borosilicate glass being worked on the torch. Later all of these experiments informed my artistic research and in different levels informed the whole production: from the story to sets to movements of camera to choreography, and to editing.

The most important experiment I conducted in pretending to be glass was yet to come. I felt it was paramount I endured what glass has to endure to reach its object-shape such as a vase or a bubble. And while all these experiments in studios were in part mimicking aspects of this process, they were always lacking something due to me not incinerating myself or causing permanent harm. Kiln

²⁹ Hand-lapping is a cold finishing process for glass objects using abrasive materials.

studio became the next place to experiment in: as opposed to working in the hot shop where glass is already hot, then worked on, and then let cool down, in the kilns glass is often put inside cold, then heated and brought back to room temperature. Still not willing to cremate myself, I knew I could not switch the heat on but instead chose to mimic the process of slumping or fusing where the glass is put inside the kiln to either slump usually over a mould, or pieces of glass are stacked and when heated they stick together. This choice of process(es) was due to its length – for instance casting inside a mould takes longer. I imagined glass would have no say in the programming of the schedule for the kiln or even know what to expect.

I hopped inside a large kiln with a pen, a notebook, and a flashlight – all this gear only to record whatever thoughts surfaced in my mind during the experiment – a colleague closed the door behind me and “programmed” the kiln to go through a firing schedule, in reality he only put a timer on. At no stage was I in real danger as the safeties of the kiln were on, but I had no clue as to how long I might be inside, and distinctly remember thoughts about oxygen running out creeping to my mind. Crouched in an uncomfortable position I fervently wrote down thoughts running through my mind: first describing the fireworks my eyes were creating in the pitch-black kiln and pretending to be a glass heating up, but very soon I completely forgot all my motivations for this experiment and instead of pretending started experiencing the situation I was in: being locked inside a dark, nearly airtight small space with no control over what was going to happen around the kiln I was inside of. My working language is English but I am native in Finnish, and without even noticing it, as I started experiencing the situation, I switched to Finnish in my notes too (and probably in my mind but have no recollection of it). The tone of these notes changed to dark, and I remember going through a range of emotions from sadness to fear, reflecting on my own life that had led to that point, and feeling grief over all the life events I never got to experience and regret for wrongdoings. I deliberated my career choices and having spent the majority of my adult life floating between countries. I was not mad or resentful towards other human beings but found posing myself a question: did I do life right? I want to emphasise that I was never in real danger, physical or mental, as I knew I was

going to get out of the kiln eventually, and to my supportive colleague: I would have done this experiment even without his help and it was because of the trust in him getting me out I did not end up having a complete meltdown or desperately try to find a way out from the kiln. I am generally not a panicking type, but this experience was sloping that way until the kiln door opened and my colleague let me out. I have no recollection of thoughts running through my mind when crash-landing from my imaginary bubble back to the real world – apart from a numbness.

As customary to my practice, I walked to make sense of everything that had just happened and by the time I got home later that evening and closed the door behind me I had my *Light Keeper* development lightbulb moment (or inspiration or illumination as described in the next chapter), a very sad moment but even more important.

3.3. Inspiration and illumination

Botella, Zenasni & Lubart (2018, pp.9–10) define inspiration as a moment after or within the artistic research process at which it is possible to identify how to best address the problem found during the immersion stage early on in the process. They also point out that inspiration is a term used only in their study to describe a stage in the creative process by students and does not have corresponding terms in other literature and propose a new study in order to confirm the results of their research. Inspiration is followed by illumination which is a more gradual version of inspiration but as opposed to inspiration, used by researchers and not by students in art.

I find illumination as a word best suited to describe the immediate time after my kiln experiment when I got home and started writing – I do not always have a distinct moment of realisation similar to this one in each of my projects but it happens. In the development of *Light Keeper*, the stage of illumination was composed of one piece of writing conceived in one sitting. I grasped what was the proper way to address my quest of creating a glass-informed feature film that

aligned with my artistic ambitions and had potential in producing information useful for answering my research questions regarding the nature of glass-informed filmmaking.

The films I make are fictional, and so would *Light Keeper* be too. As discussed before (see subchapters 1.3. and 1.4.), my process involves thought experiments, putting myself in the situation of a potential character of my films, and often chronicling these experiences in a way that aligns with creaturely writing (Lockwood, 2017) – all this to create a story that is truthful to the reality and integrity of that fictional character.

Not yet consciously working on my characters, I wrote a lengthy note about the feelings and thoughts that arose following my kiln experiment (dated November 3rd, 2017):

[T]here's no way I can ever explain this to anyone

The sound of my beating heart

And the colours washing over me

I am no longer me

No longer who I was before

[...] And I feel guilty

I am here

And so many are not

[...] I force myself to eat

Cucumber

It feels alien in my mouth

I am cold and hot at the same time

[...] I feel ashamed

And so exhausted

But not tired

How could I have such a human feeling

after this inhumanity that just happened to me?

[...] I cover myself in blankets

*I'm trying to bring myself back to this world
And at the same time not
[...] How can one force that kind of monstrosity upon others
Remain unchanged, unattached [?]
[...] Who speaks for those who have no voice?
[...] How can I love someone [... glass] so deeply and still have no idea of what goes
[on] inside their minds?
[I] Have no idea of this horror that they face every single day? For an eternity
[...] I do not even know what an eternity is
It is just this man-made world
From here to unknown
Glass, on the other hand
Is eternal,
So it knows
Maybe?
And still it has not told me
[...] My spine stings
Perhaps it is reflecting my real nature
This soulless being
Forcing all this misery upon others
(Haapasaari, 2017c)*

Through this experiment and following writing I came into a conclusion that the feature would root into the relationship a glassmaker has with their chosen material. The intimacy and insight into this relationship allowing me to develop an honest and insightful narrative, essentially telling a story about glass – what could be more glass-informed than a story about glass and its maker? However, addressing this is not uncommon in especially documentary films about glassmakers such as Jérôme de Gerlache's *Heart of Glass* (2016) telling the story of a French-American glassblower Jeremy Maxwell Wintrebert, or the short documentary *Moving Glass* (2018) directed by Rosa Ruth Boesten about the creative glass practice of Bibi Smith, in which the artist even mentions that glass is “alive” to her.

This led me to wonder if the story about this relationship had been told from the perspective of glass, perhaps resonating with a new materialistic approach to material, echoing posthumanist agency of matter, and highlighting “the productivity and resilience of” it (Coole and Frost, 2010, pp.6–7)? Juli Bolaños-Durman’s glass sculptures have a life to them in *Our Common Humanity* (Almazán de Pablo, 2018) but are portrayed as reincarnations of the artist’s imagination, and Katie Spiers’ *The Fading Call of the Curlew* (2019) portrays delicate glass birds that have a voice in reference to their real-life birds, but films that feature glass with human-like agency are more rare. Lindsay Marshall’s *It’s Alive* (2016a), a short film depicting the last breaths of molten glass as it cools down comes close to giving the material a voice, aligning with the real qualities of the material (Marshall, 2016b).

3.4. Trials, assembly, and ideation

Testing, experimenting, and trials allow the creative practitioner to explore their idea from different angles and define their solution to addressing it through activities such as sketching (Botella, Zenasni and Lubart, 2018, p.10). Sketching in my practice is comparable to my continued thought experiments that have a goal set, which was now focused on defining my relationship and understanding of glass in planning to tell a story about this material from its perspective. These experiments materialise in writing and rough visualisations of scene-like snapshots from my imagination³⁰.

I was now facing a question of how to develop and produce this film in a way that was impactful, provided real insight, and involved audience engagement – in other words: how to make a film I could be proud of and at the same time allow for enough details so that I could answer my research questions. All art is made for an audience (Adamson, 2007, p.39) and *Light Keeper* was going to be no different. My involvement in my experiments was deepening my emotional connection to glass,

³⁰ See also appendix A5 for images that visualise aspects of my experiments.

and I felt that giving the audience an insight into the perspective of glass might allow them to create an emotional connection with the material too. But *how* could I do this? The format of a feature film gave me only a time window of hours with the audience as compared to my decade with glass.

Undoubtedly, across all creative disciplines, examples of works and projects that elicit even powerful emotions in the viewer are plenty, including those of cinema. In the early days of moving image and cinema, Hugo Münsterberg articulated that “[t]o picture emotions must be the central aim of the photoplay” (1916, p.112) and this has been a central concern until today (Eisenstein, 1968; Mekas, 2002; Bresson, 1997). While approaches to encouraging an emotional response in the viewer vary from field to field, cinema has a potent selection of tools at its disposal ranging from the use of camera (Sikov, 2010, p.10) to storytelling and editing. Successful cinema draws the viewer in, and has a “powerful [...] “reality effect” [...] while at the same time it is so] unreal”(Shaviro, 2004, p.25).

Eliciting emotion in the viewer is not simple though, and the specifics for creating it keep puzzling filmmakers and critics alike. Eisenstein was an advocate for a “formula” that remains slightly unclear as it depends on an enormous array of variables (1968). Tarkovsky suggests that the dismissal of non-exhaustive associative linking enables the audience to share the “misery and joy of bringing an image into being” thus potentially prompting not only an emotional response in the viewer but pulling them into the story itself (1987, p.20). Brakhage, on the other end of the spectrum was more interested in the relationship between the artist and the film, and the emotions at play in the creative process, attempting to establish a more connected, spontaneous and expressive relationship between “the artist, the camera and the filmic image”(O’Pray, 2003, p.63).

Bresson suggests that the most powerful emotional responses in the film audience are motivated by skilful filmmaking rather than audience observing a powerful manifestation of an emotion in the actor onscreen “[d]o not try, and do not wish, to draw tears from the public with the tears of your models, but with this image rather than that one, this sound rather than that one, exactly in their place” (1997,

p.138). Simultaneously, sympathizing with characters showing emotion onscreen is also a powerful aspect of film: “We sympathize with the sufferer and that means that the pain which he expresses becomes our own pain. We share the joy of the happy lover and the grief of the despondent mourner, we feel the indignation of the betrayed wife and the fear of the man in danger” (Münsterberg, 1916, p.123).

Cinema has a potential to not only touch human beings and societies profoundly but is also unique in its approach. Cinema, and specifically “modern film poetry” that “is always awake, always changing [...] can reveal, describe, make us conscious, hint what we really are or what we aren't, or sing the true and changing beauty of the world around us.” (Mekas, 2002, p.68)

To deepen my connection with glass and understanding of it I continued developing experiments that involved me interacting with the material, primarily assuming the material was alive and willing to communicate with me. My three glass bubbles that were produced for the three short films earlier (see subchapter 3.2.) became important in this process: I started deepening my interaction with them through active imagination, and “listening” to them. This is similar to “listening as acting”, a term used by Jennifer M. Barker in describing how actors develop and implement actions in preparing for and delivering a role that enables “a sensuous reversible relationship among the actor, the spectator and the film itself” (Barker, 2014, p.243). I pretend-read the trio various texts such as Plato’s allegory of the cave (Plato, 1961) in relation to abstract thinking, and sections from Ludwig Wittgenstein’s *Tractatus Logico-Philosophicus* (1999) to discuss challenges in human language, and further reaching to Martin Heidegger’s musings on thingness and the origins of art (Heidegger, 2011). Pretend-reading composed of me sitting down with the bubbles and reading these texts in my mind followed by imaginary discussions conducted entirely inside my mind with focus on how these bubbles might respond to the texts, or not³¹. The readings brought a strange focus into my practice: I felt that in reading philosophy to objects that

³¹ And later (and sometimes during) I would write about these experiences, often both from my own and the glass bubbles’ points of view. Many of these texts, especially the ones from bubbles’ perspective could be seen as creaturely writing, with the exception that my creatures were only fictitiously alive.

are in essence eternal³² gave me a new perspective to time, eventually allowing me to develop my approach to time and progress in the film production.

Spending long periods of time sat next to these bubbles must have seemed odd to my studio neighbours, but to my delight they seemed to understand that this was all part of the process of developing my film and not a sign of insanity. I was not completely isolated in this process, even if the development was primarily an internal process. At one instance, I carried one of the glass spheres with me around the glass studios and my Ghanaian colleague commented that my activity reminded him of the Akuaba dolls that Ghanaian women carry around when hoping to conceive (Haapasaari, 2018). Curious about the dolls, I later learned that they are wooden human-like figures carried on the backs of Ashanti women (Weller, 2012, p.91), bringing me more confidence in my activity as in a way, I was in the process of conceiving the feature. One of my colleagues even named the bubbles: Elspeth (an egg-shaped bubble), Doreen (a round bubble), and Maisey (a cloud-shaped bubble), and when I enquired why they were all females, my colleague pointed out that the voluptuous shapes were feminine. These names stuck, even if I still considered the trio gender-less.

My experiments continued in taking the bubbles to experience human situations such as trying on clothing, pretend-bickering on relationships (amongst the trio), drawing and painting, visiting a church, a restaurant, the riverbank, and the park, as well as following me as I continued to work in the glass studios. I extended the circle of experiences from being confined to the close proximity to the studio due to the size of the bubbles to events such as a fireworks show, art exhibitions, public transport, and everyday situations such as visiting the grocery store by actively imagining either the trio or one of them accompanying me in these situations³³.

³² By eternal I mean without a beginning or an end, undying, permanent, infinite, and not bound by time.

³³ In addition to conducting my experiments with the glass spheres, I started cautiously chronicling the imagined (creaturely) lives of the glass bubbles in my personal Instagram, uncertain of the responses these thought experiments might evoke from my colleagues and friends who were following my primarily studio-based content on the social media platform. To my surprise, my followers started reaching out to me and seemed to playfully identify with these experiences, even to the degree of feeling sympathetic towards the bubbles and being curious about their lives. I felt I had reached the peak of what was possible in terms of creating a real life

All these experiments were my approach to assembly (testing how my experiments fit together) and ideation (brainstorming new ideas)³⁴ (Botella, Zenasni and Lubart, 2018, p.10).

About halfway through development, I added a fourth member to my “glass family”, a tiny spherical drop of borosilicate glass. I had been laying down in the grass in a nearby garden of the studio with one of the bubbles, stargazing in hopes of better understanding the passing of time in relation to the bubbles. I did not see any shooting stars but was thinking of them, and soon after, back in the lampworking studio, a tiny speck of the borosilicate rod I was working on flew off becoming a round speck as it cooled down rapidly during its sudden flight away from my torch. I named this little glass sphere as Bob as it was a little blob but also felt I needed some representation of the male gender in my otherwise female (name) dominated group of glass-y beings. Bob was so small, smaller than the round head of a small pin needle, that I was constantly worried about losing it. Nevertheless, Bob was an excellent addition to the trio: it became a sort of opposing force to the three bubbles, in terms of its size that allowed me to consider scale and pace as the trio sat immobile in their place, and when I would place Bob on my desk it would roll to whatever direction it pleased. I had to focus on this tiny sphere intensely as not to lose it (and I did but by some miracle always ended up finding it), it was fast and had a weightless, almost invisible air to it.

All the members of this glass family were of clear glass, and I attached attributes such as fluid, eternal, peaceful, and wise, to them. They all had their own personalities I had developed based on their physical qualities and my experiences with them: Elspeth the egg-bubble was slick yet uncomplicated, Doreen the round bubble was opinionated but had a tremendous unwavering

to these objects when a colleague on the other side of the planet announced he had “adopted” a glass bubble to take care of. I have included a selection of images of this process and experiments in appendix A5. to illustrate the development process.

³⁴ Assembly is a form of divergent thinking in the creative process that allows for exploring different ideas that relate to finding a solution to a problem (in my case developing the feature) and mixing the ideas. This can be followed by ideation that refers to brainstorming and examining untested ideas. (Botella, Zenasni and Lubart, 2018, p.10)

presence, Maisey the cloud-shaped bubble was slightly unpredictable and dreamy, and Bob was the young child with remarkable hunger to experience everything as fast as possible. Towards the end of my development process in 2018, I celebrated the “shape-days” of all the glass bubbles, marking a full year of gathering experiences with these glass-y beings, and by that point had developed a script that merged all these four glass objects into one character, informed by the insight I had gained to the fictional lives of eternal glass beings – the script, that I had written in a standard, conventional Anglocentric format (Geuens, 2000, p.90), was still to be further defined and focused in the new year.

3.5. Refining focus: *seeing glass* as a foundation for characters

The processes of selection and technique specification enables the creative practitioner to focus on the solution to their problem and specify a technique or material that is best suited for their project. I have known my technique from the beginning of the development: I have been in the process of creating a glass-informed film all along. I had also selected to focus on telling the story of glass but the specifics of it were still hazy. In refining my focus on seeing glass (this sub-chapter)³⁵, developing my characters (3.6.) and constructing the world my characters live in (3.7.) as well as moving through nine drafts of my feature script, I was able to navigate the process of selection in the process of developing *Light Keeper*. (Botella, Zenasni and Lubart, 2018, p.10)

Throughout the year of development my experiments first narrowed down to focus on my relationship with the glass objects so that I was able to grasp the story they had to tell, and then expanded within that story as I distanced myself from the bubbles to give space to the second character in the film who was a human

³⁵ By using the phrase *seeing glass* I want to emphasise the act of shifting focus from looking through glass to looking at it which allows me to begin developing characters with agency. Glass such as window glass is meant to be looked through and allow us to see what is beyond it – if we focus on looking at the window rather than past it, the window’s agency begins to reveal itself. Seeing as opposed to looking emphasises the acknowledgement in having recognised the object of looking. This is connected to inattentional blindness: we humans look at many things on a daily basis but unless our attention is directed to these things we do not really see them (Mack, 2003).

being. This human character was informed by my experiences with the bubbles yet I was observing her through the lens of the glass beings, in part as an observer, in part involved in what I was looking at.

I was fascinated by Robert Bresson's "aesthetics of coldness", how we never see what happens in other people's minds but can observe them moving their limbs and interacting with the physical world (Verstraten, 2012, pp.36-37), and how this aesthetic manifested in his films such as *Au Hasard Balthazar* (1966) with the relatively slow pace and distance to the lead animal donkey the story revolves around as well as in the detachment from the human beings featured – yet captivating the interest of the viewer. This kind of distance between the observer and the object of observation as well as the tension in it was important in the development of *Light Keeper*.

Whereas tangible objects can be touched and physically experienced – thus evoking related emotions and experiences in the viewer, digital artworks such as moving image exist (still) mostly in the realm beyond human touch, potentially providing "moments of intimacy" but lacking the involvement of human senses such as smell or taste (Williams, 2015, p.155). This places glass-informed moving image projects in a curious space in-between: these films cannot be touched yet they are in conversation with the tangible nature of glass, indeed defined by the act of looking.

Some glass objects are meant to be seen, even in fiction, as suggested by Paul Scheerbart in *The Gray Cloth* (2001, p.4):

Herr Edgar Krug said softly to the lawyer: "I'm really supposed to be the only one here discussing colors. The ladies should be more discreet in their outfits - out of respect for my glass windows."

While the glass objects create barriers between human beings and divide spaces (Shales, 2017, p.225), it is often desirable that this material disappears from human view altogether – regular windows, screens, and spectacles being the most

obvious examples. Central is what glass enables us to see. This suggests a flexible dual nature of the material depending on the focus of the human eye and attention, which is largely influenced also by learned behaviour: now you see it, now you do not. Contrary to this, filmmakers such as Stan Brakhage have explored the opportunities that arise from the employment of “the ‘untutored eye’” that is a way of perceiving and looking at the world free from learned behaviour and “ideological, cultural, even conceptual baggage” (O’Pray, 2003, p.60).

Glass is present in human lives more now than ever: we spend hours each day staring and touching our pocket computers, swiping the cold and smooth surfaces with our fingers (Williams, 2015; Shales, 2017, pp.224–225). Glass mediates our easy access to information as well: “people brush through information on their touch screens [... which] makes us think we can flip through time, too, as easily” (Shales, 2017, p.225).

The material and tangible world undoubtedly shapes our understanding of what is around us. Shales (2017, pp.226–227) poses an important question: “How does our material world today define us as humans?” and suggest that rather than pining for a revival of craft practices as we know them from generations past, we should look into the future with open eyes.

It was time for me to lift my own focus from being so close to glass. Following in the footsteps of David Curtis who stated on experimental animation that “[o]nce questions are asked, boundaries fall away and the imagination expands” (Curtis, 2018, p.vi), I posed my questions to the glass objects, *How glass, the eternal material, wants to be seen?*

3.6. Creating glass-y characters

This is a bit of a leap but:

Nonhuman stories are not understood in human language,

And still they have stories and agency,

How?

(Haapasaari, 2018)

Glass was my character, but how could I present this inanimate material to audiences in a time-based format as having something to say? Animation and addressing agency and the “vitality of (nonhuman) being[s]” (Bennett, 2010, p.viii) proved to be applicable strategies.³⁶

Human beings can construct their own realities and bring inanimate objects to life simply by dreaming and composing their own stories. Central to this creativity is “the capacity of reason” (Lakoff and Johnson, 1999, p.17) as well as the ability to imagine something that does not exist (yet), such as Constantin Brancusi’s or Michelangelo’s view that the material they were sculpting “already contained the forms [... they] wished to express and that [... they] just had to cut away the extraneous matter to reveal” the shapes (Shanes, 1989, p.18). Creating by imagining does not apply only thinking about future though as human beings construct their own history and change the narrative of their own memory too – even if not consciously (Draaisma, 2004).

Pictures, including photographs and paintings that present human-like beings, seem often to follow us with their eyes - even to the degree of omnivoyance

³⁶ I would like to remind the reader that while the choice to not discuss prominent theorists such as Jane Bennet in more detail in this thesis might seem a gap, or focusing on Alex Lockwood’s creaturely writing in relation to an inanimate material such as glass (Lockwood writes about the living) might seem unusual, this thesis is constructed around the development process of *Light Keeper* and the research I refer to is included to provide insight into this process, not to form a literature review. For instance, the choice to draw a line or division between humans (or a perceiving being) and the external world visible in my literature choices in this subchapter as opposed to a line between the living (including animals) and the non-living (e.g. objects and materials) is based on my character development that eventually focused on recognising glass as a being with agency.

(Mitchell, 2005, p.53). Moreover, it is common to ascribe human emotions and functions to fictional, non-living objects, blurring the line between the real and the fictional. Fiction and fairy-tale are not only for children but to all ages and walks of life, as beautifully accounted by Annie Dillard (1982, p.67):

The island where I live is peopled with cranks like myself. In a cedar-shake shack on a cliff – but we all live like this – is a man in his thirties who lives alone with a stone he is trying to teach to talk.

Animation as a film genre is a wonderful and popular example of bringing inanimate objects and entities to life, also in relation to craft as pointed out by Gary Thomas (Thomas, 2014). In cinema, for instance the Czech filmmaker Jan Švankmajer is known for his surreal animations in which stones, clay, and wood become alive (Švankmajer, 2014), and Inger Lise Hansen brings everyday objects to life in her short film *Talking to a Stone* (Hansen, 1993). Animism in varying degrees is widespread also in the field of glass: glassmakers and artists who work with the material attach human-like qualities to this material, apparent especially in the way they speak about glass, examples ranging from the glassmakers in Martin Sorrell's *The Glass Man* (2005) to Ed Schmid's account on glassmaking techniques (1997).

Judith Weston describes the successful delivery of a science fiction or animation project: they succeed “only when the actions of non-human characters become a metaphor for human experience” (2003, p.13). The viewer's engagement in the fictional lives of these characters happens only if the characters have “human agency or ‘personhood’” (Smith, 1995, p.17) – after all, the human mind is distinct from other animals' let alone inanimate objects' “mind” (Hauser, 2009, p.46). However, being a film star does not necessarily require being a living human being, as Sikov defines their characteristics that include “widespread public knowledge of the performer, sizeable roles played by the performer, and the performer's ability to generate ticket sales on his or her own” (2010, p.131). It is not much of a leap to ascribe these qualities to a range of objects and materials such as stone or glass.

As long as the audience can connect with the characters in cinema, there seems to be no limitations as to what these characters are. Filmmaking techniques from the invention of moving image on have enabled the filmmaker to not only animate the inanimate but to make them perform magical acts: “[p]eople and objects could be made to disappear, fly through the air, and change shape at will” (Dixon and Foster, 2002, p.1).

By this time, I was so involved in the imaginary lives of my glass beings that it had become easy for me to put myself in their place, and the related development of the human lead of the feature gave me a sense of perspective in how glass existed in this imaginary world. However, this was a delicate balance between allowing my characters to take me to wherever they needed to go and maintaining my distance in order to tell their story. In addition, I had to actively imagine the routes necessary to embark in order to tell a story that was not “forced”. All this is much like how Charlie Mcpherson at Notarianni Glass in Poundbury in Dorset describes directing glass: “There’s a balance between letting the material do what it wants but controlling it to do what you want. You will always be able to tell if you’ve forced things whereas if you coax the piece and work with the material rather than let it lead, the work you produce will be stronger.” (Thomond, 2018)

This process of the development of the characters of *Light Keeper* was punctuated by a constant struggle between observing the glass objects as physical objects and as personifications of something akin to humanness, as illustrated in this note, eventually leading up to accepting the (fictional) agency of these objects (September 20th, 2018):

*I have been looking for you in everywhere
Waiting for you to arrive, give me a sign
And not seeing
And then one incident made you heard
You falling falling falling down
And I could not catch you*

I tried so hard I tried I tried I tried
But you slipped
All these years I have been so careful with you
Forgive me my human error/misjudgement
You hit the ground
And made the most horrific sound
And then I understood
I did not even see you
But I felt
(Haapasaari, 2018)

Objects and the material world shape and define how humans exist and live, as well as embody different memories of individuals that add personal value to the objects and places (Guldthorpe, 2018, p.1). "Objects have biographies and ontologies, they come into being at some point in time and live lives of a certain length: maybe one second or 5,000 years." Much like living beings throughout their time on this planet, they "take part in shaping the world both physically and emotionally". (Gali, 2018, p.69) And while the boundary between a living being and an object might seem clear, it is soft and becomes harder to define the more it is being looked at (Ingold, 2009). Objects exist in space and time (Grosz, 2009, pp.125–6), and can substitute human beings in a variety of tasks as technology advances, making it even harder to distinguish between a human being and a robot (Latour, 2009).

"If images are reflections of the world, objects are actors on the world and their transformative power, while being different is as great and certainly as important." (Mathieu, 2017, p.274) However, where does this leave material? Objects have a function and agency, and often a place within the world but the function and agency of a material such as glass is a more complex matter. Shales suggests that it is wrong to even think "that glass might have any singular essence or allegorical function as a material" (2017, p.236) – even if glassmakers desire to attach human-like qualities, anthropomorphisms, or agency to it.

The agent “denotes the locus from which an action can be initiated, whether it be one of reconfirmation or resistance, mainly from the interstices between various subject-positions” (Dissanayake, 1996, p.x). These actions that result in events can be “caused by acts of mind or will or intention [...] independently of the state of the physical universe” (Gell, 1998, p.16) – suggesting that agency cannot be attributed to objects. However, objects can have “social agency” where they gain their agency as a result of the interaction with living beings (Gell, 1998, pp.17–18). Glass as an object and as a character in a film can thus have agency, as it enters into an interaction with a living being.

A potential solution to addressing the agency of my glass objects rose from the field of animation: among others, Eisenstein points out that for characters to appear alive, their action “must unfold before the spectator in the course of action” (Eisenstein, 1970, p.69). However, this was not entirely unproblematic as pointed out by Vicky Smith: “[t]he problem of anthropomorphism, elicited in much animation, is that apparently inanimate objects brought to ‘life’ are disposed of their own properties.” A solution to this is to work with technology in ways that allows the “objects to reveal their own properties”, such as utilizing time-lapse as it brings about new perspectives to the objects and reveals “phenomena as self-animating [...] authored equally by humans and objects”. (Smith, 2018, p.82) An example of successful application of time-lapse is seen in Maya Deren’s work in how she utilizes this technique in observing slowly progressing natural phenomena, time-lapse accelerating the changes, and eventually revealing the agency of Deren’s subjects while simultaneously “offering instant access to that which is otherwise only available as a specialist knowledge” (Smith, 2018, p.83).

I incorporated animation in the form of time-lapse into *Light Keeper* early on in the development for this exact reason. However, I had to stay truthful to the story being an account on the existence of a glass-being brought into existence by human agency – most glass in our environment is manmade, apart from natural glasses such as volcanic glass and obsidian (Cicconi and Neuville, 2019). My approach to time-lapse consisted of allowing glass to play with light in the way it naturally does, seemingly moving on its own which is essential for time-lapse to

be successful (Smith, 2018, p.81) yet provoking changes in this play with light by moving it around its own central axis in scenes 20³⁷ (Haapasaari, 2019, pp.27–29) and 22³⁸ (Haapasaari, 2019, p.32). In this way I was following the internal logic of how glass behaves with light yet incorporating agency of a human being into the process, and constructing my film production so that matter (glass) becomes the protagonist in the process (Smith, 2018, p.88).

3.7. Constructing the onscreen world and story

Following Erwin Panofsky's ideas on the unique properties of cinema presented in his essay "Style and Medium in the Motion Pictures" that was originally formulated in 1936 (Panofsky, 2003), Gene Youngblood writes: "The first [unique quality of cinema] is its ability to capture and preserve a picture in time" (Youngblood, 1970, p.106). Beaumont Newhall's view on time and cinema is slightly different: action captured on film (or a memory card) "is gone forever" but when "projected, past time moves again" (Newhall, 1937, p.90). Following this line of thinking, moving image offers the filmmaker a unique opportunity to give time-based existence, even a life, to an inanimate object such as glass. In my feature development this process was constructed in writing of the script, later to be translated to screen in production of *Light Keeper* – all of this largely defined by storytelling devices such as plot, continuity, and story, but also the potential lack of them that all enable a filmmaker to manipulate their audience. I had to both gratify the conditioned needs of an audience accustomed to a specific way of how stories unfold in especially commercial cinema as well as deny my audiences this kind of expected structures of cinema to stay honest to the nature of my characters that defied the linearity related to commercial cinema. And in this way, while stretching time as my glass-character is eternal, I also managed the expectations of my audiences in giving them just enough of familiarity in the form of a storyline. (Youngblood, 1970, p.60)

³⁷ See *Light Keeper* digital edit 30:00 to 31:12

³⁸ See *Light Keeper* digital edit 34:09 to 35:05

Besides the visual and aural, time and narrative are key aspects of the moving image (Cutting, 2016, p.1). Narrative is vital to especially mainstream cinema, but it has its opponents, offering “only tyranny to the spectator.” (Cubitt, 2001, p.xi) However, even the non-narrative filmmakers deal with narrative, even if indirectly, more as an opposition to the narrative filmmakers. Narrative, despite simple in its face-value, is a multifaceted issue too: in relation to cinema, it brings together issues such as “the time and status of the recorded action, the identification of the spectator with the characters and concern for the outcome of their represented actions.” (Le Grice, 2001b, p.201)

“Writers write with words; filmmakers write with images and sounds.” (Sikov, 2010, p.121), and indeed, it is common to refer to moving image and cinema as a language itself (Verrone, 2012), a language “of the world” where images replace the words (Ruiz, 2005, p.32), suggesting that cinema can cross linguistic barriers. The connection between language and moving image does not end there though: for instance the Russian filmmaker Andrei Tarkovsky held that “[t]here is only one way of thinking in cinema: poetically” (Tarkovsky, 1987, p.150), while another Russian filmmaker Sergei Eisenstein regarded cinema as a “process of arranging images in the feelings and mind of the spectator” (Eisenstein, 1948, p.24). Cinema, or any form of art, seen as a “language”, has its opponents and rightfully so (Gell, 1998, p.6). Although cinema and moving image, by definition, is not a language, the comparison does help in understanding that moving image practices have their own parameters, as well as that they require an understanding of the relationships (similarly to syntax) between the visual, aural, and time both in terms of making moving image projects and appreciating them.

Central to cinema and moving image has always been presenting an idea or a story to the audience. In the early days of moving image, everything a film depicted was images of reality: “in the first one hundred years of motion pictures, the signs and symbols onscreen were almost always real before they ended up as signs and symbols on movie screens”(Sikov, 2010, p.1). Whereas in other creative fields such as painting or sculpture, the artist could bring images of fantasy and fiction

into reality without having to construct them from the world visible to the human eye (Sikov, 2010, pp.1-2).

Reality was captured and constructed with the aid of a camera. Shaviro notes that the human characters in Andy Warhol's films either were or became beautiful as the camera started rolling: "[t]he camera invariably captures beauty, since it exclusively reveals the epiphenomenal and trivial, and beauty for its part is only skin deep" (Shaviro, 2004, p.222) – suggesting not only that the camera has agency but also that it possessed almost magical qualities of transforming the subject to something else than what the bare human eye saw. While digitally created image is becoming more and more accessible and common within the moving image practices, camera remains in the central stage in filmmaking.

I was planning to embrace conventional filmmaking in terms of camera being the central vehicle in constructing *Light Keeper*. However, central to my research was to push the boundaries of how filmmaking and glassmaking could be integrated and this presented interesting opportunities in terms of how to approach the use of technology³⁹. These issues primarily related to production and how I planned my shots but had to be considered already in development in order to not risk the integrity of the project, especially in the form of choreography. As Constantin Brancusi explains about materials: "Each material has its own life, and one cannot without punishment destroy a living material to make a dumb senseless thing. That is, we must not try to make materials speak our language, we must go with them to the point where others will understand their language." (Shanes, 1989, p.106) *Light Keeper* was to be glass-y in all the levels, from characters to narrative, to story, treatment of time and progress to shooting and editing, and thus, I developed strategies to address its glass-y-ness.

*Glass acquiring its shape in a short span of time vs human form taking years,
An older person with time-given wrinkles* (Haapasaari, 2018)

³⁹ This is discussed also later in relation to post-production in subchapter 5.1.

Time had been central in my experiments and was integral to both understanding the existence of my glass character, but also as my medium of telling its story was film that unfolds in time. In addition, I was reminded about time as an essential aspect to all creative activities: art aims at “transform[ing] the instantaneous into the permanent” (Berger, 2009, p.59). Conventionally, films are linear but also fragmented due to being composed of frames creating an illusion of movement (Payne, 2018, p.19), and thus I chose to construct my story in a way that had linearity to it but also made use of the inherent halt of time within the frames. In the script of *Light Keeper* (Haapasaari, 2019) I utilized both linear progression and circularity – this becomes clear when examining the slowly unfolding demise of the glass being from confusion, through chronicling its life with the human character and essentially ending up back where the film starts: the eternal glass being trapped in time and environment dictated by finite human lives. The glass objects I had been experimenting with (Elspeth, Doreen, Maisey, and Bob) had also allowed me to (subjectively) experience the slowing down of time: I had initially only managed to endure short segments of time in complete silence and inactivity, but was able to gradually extend this experience not much different from meditation. This experience prompted me to create a similar arch in the film: the scenes from beginning to end gradually expand in duration and decrease in action, yet given a degree of fluctuation throughout as not to be predictable and still remain honest to the material qualities of glass. The story is punctuated by stillness and slowness throughout, allowing the audience to catch their breath as the glass being narrates its existence without the need to breathe, as well as serving as a reminder of the glass being eternal which means it is in no hurry and does not experience frustration over lost time much like we humans do.

All this would result in *Light Keeper* losing some audiences: not everyone can or is willing to endure even slightly uncomfortable viewing experiences, and some audiences would be so conditioned by commercial films to expect an immersion into the world of the film primarily through constant bombardment with new visual stimuli and action that they would lose their interest. At this point I recognised how much my feature project was influenced by my personal preferences and views on what constitutes a “good film”: I see Andrei Tarkovsky’s

films such as *Stalker* (1979) and *Mirror* (1975) as some of the most accomplished feature projects I have had the pleasure of seeing throughout my life, and Tarkovsky's films have "invariably stately and solemn [rhythm – Tarkovsky explains that...] 'I want time to flow in a dignified and independent way on the screen'" (Turovskaya, 1989, p.99). Indeed, glass-informed filmmaking does not exist in its own vacuum even if sometimes in opposition to the fields it connects to (see subchapter 2.4.). This connects to the practise of slow cinema, an approach to filmmaking that has gained traction in the 21st century (with obvious predecessors such as Tarkovsky's long takes) along with other "slow" movements relating to travel, food, and media, especially in "narrative [...], experimental, documentary and semi-documentary" films, with the most notable stylistic feature being the slowness of pace and duration, making "time noticeable in the image and consequently felt by the viewer" (De Luca and Barradas Jorge, 2015, pp.1–5).

The circularity of *Light Keeper* is not confined to the narrative. The shape of the glass character is a sphere, a choice I made early on in development as a round bubble is perhaps the most simple shape for blown glass, in a sense seemingly formed by a breath⁴⁰ but also the bubble being the first step in most blown glass shapes regardless of the complexity of the finished product. This added an air of abstraction to the character: it is the shape from which all other shapes come from. The sphere was also a practical choice as it could be rolled on a smooth surface such as on the floor in scene 32⁴¹ (Haapasaari, 2019, p.48), and the round yet heavy shape was comfortable to hold in a human's arms such as is scene 1 (Haapasaari, 2019, pp.4–5) that was cut out from the digital edit.

The circularity continues in the choreography as I wanted to include the act of turning an iron in glassblowing workshop into the action of the film too. This turning of the iron is in the very core of a glassblower's muscle memory as the ability to turn the iron in a smooth and controlled manner is the requirement for being able to blow glass. Glassblowing irons are the pipes onto which molten glass

⁴⁰ In reality, perfect glass spheres require more moulding than just a breath.

⁴¹ See *Light Keeper* digital edit 52:17 to 52:29

is gathered by executing a circular motion inside the furnace, the tip of the iron being submerged just below the surface of the molten glass and the turning of the iron resulting in glass being lifted above the surface due to the circular motion, cooling the glass around the iron just slightly and this allowing the glassblower to take hot glass out from the furnace. The turning does not stop there though, the iron has to be continuously turned to prevent the glass falling off the pipe due to gravity. With a little help from imagination, this act of turning is what enables glass objects to come into this world, and following in that vein: (some) glass objects are born in the glassblowing studio.

In *Light Keeper* I have incorporated circular choreography for the human character for instance in scene 19 where the human character pushes the glass sphere in a circle which is likened to a way of processing thoughts (Haapasaari, 2019, pp.25–27), and in scene 1 where the human turns around her own axis while holding the bubble in her arms (Haapasaari, 2019, pp.4–5) – both scenes were edited out from the digital edit. The choreography is extended to camera movement and relating edit⁴² too: examples including scene 5⁴³ where the camera moves vertically around a sandbox in a circular manner (Haapasaari, 2019, pp.7–8), and scene 17⁴⁴ in which the camera moves 180 degrees around its horizontal axis in circular manner (Haapasaari, 2019, pp.21–22).

The circularity also allowed me to collate time: the structure of the film not only begins and ends at the same moment in the glass being's existence, but also within the film the viewer is constantly pushed into the future only to be brought back in a cyclical manner – this movement is addressed primarily through the bubble's narration. Through my experiments with the glass objects in development I also reached a conclusion of the eternal existence of the fictional glass beings being composed of experiencing and understanding the past, present, and future at the same time in a circular, all-encompassing manner as well as holding all awareness within them at all times as they were beyond the grasp of time and its

⁴² See subchapter 5.1. on editing.

⁴³ See *Light Keeper* digital edit 04:36 to 06:07

⁴⁴ See *Light Keeper* digital edit 23:51 to 26:05

deteriorating effect. In this way, the form of the film echoed the subject as well as was directly related to the material qualities of glass. It follows that the film itself is beyond the human viewer's complete understanding (including my own) but I hoped to provide a glimpse into this eternity by creating a structure that honed in on an understanding of the eternal life of a glass being – while maintaining a veil of mystery regarding the meaning of its life, much like we as humans to this day remain unclear about the precise meaning of the human life (Alexander, 2002, pp.30–32). Only later I realised how much my approach to time in *Light Keeper* echoed Tarkovsky: “infinity, which “cannot be expressed in words or described”, can be “apprehended” and made “tangible” through the art or cinema” as Bashkar Sarkar describes Tarkovsky's approach to time and film (Sarkar, 2008, p.237).

Chapter 4: Pre-production and production

I finished the script of *Light Keeper* in early 2019 having spent a year writing it. This meant I had to move straight to pre-production as I had scheduled to begin production in early summer 2019. Pre-production refers to the stage in filmmaking when the project is prepared for production, including financing, securing crew and cast, visualizing the film, scheduling, as well as preparing props, sets, wardrobes and so on (Steiff, 2005, pp.26–27) – all of which applied to the pre-production of *Light Keeper* too. Using the terminology of the creative process, this period can be described as specification (Botella, Zenasni and Lubart, 2018, p.10).

Pre-production is followed by production in which the raw material for the film is generated, primarily consisting of principal photography during which the main scenes are shot, and can be supplemented with additional shoots and reshoots (Steiff, 2005, p.27). This stage corresponds to realization in the creative process (Botella, Zenasni and Lubart, 2018, p.10) but as realization covers the manufacturing of a project as a whole, in filmmaking realization extends to aspects of post-production when the raw material is edited and in essence, the film is given its shape.

Many aspects of the pre-production and production of *Light Keeper* align with conventional filmmaking, with the exception that my crew and cast were students⁴⁵. The pre-production of *Light Keeper* consisted of securing financing from AHRC UK and related budgeting; casting and related auditions for the human

⁴⁵ As this project was taking place within the University of Sunderland, I chose to aim at sourcing my crew and cast from the student body – I felt students would have more to gain from the experience of working in this production than professionals and might also be more likely to have schedules that aligned with my own production schedule, and furthermore, had already all the necessary permits to work on a production on university premises and would know their way around the gear and studios. I was aware that working with students meant that shooting might occasionally take slightly longer but addressed this in the shooting schedule.

actors⁴⁶; attaching crew to the production⁴⁷; finding a choreographer⁴⁸ and a composer⁴⁹; finalising a storyboard and shooting plan; developing a shooting schedule; booking studios and gear⁵⁰; shooting backdrop scenes⁵¹; ordering, buying, building, and making all set and prop related materials⁵²; planning and acquiring wardrobes as well as fitting everything with the actors; planning makeup and hair; and testing a handful of scenes and gear in a smaller studio just before production began. Apart from help with the production of some of the props and tests just before production, I did everything in the pre-production stage. In my previous short film productions I had also usually done everything in pre-production (and production) so this was not an alien process to me, even if at times I found it challenging to manage my time and juggle between being a director, then a producer, and at the next moment the casting director or the costume designer – the sheer volume of pre-production work for a feature was more than a full-time job crammed into four months in the spring of 2019 but having reign of all the aspects of this process had its perks in being able to adjust all the aspects of the process at a moment's notice as everything was up to me to decide and deliver.

⁴⁶ I contacted Performing Arts department lecturers at the University and distributed casting calls to the students via the lecturers. After individual students expressed their interest in my film, I then organised auditions for them.

⁴⁷ My supervisor in the Media department suggested a handful of students from his experimental film class who might be interested in working on my film. I organised to meet two of them and they felt like a good match for the crew and had availability in their schedules. This is why I did not organise any further call-outs to find crew members.

⁴⁸ I reached out to Performing Arts department at the University and a lecturer put me in touch with a recent graduate who worked as a choreographer locally. Later I met with her and her ideas about my project aligned with my own ideas, after which we agreed that she would work on the choreography of *Light Keeper*.

⁴⁹ See subchapter 4.1.

⁵⁰ Almost all scenes of *Light Keeper* were shot in studios locally at the University and I used University gear.

⁵¹ *Light Keeper* has scenes that utilize projections. During pre-production I shot multiple landscapes in Finland that featured primarily forests as well as buildings and graveyards around Sunderland, all with a single handheld camera and no crew. For the most part these shots were very simple, single angle shots from a fixed point. I acquired one moving shot by mounting a camera on the front of a car and driving around in the countryside, and for another landscape shot fixed a camera on my body and walked in forests. Once we got to production, I had a handful of options for each scene that utilized these projections as a part of the set.

⁵² My approach to sets and props was minimalistic. I utilized fabrics that were to be hung from the ceiling as space dividers and projection backdrops, mountains of paper as mimicking sand dunes, cascading piles of tulle as clouds, a river of glass shards as water, a large clear Perspex hung as a window, as well as tables, chairs and a sandbox that I bought pre-made. Most of the props I bought pre-made, apart from glass, which I either had made in the University or made it myself.

Unlike many film productions, I did not organise any rehearsals as it was not necessary because of the minimal action and onscreen dialogue, and instead scheduled rehearsing into production if it was necessary for a particular scene. I had scheduled the whole production of *Light Keeper* so that for the most part, with a crew of two and myself we were able to build a set, light it, shoot the scenes in it, and take the set down within a day. For less complicated scenes we were able to shoot one scene in the morning, and another one after lunch, and the more complicated scenes were scheduled just after weekends so that we could build the set and light it over the weekend and be ready to shoot on a Monday. Fortunately, as all the scenes were shot in a studio, the weather and natural light were never a challenge, which allowed for a more reliable production schedule.

The production of *Light Keeper* began straight after pre-production and was composed of building sets and taking them down, lighting, an occasional test shot, and principal photography. While the work of my crew and cast was scheduled and confined to the studio, as a director I also prepared for each scene, and reviewed the dailies⁵³ on a daily basis. For the most part, the production of *Light Keeper* was no more complicated than a normal film production, and I felt it was remarkably void of unnecessary drama, unexpected challenges or pushbacks. While this has to do with luck and a small crew that got along with each other, this is also due to good planning, scheduling and preparation both in the pre-production and production.

Many of the details of pre-production and production do not shed light on the particularities of glass-informed filmmaking or serve the purpose of answering my research questions. Consequently, in this chapter I will touch on aspects of pre-production and production stages of *Light Keeper* that provide insight into the practice of a glass-informed filmmaker.

⁵³ The raw footage shot during the day

4.1. Sound

The beginning of moving image practices was silent and had no soundtrack. Münsterberg formulated in 1916 that if a film was to emulate theatre the inclusion of sound was important but being an advocate for film as its own artform (distinct from theatre) concluded that sound and film was a completely unfitting match, thus driving a wedge between theatre and film but also between sound and image in projects for the silver screen (1916, pp.203–204). However, quickly the inclusion or exclusion of sound and music that contributed towards the distance and immersion of the audience into the world depicted in the film became crucial (Rogers, 2017, p.4). The aural is a complex but vital aspect in moving image practices: especially in experimental and avant-garde cinema “it is not possible or desirable to make universal claims about the soundscapes” (Rogers, 2017, p.18). Cinema has evolved through the past century and today there is no doubt that image and sound form the very basis of cinema (O’Pray, 2003; Rogers, 2017; Bresson, 1997).

Sound and music were important parts of my project but it should be mentioned that this not true to all films growing from the fields of craft. For instance, *Time... And Again*, which is a short dance film by Mary Wycherley produced in collaboration with composer Jürgen Simpson, and revolves around the movements of a woman hand-separating cream from milk by traditional means (Wycherley, 2008), does not have a musical score. “Instead the natural or diegetic sounds of movement and the environment are foregrounded.” (Wycherley and Simpson, 2018, p.146)

In my previous projects I had primarily used pre-existing music for my soundtracks but for *Light Keeper* I wanted to bring a composer onboard: being in charge of all aspects of a project has its advantages but one person can only know and stretch so much. *Light Keeper* was a feature project from the beginning and collaborating with a composer felt necessary – I do not have the skills and knowledge to build a soundscape that is in a symbiotic relationship with the

image, and I got in touch with Peter Roberts, a musician and lecturer at the University of Sunderland who agreed to compose the soundtrack.

Rather than treating the sound as an add-on to be included in post I wanted the process of creating the tracks to happen at the same time as the visuals were being produced. After initial discussions with Roberts in early 2019 about what I was trying to achieve in the film, exchanging notes and reference tracks from a range of musicians such as Amiina, Ólafur Arnalds, Max Richter, and Nils Frahm, as well as topics such as soundwaves, polyrhythms and room tones, Roberts set out to work on experiments and themes. He would send the tracks over for me to have a listen, and I would comment on them first very loosely, describing my emotions and allusions evoked by the tracks. In May 2019 there was a clearer picture of the number of tracks, their durations, and a direction for the soundtrack, which Roberts finished towards the end of summer 2019, ready for post-production.

4.2. Glass-speak

In writing the script for *Light Keeper*, I was confident the glass lead narrated the majority of the film but did not resolve the problem of how an inanimate object would communicate until in late production and early post. A common solution in mainstream cinema is to personify the objects, such as giving human voices to the toys in the *Toy Story* (Lasseter, 1995), or Chuck Noland speaking to Wilson the volleyball in *Cast Away* (Zemeckis, 2000). Children speak to their toys (Hart and Risley, 1992), and the screenwriter for *Cast Away*, Bill Broyles developed Wilson based on an encounter with a volleyball while alone at a survival camp, speaking to a castaway sports ball. Broyles' approach to cultivate the story was similar to mine, immersion into the world of the film, and Broyles even ascribed some lines for Wilson the volleyball that the main protagonist Chuck Noland were to articulate on behalf of the ball. (Hepola, 2000)

However, I was never interested in the glass lead being personified to the degree that it would speak like a human being. I felt I needed to find a golden middle ground between the audience understanding the message of the glass lead, and it

telling its story in its own way, a glass-speak of some kind. Throughout the writing, I kept going back to the same questions: *How do I communicate with glass? How could I communicate with glass in an audio-visual format?* Or perhaps more appropriately: *how do I simulate the communication of glass in an audio-visual format?* I trust in my creative process and felt assured that if I ask the same question enough times and examine it from various angles an answer eventually emerges.

Maurice Merleau-Ponty indicated a potential route to glass-speak as a more physical quest: he confirms the three-dimensionality of objects by going around them, perceiving the facets as he moves in the space around, formulating a consciousness about the world through his body (1962, p.82). Following Merleau-Ponty, a more honest way of approaching how glass might communicate rather than a human voiceover could rise from the material itself. Human speech is believed to be a result of the combination of neural control and a corresponding sound-producing anatomy (Dunn and Smaers, 2018) – my glass-speak question was slightly reformulated: *How glass, the material, communicates?*

With a few imaginary leaps: glass communicates at different temperatures in various ways such as emanating heat, responding to gravity and human touch, breaking, reflecting its surroundings, and refracting light. Working in the hot glass studio, sometimes all of these are present, but there is always a specific temperature range in which the glass is most susceptible to actions performed by the glassmaker on a quest to mould it into an object. With another imaginary, almost empathetic leap (Popova, 2019, p.15): it is perhaps within this temperature range the dialogue between the glass and its maker is most amicable.

The range is dependent on the chemical formulation of the glass. For Cristalica, the material the glass lead was produced of, this range is 1130-1160 °C (Spruce Pine Batch, 2017). Following my set of imaginary leaps: surely glass does not stop communicating outside this range? Communication only within a 30 °C range would result in hundreds and hundreds of years filled with silence alongside a tiny stretch of reaching out to the world, perhaps only minutes. Certainly possible, but

I would not accept glass having that little to say, having spent a generous amount of time since late 2017 trying to cultivate a dialogue with my glass objects while developing this project. For the purposes of my project, I decided that glass has an inherent quality or will to communicate with the world around it – and by extension, to communicate with us humans.

The temperature range felt significant, but as films are audio-visual projects, image and sound felt equally important, too. When working in the hot glass studio, the glassblower uses their senses to gauge the temperature of the glass: the measurements are not in Kelvins or Celsius, but memories of thermal radiation on the skin, the material's responsiveness to touch, and visual references – all driven into the body of the glassblower over years of practice (O'Connor, 2005). Learning that heat is “kinetic energy of random motion of particles of matter” led me on a journey to light waves and the electromagnetic spectrum: the wavelengths of visible light fall between 350nm (violet) to 740nm (red) (Fricker, 2009). Also the auditory stimuli that humans perceive is waves that are associated with pitch, ranging between 20 and 20000 Hz (Spielman, 2014, p.161).

At this stage, taking artistic liberties in interpreting an imaginary way of how glass might communicate with humans felt like an apt way of addressing my glass-speak challenge. For the purposes of my project, I realised I was getting too deep into a scientific way (even if being a non-scientist) of trying to address glass-speak: the communication of the glass lead was based on imagination and play and to stay truthful to the integrity of the project, I allowed myself to entertain and absorb scientific data and approaches but in essence, following established, scientific ways of generating new information and ideas would only lead me to a place familiar to us humans, into a world where glass did not speak.

The production of *Light Keeper* was about to start and I paused the development of my glass-speak feeling confident that I would be able to continue building on this artistic research that was taking place now within pre-production as opposed to being confined to the linear nature of creative practice as outlined by Botella, Zenasni & Lubart (2018, pp.9–11).

Towards the end of the production I brought my focus back to glass-speak, conducting a test in translating plain English to an audio-visual format, and utilizing glass as a mediator of sorts. I assumed that the glass in my project had the capability to communicate at all times but we humans were unable to tune into a frequency to decipher its message, my imaginary reason being that we lack the physical, built-in apparatus or organs to do that.

I decided that as a glassmaker I already communicated with glass in its 1130-1160 °C range but because of my limited apparatus to truly understand it, the range had to expand somehow; in an audio-visual format, Celsius was not practical but waves were. Starting with sound, I had learned that the cry of a baby catches the attention of humans, being one of the most salient sounds we can experience regardless of our parental status. This pitch just happened to be around 1130-1160 Hz, so with an uncomplicated imaginary leap, I decided that sound would correspond to the temperature of my glass⁵⁴. (Young et al., 2012, p.1200) I simply substituted the °C with Hz, and ended up having an audible range of 1130-1160 Hz for my glass-speak. Hot glassmaking processes had always seemed and felt violent to me: forcing a material into a particular shape while it was heated to high temperatures – I imagined that glass might be screaming or uttering complaints and likened this to a child crying. In addition, hot glassmaking processes are also a means to bring objects to this world, analogous to giving birth to a child and subsequently to the child's first cry and perhaps also the experience and trauma of arriving in this world.

I had written the lines for the glass lead in English, and had my human lead read those. I then applied two filters to the audio tracks limiting the frequencies to 1130-1160 Hz, and this became the audio aspect of my glass-speak. The visual aspect had to be light: my glass lead played with light, and I was fascinated with the different shapes and colours it produced around when light would pass

⁵⁴ Later also Peter Roberts, who was working on the soundtrack for this film at the time, informed me that this frequency babies cry in happens to be the range humans respond best, which gave me more confidence that I was on the right path towards glass-speak.

through it. In my imagination, glass was already communicating with us by creating these caustic effects around it, in a much slower pace than human speech, perhaps aligning more with the pace of our planet as natural light changed these effects, perhaps because being an eternal material and not having the need to succumb to the relative swiftness of human life. Stumbling across with an article by Clint Gloss where he had ascribed colours to different sounds, dealing with both frequencies and wavelengths (Gloss, 2016), I felt I had found a basis for the visuals of a glass-language. Despite Gloss' science was not solid I was curious to utilize his findings in my imaginary language.

Taking inspiration from Gloss' charts (2016), I took the wavelengths of different colours (red, orange, yellow, green, blue, indigo, and violet) and found them the corresponding aural wavelengths. Following this, I now had a collection of sound and colour wavelengths, that I could convert to frequencies to compose eight different layers for my glass-speak (one layer to be the aural aspect of glass-speak and the seven others a basis for the visuals):

Frequency (Hz)

Aural 1130-1160

Red 349-415

Orange 415-440

Yellow 440-493

Green 493-554

Blue 554-622

Indigo 622-659

Violet 659-698

Prisms break white light to colours. My glass lead did not quite do the same due to its shape, and I decided it needed a little help to get there. Thus, I developed a method to acquire its input:

I produced glass lenses from the same glass my glass lead was made of. I then built a small set in a dark studio to record the visual aspect of my glass lead speaking: I

placed the glass lead in front of a black backdrop, fixed a camera in front of it, and adjusted three spotlights with white light on the glass. I took one of my lenses, and played the spoken word (read by the human lead) while moving the lens tightly in front of the camera lens, responding to the spoken word, and recorded this. I then carried on to repeat this with all of my lenses, with different f-stop settings, for each scene.

Later I selected the most vibrant take for each scene and isolated seven different frequencies from the original spoken word (one for each colour, corresponding to the values I had acquired from Gloss' charts). In edit, I produced seven versions of each glass-speak visuals take and with digital help, made each version to respond to the corresponding aural range of the original spoken word, for instance: red version would correspond to the aural frequency of 349-415 Hz. I then assigned a corresponding hue to each layer, and put all the layers together. This resulted in a pulsating, flickering footage of the caustic effects produced by my glass lead, in the full range of visible light.

In edit, I would superimpose the glass-speak visuals on the action, matched with an audio track of the glass "speaking" in 1130-1160 Hz. Throughout my education I had been told not to stick with the first idea, but this time, this glass-speak was doing exactly what I wanted it to do: it was connected to the experience and sensitivity a glassmaker has of the material, it was glass-led and audio-visual, yet having a bit of mystery around it. Fully aware that I had taken shortcuts in the process, and that the foundations of the glass-language were not firmly rooted in solid science but instead punctuated with imagination, I had to decide if my methods were appropriate for the end result. The production of the language was laborious and it was not until after editing it I was able to see how it worked – having spent weeks developing the language was no reason to not scrap it but upon first watch my heartstrings were tugged, I felt the glass was speaking to me, and it felt truthful. I felt I had given voice to my glass lead, and my imagination-fuelled process had led to a place where I was inviting my audiences to come along for this imaginary journey into the life and existence of a glass object.

4.3. Subtitles

Despite my glass-speak being based on a human language (English), it was incomprehensible to human viewers. If the eight different tracks were reversed back to audio, it was fathomable English and even clear that the narrator was a female, and thus in a sense, all the information to decipher glass-speak into English was in the film but the human eye could not make the same translation of light waves to sound waves as the computer and my editing software could. I grew up reading subtitles and for me, the obvious solution was to subtitle the whole film. Talking about this to my colleagues, I was suggested different solutions such as dubbing but subtitling seemed to be the only viable option that would not destroy the integrity of glass-speak.

Individual humans read subtitles with a varying degree of ease, depending on their experience level with watching subtitled programmes, and the less experience they have in reading subtitles, the less time they spend on focusing on the image (Romero-Fresco, 2018, p.241). This was a potential problem: my project was primarily for English-speaking audiences and for instance in the UK where 92% of the population speak English as their main language (*2011 Census: Detailed analysis - English language proficiency in England and Wales, Main language and general health characteristics*, 2013) the confidence of 15-30 year olds in speaking more than one language is poor and subtitled foreign films are not mainstream (Long, Danechi and Loft, 2020, p.3). In addition, my project was narration-heavy with most scenes including a glass-speak voiceover. This would mean that a significant majority of my audiences might not be used to reading subtitles and that might reduce the time they have to focus on the visuals. I could not figure out an alternative approach to making the narration comprehensible to the audiences without subtitles and carried on with edit with this problem earmarked.

As I proceeded with the edit it became clear that the slow pace of the film gave more space to the subtitles than I had even imagined, and although it did not completely abolish my problem with the subtitles, it seemed to make the subtitles less of a problem. Fast-paced changes in the visual field appeal to the attention of

the eye (Cutting, 2016, p.1), and thus having long takes, minimal action, and less rapid visual trickery on top of the subtitles would amount to an equilibrium of pace. I decided to go ahead with the subtitling hoping that my test screenings would bring clarity to if there was a problem after all – the feedback from the test audiences is discussed in subchapter 5.2.

4.4. Shooting a script

My scripts are roadmaps for production, and so was the script of *Light Keeper* too. Working in small productions, I believe in being able to respond to events in principal as they unfold and addressing aspects ranging from camera location to choreography on the spot rather than following the script and storyboard to the detail. I feel this kind of approach allows me to produce films that are honest to their materiality and subject matter as visualising and scripting can only grasp aspects of the events in the film in an abstract level. It is when shooting them these events materialise and unfold in real time, and I want to be able to flexibly respond to them and make adjustments in the moment. I believe this is also a quality of the glass-informed filmmaker as the tactile experience of production allows the filmmaker to sculpt their material (the film) as it takes its form on the set, addressing the relationships between the actors, props, set dressings, the camera, dialogue, and lighting to mention a few. The glass-informed filmmaker has an intimate understanding of physical matter and this allows them to address the tactile qualities within the film in a unique way.

My approach posed a challenge to the production: I was working with a crew and cast confined within a shooting schedule, all of which provided practical limitations to the principal photography of *Light Keeper*. Thus, for the sake of a successful production, I had to sacrifice some of my flexibility and preference for improvisation as we could not keep shooting for an unlimited time or redress the sets at a moment's notice. For the most part, actors having to learn dialogue or new choreographies was not going to be a problem as central to *Light Keeper* is the treatment of humans as props with little rehearsing necessary– as opposed to often glass being a prop or a set dressing and the human the locus of action.

My solution to mitigating this tension between my practice and production of *Light Keeper* was twofold. Firstly, dissimilarly to my prior projects, I tested some of my scenes in smaller scale in a miniature studio (which is not uncommon to filmmakers) I built in pre-production but as this was only a mock-version of the real thing and mostly make-believe, it was useful primarily in terms of preparing for the actual shoot and addressing some of the concerns relating to sets. The lack of the real scale was problematic in terms of responding to light and the relations between humans and objects as in smaller scale these were significantly off. I was especially worried about light in relation to how it played with glass as this relationship is dependent on not only scale but also other materials and physical aspects of the set, let alone the camera and lenses. Secondly, I scheduled as much extra time into the principal as possible given the availability of the crew and cast. This was a gamble, going into production knowing I was not able to practice total freedom in all aspects of it but this also taught me an important lesson about trusting the process of collaborative filmmaking and my adaptability.

Throughout the principal, as is probably natural to any crew, we learned how we worked as individuals⁵⁵, and this allowed for a more seamless production, and enabled me to entirely step away from operating the camera which was something I had never done before. In addition, giving the crew freedom to use their skills also in developing creative solutions to for instance choosing the best way to utilize cranes and rails, or shooting with Steadicam allowed a much more flexible approach to production: it removed the limitations from the production as they pertained to my technical skills set. We were utilizing the skills of a team rather than of an individual, this being a textbook example of the benefits of collaborative practice. The artistic decisions relating to camera operation and the general cinematography are certainly aspects of the glass-informed filmmaker's practice. However, the opportunity of delegating primarily the technical side of this to the

⁵⁵ In the first weeks of production when we were still adjusting how we worked as a production team I stretched the crew to their limits and was made aware of that. I had asked for honesty and open discussion when going into production and fortunately my crew delivered. Responding to this, especially I had to work more efficiently and perhaps even more intuitively without spending too much time mulling over each detail.

crew as they had learned my aesthetic allowed me to focus on directing as well as using my energy towards tweaking, adjusting, playing with glass, and standing in the middle of a shoot figuring out the best way forward – essentially practicing the glass-informed side of my practice rather than technical execution of filmmaking.

To my surprise, even with my continued adjustments of all aspects of the sets, requests for extra takes, and a health-related issue that resulted in minor schedule tweaking, we finished principal on time with all the necessary scenes and visual materials shot. I used all the extra time I had allocated for principal but felt my artistic integrity as it related to production was not compromised.

Chapter 5: Post-production

Post-production is the stage in filmmaking where the raw material shot during the production is reviewed, and edited to give form to the film (Steiff, 2005, p.27). This involves also digital effects and working on the audio such as the soundtrack. In the creative process, this stage corresponds to the latter part of realization that has begun in the production stage of the film, realization followed by finalization and judgement that correspond to the end of post-production as finalization involves the creative practitioner deciding that the work is ready, and judgement refers to the assessment of this work. Judgement can be both internal and involve bringing colleagues or test audiences into evaluating the work but can also lead to exhibiting the work to the audiences – these are all discussed in this chapter. (Botella, Zenasni and Lubart, 2018, pp.10–11)

Again, as with the previous chapters, I am addressing only aspects of post-production that pertain to the glass-informed filmmaker's practice and are informative in answering my research questions. The post-production of *Light Keeper* was a lengthy process that span from July 2019 to March 2020, with an added period working on the digital screening version of the film over the summer 2020. I had scheduled the post-production to finish by end of 2019, but because I was unexpectedly left alone with my edit without a "sounding board" as my supervisor in Media left the University and I was waiting to get a new supervisor for the whole of Autumn 2019, I had to add three extra months to the process. In addition, the COVID-19 pandemic that forced England and most of the world to come to a standstill starting from the spring 2020 meant that I was not able to screen the film in theatres which affected both my planned test screenings and the eventual premiere and festival screenings of the film. *Light Keeper* was meant to be shown in an actual theatre and was edited accordingly. This will be elaborated later in this chapter but is worth mentioning here as this resulted in my decision to produce a new edit of the film that would work if viewed digitally. This digital version of the film is what is included also in my submission.

5.1. Edit

Editing refers to organising the footage and other raw material such as sound by utilizing different tools, and when working with digital footage as opposed to film stock this involves nearly always software. *Light Keeper* was shot digitally, and thus the focus in this thesis is in digital editing only. Film editing seems simple but is a complex, continuously evolving practice, current research ranging from automated editing technology (Galvane, Christie and Ronfard, 2015) to the psychological effects achieved by adopting specific editing strategies (Germeys and d'Ydewalle, 2007). Examining glass-informed filmmaking principles against the plethora of research in editing has potential to cast light into the specifics of glass-informed filmmaking practice as editing is the last step in bringing a film to life, quite aptly described by the editor Zach Staenberg “[w]hat makes a movie a movie is the editing” (Apple, 2004), and the process can be approached as a way to support the desired emotional responses from the audience, specifically by utilizing continuity editing principles such as the 180-degree rule and point-of-view editing (Kim, 2014).

Editing requires a specific skillset that on one hand is based on mastering the tools of the trade and on the other is vaguer, concerning the artistic goals and dependant on the film genre and the role of the editor in the production. The complexity of the work of editors is outlined by Dany Cooper: “I mean basically our job is to harness light and sound and action, and story, and create a multilayered thing called a film” (Gross, 2009, p.32). In any case, the editor has a specific role, often separate from the director but it is not unheard of the director also editing their own films, well-known examples including David Lynch’s *Eraserhead* (1977), Akira Kurosawa’s *Ran* (1985), and most of the Coen Brothers’ films, including *The Ballad of Buster Scruggs* (2018) in which the editing is credited to Roderick Jaynes that is a pseudonym used by the brothers.

The approach of the director as the editor has many opponents, especially in commercial productions as the dual role inhibits objectivity in the editing process (Selakovich, 2014). However, in a more commercially flexible project this is not as

big of an issue and is embraced by some filmmakers such as David Lowery in *A Ghost Story* (2017) and Gus Van Sant in *Elephant* (2003), and by many experimental filmmakers such as Jonas Mekas, Bill Morrison, and Stan Brakhage whose *The Text of Light* (1974) is shot entirely through a glass ashtray, a feature undoubtedly inspirational for many (glass-informed) filmmakers due to the exquisite fluidity and use of light and shadow (Nelson, 2017).

Editing corresponds to realization and finalization in the creative process (Botella, Zenasni and Lubart, 2018, pp.10–11). Regardless of how many people are involved in the process and whether or not an editor is employed, this is the stage where the project comes together and while the final audience of the film has to be considered throughout the process of producing the film, in the editing stage understanding how the audience perceives the film is paramount as it informs how all the raw material acquired is put together: films are created for an audience (Weaving, Pelzer and Adam, 2018, p.89).

My approach to editing is based primarily on intuition but also on “pure logic”, much like the Hollywood editor Joe Hutshing who has a degree in fine arts rather than film production (Gross, 2009, p.15). I have edited all my films and embrace an experimental approach to it, similar to director David Lowery’s sentiment: “[y]ou smash two things together and see what happens” (Anderson-Moore, 2017) – it is indeed difficult to verbally explain the practise of editing but the process is inherently reflective as each cut and revision is developed and refined in relation to the previous one (Holt, 2015, p.27). However, *Light Keeper* was a substantial project and some of my visual effects were beyond my technical skills, and thus I brought in Tom Lee to edit some of my scenes as well as to produce the more technically challenging visual effects. I retained control over the edit, and Lee assumed a role akin to an assistant editor. This approach enabled me to realise my artistic freedom and focus on editing the film in a way that was truthful to glass-informed practice but also was not hindered by technical limitations.

Editing a glass-informed film shares qualities and concerns with editing screendance. Dance and film can be seen as opposing disciplines: films are often

composed of multiple shots and angles as well as manipulated time whereas (stage) dance is continuous movement viewed from one angle and happening in real time (Conrad, 2006). Much like dance, glassmaking is based on the movement of the human body, most evident in glassblowing. Simply cutting either a choreographed dance piece or a process of blowing glass destroys the integrity of these processes. Thus, the filmmaker or editor has to be conscious about the progression of time and how that connects to the movement of the human body and material (glass) and compose angles, shots, cuts, and framing so that these allow the viewer to gain access to a desired experience. (Conrad, 2006) This might serve the purpose of documentaries that have the main purpose of showing what is but is not enough for screendance or the glass-informed film. Screendance has two options that influence the whole production but become specifically evident in the editing process: either to re-choreograph work intended for stage or compose the film de-novo (Conrad, 2006). In glass-informed filmmaking that makes use of glassmaking techniques, the options are similar: either translating the glassmaking process to the screen⁵⁶, or creating the film de-novo. Composing the dance film (or glass-informed film) de-novo is a powerful approach as rather than aiming at translating dance (or glass or glassmaking) to screen (re-choreographing) it entails considering different aspects of filmmaking from the start that best support the intended story or message of the screendance (or glass-informed film), primarily revolving around montage methods that include “collision cuts, rhythmic cuts, and pseudo-matching cuts” as well as “angles, locations, [...] camera movement, [...] and] in-camera superimposition” (Conrad, 2006) to mention some of the central techniques. While *Light Keeper* is not montage, I have utilized parallel techniques in it. Examples of these include circularity⁵⁷ that is comparable to collision and rhythmic cuts in screendance as

⁵⁶ Useful tactics could be for instance utilizing the camera as the locus for observing a technique, or restructuring the technique for camera rather than for the purpose of producing an object – all the while maintaining truthfulness to the glassmaking technique. This kind of translating or re-choreographing glassmaking for screen is of particular use to films that lean towards documentary or prefer realism. *Light Keeper* is an entirely fictional film and thus re-choreographing glassmaking processes was not a tactic I chose to employ.

⁵⁷ For examples see subchapter 3.7. Many of these tactics must be integrated into development and production, and are tied together in edit, such as multiple angles around a sandbox or the camera turning 180 degrees around its horizontal axis that was done in edit rather than physically turning the camera.

these are connected to the nature of the actions in both fields, as well as moving away from shooting on location in the glass studios⁵⁸ to be able to address the material's connections to the world rather than conforming to its natural habitat and shooting in the glass studios – much like screendance can move from stage to locations to expand the vocabulary of dance from being confined to a theatre stage. What is paramount in this approach is that the choreographer or the glass-informed filmmaker understands the tools and techniques available to the editor so that in production they can acquire the necessary raw footage for the editing process.

The choreographer, the glassmaker, and the editor think physically: “[t]hey rely on kinaesthetic empathy and various brain functions that respond physically to movement to inform their intuition about what feels right in the process of shaping movement [or glass] into expressive form” (Pearlman, 2006). This puts the glass-informed filmmaker in a potentially fruitful and unique position provided that they are able to harness all their roles and skills in a fluid manner. In editing their film, they are essentially translating three-dimensional space and matter by using movement-based tools into a two-dimensional realm occupied solely by light and sound that eventually unravels in time – borrowing from Andrei Tarkovsky's book title (1987), they are *sculpting time*. Arguably, this is done by all filmmakers but what makes the (successful) glass-informed filmmaker's position unique is not only that they are masters of the very material that translates space and action into footage (the lens) but they also embody a haptic understanding of how the footage they are shaping in the edit relates to the physicality and three-dimensionality of their subject matter (glass).

⁵⁸ The vast majority of the scenes in *Light Keeper* are shot in a film studio, with a handful being shot on location in the glass studios. The film studio scenes reflect the fictional “life” of the main protagonist (the Bubble) as seen through it remembering its “memories” of the relationship it had with a mortal human being – none of which is ever real as it is an eternal being incapable of experiencing life of an animate being such as a human, whereas the location shots in the glass studios were rooted in the reality experienced by the protagonist.

5.2. Test screenings leading to a digital edit

Test screening or audience testing is a way obtain insight on how different demographics would respond to a particular film. These screenings are often organised towards the end of post-production, and can be used as a way to address creative decisions regarding the edit and how to best market the film – commercial cinema is driven by market forces and thus has to cater to the audiences to gain profit. (Weaving, Pelzer and Adam, 2018, pp.89–90)

Part of my research project was to organise test screenings to gain audience feedback at the very last stages of post-production of *Light Keeper*. My test screenings would take the form of a screening followed by a questionnaire which is a typical format for testing how audiences react to films (Weaving, Pelzer and Adam, 2018, p.90). This was not to shape the film to cater my audiences in order to gain financial profit – test screenings of commercial films provide insight into how audiences react to different aspects of a film and based on the audience feedback the film can be further edited and marketed to maximise the chances of paying audiences flocking in theatres to see it. Instead, my test screenings and feedback would provide details towards answering my research question on the particular qualities of glass-informed film (question 2). The test screenings also gave me an opportunity to see what kind of experiences the film elicited in my audiences and determine if they established emotional connections with my characters or different aspects of the film. I planned to screen the film first to audiences composed of glass students and professionals who would be able to identify glass-informed aspects of the film or a lack of those. After this, I would organise screenings to general audiences which would provide insight into whether or not I had succeeded in creating a film that engaged its audience. This is probably what motivates many filmmakers: showing your film to an audience brings closure to the project, as usually films are made to be shown to audiences.

I had just scheduled the first (general audience) test screening to take place at Star & Shadow Cinema in Newcastle Upon Tyne on April 1st 2020 when COVID-19 forced public venues to close. It quickly became clear that it would be impossible

to organise physical test screenings even later on to inform my research as I was going to submit my thesis towards the end of summer 2020. Thus, I resorted to planning digital test screenings that were simple in their form: an online Vimeo screener and a Google forms questionnaire (see appendix A3.). I knew this was likely going to be difficult in two major ways, firstly as *Light Keeper* was meant to be viewed on a cinema screen and now my audiences would be viewing it on their personal (small) screens such as on a laptop or even on mobile devices in spaces I had no control over. They could start, pause, skip and rewind to their liking and this would likely affect their viewing experience on top of having to focus on a small screen and potentially experience distractions such as sounds from their surroundings. Secondly, it was clear from very early on during the pandemic that as individuals were working and studying from the confinement of their homes, staring at screens and attending virtual meetings more than before, at some point some of my potential audiences might start experiencing an overload of screen time and even visual fatigue (Speeg-Schatz et al., 2001) and this would lead me losing these audiences.

I had two options: either seek extension to my research project and submission without knowing how long I would have to wait to organise physical screenings or go ahead with digital screenings knowing I would not get the audience feedback I had originally planned for. The uncertainty of how long we might be experiencing the pandemic and ripples of it let alone how it would affect me personally led me to decide to go ahead with the digital, remote test screenings. The purpose of the test screenings was to provide insight about audience experiences (both glass and general) but even the absence of them would not destroy my research. I would take the special and different circumstances my audiences were viewing the film in into account in interpreting the feedback.

To address the potential visual fatigue of my audiences induced by excess screen time, I had to be quick in getting the film in front of my audiences. I reached out to my professional networks in glass and heard back from educators who wanted to either incorporate the screening into their new lesson plans or simply were interested in showing it to their students. One individual educator posted my

screening offer to their networks and this led additional educators to contact me to organise further screenings. I wanted my audiences to watch the film without prior knowledge to obtain sincere audience feedback and thus I left the specifics of how and when the film was viewed to the educators. I provided them with a screener link and the questionnaire and waited as the feedback trickled in. To address also non-glass audiences, I reached out to my social networks and offered interested individuals the screener link and the feedback form.

I was aware that this approach provided feedback only from an audience that was interested in glass and film and was willing to donate two hours of their own time. While not similar to test screenings in commercial cinema where it is desirable that the demographic is more varied, this approach was more akin to how practicing artists get feedback of their projects: talking to their colleagues and networks.

Having devised my digital test screening plan very quickly, I made the mistake of providing the audiences the same screener that I had already submitted to a handful of festivals, and thus was not able to get exact viewing statistics. I would estimate that the screener was viewed approximately 80-90 times in relation to these test screenings during a two-month window in end of March – mid-May 2020, based on my knowledge of the rough geographic locations of the educators, individuals, and festivals. To my surprise, only 18 individuals filled in the feedback form. As I have no way of connecting views to the feedback form, I do not know why either many individuals watched the film multiple times or did not fill in the form after watching the film. However, these 18 feedback forms provide some insight into how my audiences received the film. The questions in the form are included in appendix A3.

I developed the questions so that they would follow roughly the conventional test screening feedback format but added questions directed towards answering my research questions. I collected basic demographic information on the viewers such as gender, age, and geographic locations as well as preferences and habits relating to watching films as I expected this might reflect on how their previous

experiences might influence the answers. With a small set of answers, it is difficult to draw parallels but what is worth mentioning is that the majority of the viewers were female (10), from the USA (12), and between the ages of 25-39 (9). This is perhaps more indicative of my networks than of potential audiences for glass-informed films. In a common test audience feedback vein, I was also curious how they would rate the film even if I knew this was likely going to reflect their viewing experience rather than only the film: the majority rated the film as good (9), followed by excellent (6), fair (2), and poor (1).

The questionnaire included conventional test screening questions regarding different qualities and aspects of the film such as characters, visual qualities, story, aspects that stuck out or were perceived as unique, viewing experience and related emotions in the audiences, as well as questions relating to my research and the “glassiness”⁵⁹ of the film. For the most part, the feedback included no surprises:

The majority of the viewers mention that the film and the pace were long and slow, and overall the pace and duration were viewed in at least partially negative light (10), with the rest neutral (4) and positive (4) views on the duration. This would indicate that the duration should be cut down to cater to these audiences watching the film on their personal devices. Viewers mentioned that some scenes should be cut shorter but others mentioned that slower scenes allowed them to have “reading breaks” after more intense scenes. Thus, for digitally viewing the film I decided to cut the film but kept the original length for the theatre cut as I had no way of determining how these audiences would view the film in the confinement provided by a cinema screening.

Viewers listed their favourite and their least favourite aspects of the film. Many viewers mention that they enjoyed most the soundtrack or the soundscape in

⁵⁹ By “glassiness” I am referring to different glass-like and related qualities in the widest sense, primarily visual and aural but also drawing from haptic, not limited to but including the visual qualities of the material, how it plays with light, its material qualities, chemical composition, attributes such as fragility, how it is perceived by individuals within the glass field, how the material feels to the touch, what it sounds like when breaking, and different choreographies and movements of the human body that relate to glassmaking processes.

general (9) while only one viewer mentioned they did not like “the sounds” – which could refer to the soundtrack or how the bubble spoke. Two viewers felt that there should have been more variety or manipulation in terms of the audio but did not specify the soundtrack being unpleasant. Different aspects of the visual qualities of the film were also mentioned as being the most enjoyable (12), such as the use of different qualities relating to light such as caustics and optics (4), the editing, framing, and cinematography (4), or the visual construction of specific scenes (4). Three viewers also talked about how the relationship between the girl and the bubble presented them as viewers with either opportunities for connecting with the characters or in general found the interactions between them as most enjoyable. Five viewers mention the use of glass as one of the most striking qualities of the film. The disliked aspects apart from the duration were a mixed bag, including issues such as grading, specific scenes, lack of audio manipulation, subtitles, and repetition.

Only one viewer had nothing to do with glass which is unsurprising as I had sent the screener to glass educators and my personal networks. I included a question regarding the viewer’s relationship to glass in the questionnaire to determine if viewers knowledgeable of glass would be able to pinpoint the “glassy” decisions I had made in the film ranging from the narrative to the editing. I asked “[w]ere there any aspects of the film and your experience of watching it that reminded you of glassmaking processes, the material, or related traditions? Please provide examples.” One viewer who had indicated having a relation to the field of glass (student, academia, artist, etc) found nothing “glassy” in the film while three viewers mention that they felt underqualified to answer this question. Most viewers (12) mention the glass studio sets, onscreen glass, or the visual effects created by using glass (4). One viewer mentions that they felt the whole film was a representation of glass, and another pointed out the film reminded them of the fluidity of molten glass and the potential of the solidified glass to hold memories. Other glass-y aspects mentioned were the repetition as it relates to glassmaking, the value of glass and appreciation of general public, the solitude of a glassmaker, and movement/choreography as bearing semblance to glass or related processes.

Did the film provide emotional connections or experiences for the viewers? The viewers saw the Bubble as an eternal, enigmatic entity (7), even as an “alien-like” character (1). 15 out of 18 viewers mention that they connected with “the topics or emotions raised by the Bubble’s narration”, and further elaborate that they identified specific topics as akin to their own experiences in life (12). One viewer describes that the “Bubble’s narration was somehow more touching than if a human would say these things”, while many viewers talk about perceiving the film as discussing about what it means to be a human rather than specific life experiences (11). No viewer specifically says that they felt empathetic towards the Bubble for the misfortunes it has experienced, but some mention aspects such as loss and disconnection (6) as feelings they experienced while watching the film. Other viewers speak about a connection to the universe, a higher spirit, or a journey of an individual trying to figure out what it means to be a human (5) in reflecting on their viewing experiences. Many of these topics in relation to emotional connection above are discussed or presented in the film as the Bubble’s experience of the world and existence though, and thus, if nothing more, some viewers had emotional viewing experiences if not even formed an emotional connection with the glass lead, the Bubble.

Overall, especially given the ongoing pandemic I was grateful for the feedback I received and the time my test audiences had donated for viewing the film. For future reference for my creative practice, this digital test screening experience and feedback collection showed that an opportunity to further discuss the feedback with the audiences would be useful in teasing out the specific concerns and experiences of the audiences. The open-ended questions in the feedback form for *Light Keeper* left room for speculation in interpreting them but a simple form such as one composed of yes/no answers would likely have lacked depth and even directed the answers. However, the test screenings informed my judgement of the film, much in line how judgement in the creative process is often described (Botella, Zenasni and Lubart, 2018, p.11). Based on the feedback, I felt that drastic changes to *Light Keeper* were not justified as the film was not viewed in an environment where I had intended it for. I decided to re-grade the theatre cut and hope to screen it in an actual theatre setting in the future.

The digital cut⁶⁰ was finished towards the end of summer 2020, the test audience feedback informing my editing process. The process was similar to editing the theatre cut, with the difference that now I was focusing on addressing specific problems: the grade, duration, and pace as well as a couple of challenging scenes. I changed the colour to mainly grayscale, and kept a handful of scenes towards the end of the film in colour as these were portraying an inverted reality or the internal thought process of the Bubble. My motivation in doing this was to further emphasise the contrast to the more “real” world in the rest of the film, similar to Andrei Tarkovsky’s *Andrei Rublev* (1973) in which the life of Rublev is portrayed in black and white and his art in colour. I cut out scenes that were dealing with slowness and required the immersive environment of a cinema to work – this resulting in a ripple effect as I had to cut out the mother of the girl entirely as her inclusion and meaning in the film was based on these slow scenes. I also re-cut scenes throughout the film into a more compact form yet keeping the pace of the film slow as this was necessary for how the Bubble experienced time. In total, I cut out almost one third of the duration but the runtime was still just over an hour, and the film still qualified as a feature, even if a short one by modern standards.

The post-production of *Light Keeper* is finally finished at the time I am submitting this thesis – or using Botella, Zenasni & Lubart’s terminology, I have reached the stage of finalization in the process of producing this film. Part of finalization is making choices about exhibiting the work if the artist so chooses – this has been my intention all throughout the production of the film. Because of the ongoing pandemic and the related uncertain situation of film festivals and opening of cinemas I cannot make actionable plans for when and where exactly I can screen the theatre edition of *Light Keeper*. However, I hope to develop a plan to where I can screen the digital edition during the autumn of 2020 but the uncertainty of (physical) festivals is reflected in the whole field of film and I am not expecting to hear back from digital opportunities for screening the film until 2021. This is why

⁶⁰ This edit can be viewed online, and the link to an online screener can be found in the beginning of this thesis.

I have not reached the end of finalization, and the lifespan of *Light Keeper* will extend well beyond this research project. (Botella, Zenasni and Lubart, 2018, p.10)

5.3. Distribution and exhibition

The distribution or exhibition of a film can be seen as providing the framework for judgement in the creative process of filmmaking as at this stage the film is brought to its intended audiences and often some kind of feedback emerges either in relation to the screenings through discussion or media coverage. Judgement involves also the artist reflecting on the project – in part the judgement as it concerns my own reflection of *Light Keeper* was situated in the test screenings, post-production process, and related creative decisions I made for the digital edition of the film. (Botella, Zenasni and Lubart, 2018, p.11) The judgement from the public is pending as I have not had an opportunity to engage a final audience to discuss this film prior to submitting this thesis.

It is worth mentioning that I had submitted the theatre edition of *Light Keeper* to festivals prior to having any knowledge of COVID-19, but due to many festivals cancelling and postponing, judgement in terms of how many accepted or rejected the film in light of the still ongoing chaos and uncertainty facing the film field renders these rates unindicative of how the film was received. However, the theatre edit of *Light Keeper* was accepted to Kyiv International Film Festival in June-July 2020, Austria International Film Festival in July-August 2020, and Polish International Film Festival in October 2020 (*Light Keeper* also won the experimental category of this festival), all these screenings taking the form of an online festival because of the pandemic⁶¹. My work as directing the film was also awarded with a nomination in the Best director (feature) category at the Alternative Film Festival in Toronto, ON, Canada in March 2020 but this festival chose not to organise any screenings. The trailer of *Light Keeper*⁶² was also

⁶¹ Full list of screenings and awards before submission in appendix A4.

⁶² I have not discussed the production of the trailer of *Light Keeper* in this thesis as it does not provide insight into the glass-informed filmmaking process. The trailer I produced is a standard trailer in many aspects: it is short in duration (2:46), cut fast, and introduces the main characters,

accepted to the programme of Glass, Meet the Future Film Festival organised by North Lands Creative, and they chose to organise a digital screening in place of the scheduled physical festival in July 2020 in addition to postponing further (physical) screenings in Scotland and Japan in 2021.

While I will not be able to discuss the distribution and exhibition of *Light Keeper* in further detail, it is useful to briefly address exhibition in relation to the appreciation of glass-informed filmmaking. As discussed in subchapters 2.5. and 2.6., glass-informed films have been screened in specific festivals and exhibitions but these are very recent and thus not much research or writing about these exists. Ann-Sophie Lehmann has discussed craft and film in a recent paper (2018) but focuses specifically on the process film which essentially is an audio-visual representation of processes rather than a glass-informed film or an equivalent from another craft discipline. Nevertheless, ceramics as a closely related field provides insight into showing craft films.

Andrew Livingstone discusses practices and projects that combine ceramics with moving image and still photography, and identifies a challenge in showing this kind of work: “whist the ceramic figures sit with discipline acknowledgement, the formats of video and photography do not” (Livingstone, 2008, p.55). This problem is closely connected to the gallery or museum space and the venue’s placement in the spectrum of ceramic (or craft) - fine art identity: the challenges in exhibiting ceramics alongside image-based media seem to dissipate when the work is shown in a gallery with an inclination towards fine art and especially installation (Livingstone, 2008, pp.55–56).

Difficulties in showing films that utilize craft skills and knowledge arise from the context of where they are shown and how these projects are labelled and marketed since the audiences have no problems in appreciating for instance the Czech filmmaker Jan Švankmajer’s clay-informed projects at least partially because those are clearly shown as films that sit within the parameters of

as well as gives an idea of the story and genre without giving away too much information to ruin the viewing experience of the actual film (Bordwell, 2004, p.6).

cinematic practices. Švankmajer combines clay and animation to expand sensory responses (of viewers) to his films from the visual and aural to tactile. Švankmajer utilizes “tactile memory” in his film *House of Usher* (1980): hand-sculpting clay is turned into a stop-motion, where seconds between frames also slow down emotions – evoking feelings of tension and frustration in the viewer. (Švankmajer, 2014)

How can these craft-informed films be critiqued? Livingstone notes that “[s]everal critiques and structures applied to video art might possibly be applied to video work emerging from ceramic artists” particularly applicable to David Cushway’s moving image works that displays a “time-based narrative that extends the notions of temporality” (Livingstone, 2008, pp.162–163). While craft-informed moving image projects seem to grow mostly from within the craft fields, these might benefit more from being seen as projects transcending discipline borders as critique and values in terms of content and technique seem to be closer to cinematic and contemporary art practices than those of craft but these parameters are not set yet. Nonetheless, materiality that is crucial to crafts is important in the field of moving image and cinema too: “[f]or alchemy to take place in a film, the form must include the expression of its own materiality, and this materiality must be in union with its subject matter” (Dorsky, 2005, p.24). It is possible that through addressing this materiality, applicable avenues for critiquing glass- and craft-informed film present themselves.

While related, glass-informed film is different from its relative in the field of ceramics. Luminosity is central to the appreciation of glass art, and similarly even if slightly in different terms fundamental to cinema. This connection becomes even more obvious when contrasting religious glass art to devotional cinema – especially to cinema of immanence. Both art forms (can) instigate spiritual experiences and relish devotion through the use of light and giving form to ethereal matter. (Behnam, 2015) How does this inherent connection to light affect viewer experiences or opportunities for screening glass-informed film remains problematically unclear and more research is needed to better understand how audiences interact and appreciate glass-informed film.

Within the field of glass there is no established framework for exhibiting glass-informed films. However, three potential opportunities and a fourth in its very early stages can be identified for screening glass-informed films: 1) exhibiting alongside more conventional glass art in glass exhibitions in galleries and museums, 2) in exhibitions composed solely of glass-informed films in museums and galleries, 3) in glass-specific film festivals, and 4) in film festivals. Glass-informed films have been shown in major exhibitions along sculpture and installation such as *Young Glass 2017* and *New Glass Now* (Blach, 2017; Silbert, 2019a) similarly to how artist's moving image is shown within the fine arts, looped on screens and as projections. Similarly, these projects have been exhibited, even though with less examples in gallery and museum exhibitions composed solely of glass-informed moving image projects looped on screens and as projections such as in my solo show at the Glass Factory in Sweden in 2018. In these kinds of museum and gallery settings, it seems that these films enter into a realm and discussion akin to moving image in the fine arts but as the audiences of these exhibitions are glass-specific the differences and similarities remain unclear and thus further discussion about this is premature given the scope of this thesis. Another option to show glass-informed films is through festivals – the glass-specific festivals have already been discussed earlier in subchapter 2.5. Screening these films in traditional film festivals in a suitable category such as experimental film seems to present another opportunity but few examples of this exists: for instance Diego Almazán de Pablo's *Our Common Humanity* (2018) screened at Pupila Film Festival 2018, and my own short *A Home* (2017a) in Bideodromo 2018 but research on how these films were received as being glass-informed films does not exist.

While some opportunities for showing glass-informed films exist today, as more artists experiment with moving image and even embark the route of a glass-informed filmmaker, more opportunities for both screening and appreciating these films can arise. As Lehmann points out “[i]mages are particularly well-suited media for capturing the experience of making and the tacit knowledge enclosed in it” (Lehmann, 2018, p.41), and thus at a time when we as audiences consume more

and more audio-visual content, also the glass-informed is bound to find the appropriate venues and audiences for the consumption and appreciation of it.

Chapter 6: Conclusions

In this chapter I summarise the key findings of this research project, answer my research questions ⁶³ and address my contributions to knowledge. The conclusions refer to both what can be seen in the field of glass and what can be drawn from my practice and production of *Light Keeper* unless I have specifically mentioned otherwise. I also introduce points for further research and briefly touch on future directions and challenges in and for glass-informed filmmaking.

This thesis has discussed craft and specifically glass as the foundation from which glass-informed film practice grows from in the past ten years as illustrated by New Glass Review publications, and highlights related concerns in associated fields such as ceramics. These include: digital approaches, art vs. craft debate, and focus on object and the tangible, which are all topical issues in the craft fields and form a part of the framework for glass-informed film. While the discussion and debate surrounding these concerns is on-going, it is important to note that as glass-informed film practices are more developed in the future and more insight, research, and understanding of them emerges, also potential resolutions to these concerns can be brought to light. There is nearly no existing research about glass-informed filmmaking, and thus looking into other related fields and practices is useful in understanding this emerging field.

Glass-informed film is closely related to avant-garde film in terms of concerns and approaches: avant-garde film presents a framework for understanding and appreciating glass-informed films. This will be further elaborated and summarised below in discussion about my research questions. With this affiliation comes also a connection to other film traditions such as screendance, independent cinema and even Hollywood film. Glass indeed exists in mainstream cinema but these are not glass-informed films as they do not integrate glassmaking into the production of the film but merely portray glass or related activities onscreen. The

⁶³ I have also included a list of key characteristics of glass-informed films in answering my research question number 2 for the reader's convenience.

differences between film and glass-informed film will be discussed in relation to my research questions below.

This practice-based research project focused around the production of a glass-informed feature film *Light Keeper* as a pioneering example of the potentials of the glass-informed filmmaking practice. Because the practice is a fundamental part of this research project, the structure for this thesis was chosen to reflect this: the core echoes the film production process from pre-production to post-production. However, the glass-informed film production process differs from the production of its mainstream relatives in terms of it being artist-driven that results in a more fluid and flexible approach towards production than conventional film productions are – this is highlighted by incorporating discussion about creative process throughout the thesis and is also incorporated into the structuring of the chapters to provide further insight into this creative practice. The overall structuring of the thesis reflects the interwoven relationship between glassmaking and filmmaking in this practice and how glass-informed filmmaking connects to creative practice. In addition, the structure accommodates my autoethnographic methodology: being merged in the practice allows for insightful observation and developing an understanding of the practice.

Glass-informed filmmaking is rooted in the tactile and being in touch with a material that extends beyond our limited understanding of the world and relatively short existence. Glass is eternal in many ways, and thus the incorporation of it into a time-based medium (film) presents opportunities to address perhaps some of the most emotional aspects of human lives relating to our existence as film unfolds in real time, in front of our eyes yet the material that informs these films is eternal and not bound by human parameters such as birth, death, and the time in between. The glass-informed filmmaker can potentially harness this emotionally salient quality of their practice. However, glass-informed filmmaking is new and just by examining the mediums at hand (glass and film), there is tremendous potential for creating novel, emotional experiences for the viewer.

Research Question 1. What are the differences between a moving image work and a moving image work that is informed by glassmaking processes?

Glass-informed filmmaking is closely connected to filmmaking and glass, grows from the field of glass but does not comfortably sit in its tradition. This practice is essentially filmmaking but with a strong link to glass and glassmaking, and this link draws the glass-informed filmmaking practice apart from especially mainstream film. Glass-informed filmmaking seamlessly integrates glassmaking and filmmaking skills and traditions in multiples levels: in development, ideation, story, storytelling, concept, production, editing and related techniques, and addresses glass in visual and aural aspects of the film produced. In using their skills, knowledge, and tactile experiences concerning glass in filmmaking the glass-informed filmmaker is essentially sculpting time – they are employing techniques conventionally associated with a three-dimensional material in creating durational, two-dimensional works. This becomes particularly apparent in the editing process of glass-informed films as the filmmaker has a haptic understanding of the footage they are working with, which is directly related to their glassmaking skills and understanding of the material. All this requires intimate knowledge and skills in glass that are not accessible to the non-glass-informed filmmaker through means of observation but require years of training and practice with glass. This is the main difference between glass-informed film and film as films that merely portray glass or related processes and techniques can never offer truthful insight into the intimate relationship between glass and its maker. (Key discussion in: subchapter 1.4. and chapters 2. and 3.)

This is where glass-informed filmmaking finds its closest reference point in the wide canon of filmmaking traditions: the screendance. Screendance is an amalgamation of dance and film, and much like glass-informed film, screendance incorporates dance-related skills to all aspects of film production from development to post-production in ways that are specific to dance and impossible to utilize by practitioners unfamiliar with dance. (Key discussion in: subchapters 2.3. and 5.1.)

Another difference between glass-informed film and film is audience and distribution of the projects. Glass-informed films exist primarily in relation to the field of glass and thus are shown in glass-oriented venues such as museums and galleries often along with glass sculptures, installations, and vessels. Glass-informed films have also been screened in festivals but these are often geared towards either glass or craft. Examples of these are International Film Festival on Crafts in France, Real to Reel the Craft Film Festival in the UK, The Post-Glass Video Festival (USA/UAE), RISD Glass Film Festival in the USA, and most recently Glass, Meet the Future Film Festival (UK/Japan). Even though there are exceptions, glass-informed films are not shown in traditional film festivals while potential categories and festivals do exist. This crossover has happened to films coming from mainstream to glass though: although glass-informed films have not found established audiences in the field of film, non-glass-informed films that either deal with glass (such as documentaries) are shown in both craft and glass film festivals. (Key discussion in: subchapters 2.5. and 5.3.)

Research Question 2. What are the qualities of a piece of moving image that utilizes skills, traditions, and knowledge from glassmaking?

Glass-informed films find a framework in avant-garde film. They share multiple qualities and concerns with this well-established approach. Much like avant-garde films, glass-informed films are fluid in terms of production and defy categorisation, and it is difficult to pinpoint exact qualities that make them glass-informed. Films in both traditions are often produced without the support and sometimes even acceptance from their field, question it and the tradition from which they grow, provide alternatives to it, and are sometimes controversial – in glass-informed film primarily because of the newness of the approach. Glass-informed filmmakers are sensitive to different changes in the field much like avant-garde filmmakers and utilize this in their practice, and break down barriers between different disciplines. (Key discussion in: subchapters 2.2. and 2.4.)

In addition to qualities similar to avant-garde film, glass-informed films show preferences relating to certain visuals qualities such as long takes, superimposed

footage, and optical effects as well utilizing sounds of breaking glass as I have discussed especially in relation to the film festivals that focused on screening glass-informed films. These also incorporate non-linear approaches to dealing with time and progress, portray pain and risky human behaviour, and exploit tensions between the human body (e.g. alive, soft, mortal, warm) and glass (e.g. cold, inanimate, fragile, sharp). (Key discussion in: subchapter 2.5.)

My goal was to incorporate as much “glassiness” to *Light Keeper* and its development and production as possible. In addition to what can be seen in the examples of glass-informed films discussed in this thesis, my feature project shows that glass-informed films can benefit from specific approaches in development. Thought experiments are particularly useful in the development of glass-informed films. Examples of this that I employed in my feature production are assuming the point of view of glass (both as a basis for a thought experiment but also taking the place of glass such as sitting inside a kiln) and asking questions such as how glass perceives its relationship with humans? Or how it communicates with humans? This is where my employment of creaturely writing becomes apparent as I had given a fictional life to the inanimate material. Addressing the agency of the material was paramount in this process as an understanding of it allowed me to develop a fictional story yet keep it rooted in the real material qualities of glass. This kind of balancing between the real and the fictional is certainly a quality of great films but also important in glass-informed filmmaking as can be seen in my feature production as it can be the starting point for creating evocative characters that support audience engagement. All this further highlights that in order to tell meaningful stories in glass-informed films, the filmmaker must have intimate knowledge and understanding about glass.

Another approach I used in *Light Keeper* is utilizing choreography developed from glassmaking-specific movements and the material’s unique qualities in creating the choreographies for different scenes but also camera operation and editing. This is most distinctly visible in the use and references of circularity in different aspects of *Light Keeper*: in the narrative, story, characters, action choreography, camera operation, and editing. The process of developing *Light Keeper* also shows

that a continued involvement in glassmaking is a particularly relevant aspect of glass-informed filmmaking: the filmmaker is developing a story in close interaction with the material and a too much distance to it can potentially dilute the salient aspects of this relationship: the glass-informed filmmaker is an active participant in the realm of glass and not merely an observer. This active relationship is demonstrated for instance in my development of glass-speak: the visual effects are based on my own experiments in making lenses in the hot glass studio. Glass-speak is also an example of a unique approach to glass-informed filmmaking as the fictional language and its development is based on a merging of both glass-specific and filmmaking skills. In addition, glass-speak is an example of how sound can be approached in glass-informed films – contrary to the common sounds of breaking glass as a sound effect in films, glass-speak is integral to the story of the film.

These above mentioned qualities and aspects can be embraced in unique ways in glass-informed filmmaking but as they currently exist primarily only in my own practice and in *Light Keeper*, it remains to be seen if other glass-informed filmmakers incorporate similar approaches and ideas into their projects. My glass-informed filmmaking process is part of my contributions to knowledge (see 6.1.). However, it is clear that glass-informed filmmakers must have skills in and understanding of filmmaking alongside skills in glass to be able to produce successful films. (Key discussion in: chapters 3. and 4., and subchapter 5.1.)

The artists producing glass-informed films often maintain a practice that includes physical manifestations of their creative practice such as sculptures and vessels and it is rare that an artist focuses solely to glass-informed filmmaking. However, due to the newness of and potential in glass-informed filmmaking it is not at all farfetched that this practice gains traction in the future. Artists who have produced glass-informed films share motivations: curiosity, experimentation, investigation, and illustration. Some artists seem to use film as a way to move away from glass which is perhaps motivated by economic and ecological factors but also made possible by the accessibility of filmmaking as well as affordable equipment and software. Glass-informed filmmaking also presents a possibility to

reach wider audiences beyond the field of glass such as film festivals and fine art-oriented venues but currently this as a motivator seems paradoxical: glass-informed films are screened primarily in venues for glass. (Key discussion in: subchapters 2.4. and 2.5.)

The following lists provide a summary of the key qualities of glass-informed films that can be identified on the basis of this research. In these lists, LK denotes a quality identified in *Light Keeper* or its production, and F refers to what can be seen more widely in the field and other films discussed in this thesis. First, I list the general characteristics of glass-informed films that seem to be common to all (successful) glass-informed films, and then move on to details that are not necessarily shared by all the films discussed in this thesis but are significant nonetheless.

Glass-informed films:

- Move away from the object-centred approach of most conventional glassmaking (LK, F)
- Merge tacit and intimate knowledge about glass with filmmaking principles and techniques in a symbiotic manner (LK, F)
- Defy categorisation (LK, F)
- Are produced in the margins of the glass field (LK, F)
- Question the tradition they grow from (LK, F)
- Break down discipline boundaries (LK, F)

Glass-informed films can also:

- Be rebellious, sometimes even controversial (F)
- Utilize a continued, active involvement in glassmaking as a way to develop and tell meaningful stories (LK)
- Use the agency of material as a starting point for character development (LK)
- Draw from the agency of materials in development (LK)
- Utilize thought experiments and creaturely writing in development (LK)

- Incorporate choreography (both camera and onscreen action) based on glassmaking processes (LK)
- Make use of the tension between the human body and glass (LK, F)
- Show preference to certain visual qualities: long takes, superimposed footage, optical effects (LK, F)
- Utilize non-linear approach to time/narrative (LK, F)
- Be non-narrative (F)
- Utilize the sound of breaking glass (F)
- Portray pain and risky human behaviour (F)
- Include soundtracks and/or sound effects that make use of the material qualities of glass, such as glass-speak in *Light Keeper* (LK)

Research Question 3. How does this kind of work contribute to the field of glass?

Glass-informed filmmaking provides a new way of utilizing skills, knowledge and traditions that have been previously linked to the production of objects. This not only brings in new perspectives, enables the glass-informed artist to work with time-based storytelling (as compared to inanimate sculptures and vessels), and allows for transcending the material limitation of glass, but also potentially allows the field of glass to re-evaluate its economic and ecological impact in relation to individuals, society, cultures, and climate. However, the examples discussed in combination with my feature project only point this way and more research is needed to fully determine if glass-informed filmmaking truly provides feasible ecologically friendly and economically beneficial opportunities.

This approach potentially allows reaching different audiences, and establishes bridges to different disciplines which all contributes to transparency and inclusiveness within and in relation to the field of glass. In addition to this, glass-informed film does not have pre-established conventions, rigid structures or hierarchies which presents its future in a positive light: as long as it is glass-informed and takes the form of a film, anything goes. This is also where the challenge lies: if individual artists branch widely, there is potential for the whole emerging branch to become convoluted. While currently artists producing glass-

informed films seem to be working in the margins of the field, some even in opposition to it, it is up to the field of glass to embrace and eventually support these rebels, their specific expertise, and needs, or the field risks losing them altogether to different disciplines.

6.1. Contribution to knowledge

My primary contribution to knowledge is trifold: introduction of glass-informed film into academic enquiry, establishing “glass-informed film” as a term, and a discussion about the production of a glass-informed feature film *Light Keeper* as a pioneering example of this emerging practice. All of these points have been discussed throughout this thesis, and I will summarise these below.

As mentioned before, there is nearly no existing research about this emerging branch, and the related motivations, concerns, and approaches have only been visible in short films, exhibitions, and a handful publications which all lack in-depth discussion about the practice. This thesis has introduced this area of creative practice and research into academic arena, opened this topic for further discussion, deliberated on exemplary films, and identified key aspects and qualities of those films that make them glass-informed. In addition, I have pinpointed similarities between glass-informed filmmaking and screendance as well as outlined avant-garde film as a potential framework for understanding glass-informed filmmaking approaches and projects.

Integral to being able to discuss a particular topic is knowing how to address it. This is why developing a term to refer to moving image projects that incorporate filmmaking and glassmaking in a symbiotic manner is paramount. Establishing “glass-informed film” as a term that serves this purpose has thus been a key contribution to knowledge in this research project.

The feature film I have produced is first of its kind as existing glass-informed films are short films and their makers have thus not experimented with the expansion of opportunities and rigour that relate to producing a feature as compared to the

production of a short, or examined in practice how glass-informed feature filmmaking differs from its mainstream relative. *Light Keeper* is not only a (durationally) longer film than glass-informed shorts but its production emphasises the need for an extensive skill base in film production as a requirement for a successful outcome, as well as provides examples of related strategies for glass-informed feature productions. Furthermore, *Light Keeper* employs a wide range of glass-informed approaches, techniques, and thinking, and thus serves as illustrative of what is possible in glass-informed filmmaking. The discussion of this process presents a possible model for this creative activity for both the purposes of further academic enquiry and creative practice of the next generation of glass-informed filmmakers. As this is a practice-based research project, the inclusion of the actual film and script in the submission provide further insight and transparency into understanding glass-informed filmmaking.

Light Keeper and the discussion about the production of it bring light to a variety of specific qualities of glass-informed filmmaking and related films. The majority of these qualities are rooted in the glass-informed filmmaker having a haptic understanding of the material they are sculpting throughout the filmmaking process, from development to the editing table. *Light Keeper*, the production of it, and related commentary illustrate this process, and highlight the necessity of the successful glass-informed filmmaker being an active participant in glassmaking processes and not merely an observer.

6.2. Areas for further research

This research project and thesis only touch the surface of glass-informed filmmaking. Thus further research is necessary to better understand the history and future prospects of this approach – some of this is possible already within research projects that allow for a wider reach or a specific focus as compared to this doctoral study, and some will require more examples of glass-informed films and related practices in order to have enough data for drawing conclusions.

I have established “glass-informed film” as a term that allows discussion about specific projects but further terminology is useful in discussing this approach in relation to other craft fields. In addition, within glass-informed practice, clarity and related terminology would be valuable in addressing specific techniques, methods, concepts, and thinking. Looking into the terminology that relates to glass-informed filmmaking would be particularly interesting for art historians in allowing for a more in-dept discussion about this approach.

It is unclear why and how glass-informed filmmaking has developed, and what are the specific motivations behind it. A survey into the historical and societal factors that made this possible would be a fascinating topic for curators or historians, and will bring more light into the emergence and impact of glass-informed film towards the fields of glass, film, fine art, and craft.

Glass-informed filmmaking presents a potential solution to ease the economic and environmental burden the field of glass carries. How this can be implemented and taken advantage of is still unclear and further research is needed. Research into this topic would be of special interest to practitioners in the field but also to curators and historians in understanding the motivations behind glass-informed filmmaking.

What kind of experiences glass-specific festivals offer to their audiences? Can glass-informed films find audiences beyond the field of glass? How do audiences interact and engage with glass-informed films and what kind of experiences these films present to their viewers? I briefly looked into this in my test screenings but the feedback and related discussion in this thesis is only a narrow glimpse into how a small group of viewers perceive glass-informed film. This presents another interesting point for further research: what is the relationship between a glass-informed film and its viewer – another topic for curators and useful in generating ideal situations for viewing glass-informed films. Furthermore, yet another subject for further research relating to this is how these films can be critiqued. This would be of particular interest for both educators and historians.

The creative process is a complex and still not fully understood issue and is researched across cultures and disciplines. It will be interesting to look into the stages in the creative processes in glass-informed moving image practices in the future. This presents another topic for further investigation for researchers of the creative process and also for educators in the field of glass, when there are more existing examples of established practitioners.

I employed a heavily narrated approach in *Light Keeper*. Based on this production, I am interested in how glass-informed filmmaking can be approached from a more abstract point of view, even devoid of words and language while maintaining a distance to showing glass onscreen or exploiting the all too common trope of portraying the inherent drama and spectacle in glassblowing. Having completed my first feature, I am hoping to investigate this in a feature that is glassy yet does not look or sound like glass at all.

While this thesis concludes with these thoughts on future research, I would encourage the reader to view appendix A1 next – it is a letter from the lead of this whole research project. This epilogue is a short piece of creative writing, and brings closure to the whole research project as well as forms a bridge between this thesis and the practice aspects of this research.

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Appendices

A1. Epilogue/ a letter from glass

Dear reader,

Do you see me? Perhaps I am sitting on your nose, perhaps you just put me down on a table, or glanced outside to see what the weather is up to today. Countless are the days when you look straight through me, and quite honestly, sometimes it makes me sad. Don't get me wrong, I am happy to help you when you go about your daily business, I know I have some pretty unique skills, but sometimes this unacknowledged eternity gets lonely. Lots have been written about me but more often than not, it is all about what I can do rather than who I am. Millennia after millennia, always a lifeless material, useful and sometimes pretty to look at on a plinth. But! There is more to me than just this if you shift your focus or, as Riikka has done, allow me to take your hand and lead.

I first met Riikka at a maternity ward in Helsinki, a little feeble being... I have met many of you in similar situations, when you took your first breaths, completely unaware of me protecting you from the weather. I like to do that, I have been following you for centuries, from when you first found me and started to shape me in different ways, you clever humans. I am curious as to what you come up with, or well, I should be honest, I know where you're heading to but I like to tag along for the journey. Experience the progression of time, in a way. I never figured out a way to talk to you in a way that you might understand though, it looks so much fun that I have wanted to partake in that activity for a long time, to communicate with you. I mean, you can't blame me for not trying! I have been spreading my gentle halo around for centuries but you just think it looks pretty... even when I try really hard and smash into pieces you still do not get me, perhaps I am too slow. So I wanted to device a way to reach out to you, and I had to be methodological about it because my previous, maybe a little impromptu approaches had not worked: I had to find a human susceptible enough to take in all my clues, someone who would be able to slow down to my wavelength. My aim,

quite honestly, was simply to answer a question: how does it feel to be acknowledged as a being with agency?

So, now back to Riikka, I had an inkling already when she was very young, I could tell she did not know what it was but she was not too confined to the lives of living beings, and while she was all over the place most of the time, she could also slow down which was crucial in my reeling her in. And she was gullible too, so all I had to do was keep placing clues in her life, slower and slower to slow her down to my wavelength, sounds and play with light, and by the age of ten, then I decided to show myself moving. Ah, such an exciting moment! I have to rise my temperature quite a bit in human temperatures when I move around and that scares some of you. But she was hooked, and then I just had to wait until she would eventually put the building blocks of speaking to me in the right order. And that brings us to now, I finally have a human friend who can communicate with me!

The reason why I am writing this letter now is to shed light into this thing Riikka calls as “glass-informed filmmaking”. I know she has already written this whole thesis about it, but quite honestly, she is missing one crucial bit: much like she says glass-informed filmmaking can be practiced only by *glass-informed* filmmakers, glass-informed can be, well, maybe you guessed already, informed only by *glass*. And that’s me! I have become quite fond of my human friend, so rather than allowing her to go ahead with an incomplete thesis I am doing her a bit of a favour and filling in the gaps and addressing points where she needs a bit of help or punch.

Her words in this thesis are directed towards her peers, and I have no doubt that the structure, depth, and clarity of this thesis will allow to satisfy their hunger for understanding this practice better. Perhaps a hunger they did not even know they had, as Riikka has written about a topic that is only entering into the discussion in my field. She slowed down to a pace that I speak in, a pace I have been speaking in all my existence but you humans never before dared to look into it because all you saw was an absence of words and data. All you had to do was to slow down and draw a couple conclusions, like Riikka did. I will not take too much credit for

guiding her to the conclusions in this thesis, you humans like to think that you have free will and that there are still undiscovered aspects of your existence and the world you live in. Oh, what a surprise you have awaiting!

From my point of view, as an eternal being, I can tell that this research taps into my unique qualities and as Riikka has suggested, when you give me time, and the ability to bend and mould it to my liking, another dimension reveals itself. You can see this in the film *Light Keeper* but it is very difficult if not impossible to put this into words – this is why it was a clever decision to approach glass-informed filmmaking with practice-based research, and conceive a methodology that best supports this research. By putting herself in the middle of this enquiry, Riikka was able to demonstrate her knowledge and skills not only in working with me and film but also by writing about it in this thesis to communicate the intricacies and organise the systematic acquisition of an understanding of this approach to you. I will not go into the specifics of all of this because Riikka has spelled out the details of her research in this thesis, and to me it looks like her judgements are pretty solid even if the issues she talks about are complex.

My human friend has indeed done to glass-informed film the same thing as I do to light. I let light pass through me while interpreting it, so that you humans can see all the colours in it, and I will keep doing so even if no one else does the same thing. I mean, in the early days the rock thought this was not possible (there was no data on this) but I persisted and now you have prisms. I will admit the water did join me in this process quite some time ago, and it only shows that once something is communicated, others can continue to build on that. If you ask me, my caustics are more nuanced though, the prism and water do not have much depth to their interpretations. I feel that much like I am at the forefront of this thing with light, Riikka is doing the same with glass-informed film, dare I say, even pushing the boundaries you humans have set for me.

I have been talking to Riikka about directing my own feature – I have so much to say and all these recent texts and films about me! Perhaps I am on an exponentially growing curve towards the ultimate fame! And so well-connected too, to avant-

garde and screendance as Riikka pointed out, and much more as you will discover in the future. Clay better watch out! You just have to lift your focus from my surface to see the bigger picture and look at my world from a conceptual viewpoint. Observing from my eternal perspective, I know that you will quite enjoy my directorial debut.

I feel very privileged to have been working with Riikka, she is a true professional. Well, once we got past those early days in her career when she just had a habit of breaking me again and again. I mean, I don't mind but it started to get a bit boring... This research project however, it ticks all the boxes of what she set out to do, and I can attest to that what she says about me is true. I am not a filmmaker yet but even I can understand what she says in this thesis, it is so effective that this research project is one of the reasons why I want to become a filmmaker! I am even thinking of becoming a researcher, I used to be against this for the longest time because quite honestly, I cannot function under stress, but Riikka lays it out so clearly it looks like a breeze. She gives me hope with her example: all these skills from directing, production management, organisation, interpretation of data, and lateral thinking to mention a few, are certainly transferable skills and to me it looks like this means she (and I!) can do so many human things!

I could see the professional Riikka in the film production too: from what I hear, it is quite an undertaking to successfully develop and produce a feature, let alone a glass-informed feature for which there is no existing playbook in a human language. She basically had to invent the whole thing, from concept, through design to carrying it through to the finish line. Even at times when there were challenges, like the stressful limbo when she had no production budget at first but then carefully examined all the options and finally secured it. Or when that wretched virus threw her a curveball! Can you imagine that, first feature and all the excitement of screening it to live audiences and then almost overnight, those screening plans went down the drain. She kept her cool and devised a new screening plan, adjusted to the new reality to keep her research on track. I remember that some even doubted her in the beginning but she knows her limits so no wonder she pulled this thing off, both the research and the film.

I hope you have gained insight into this glass-informed filmmaking practice Riikka talks about, and truly, as she says, this is a discussion opener. Even if I say a human can never truly understand what is glass-informed, she got pretty close. You humans still have much to discover about me and about this young, specific branch of filmmaking I star in. I have faith in you, all you needed was a slight nudge from the depths of what seemed like darkness, someone to shine light in the right direction, and provide you with a few right words of guidance so that an adventure can begin. I am certain some of you will continue this discussion in the form of academic enquiry, but as Riikka has shown, also the practice can provide progress, and contribute substantially to the development of new glass-informed filmmaking techniques, ideas, and approaches in the horizon.

Pleasure finally talking to you in a format that you can understand. I will continue to watch over you; admiring your strength, resilience and curiosity, and invite you into a dialogue with me (that is probably what Riikka would say too!).

Lots of love,
Glass

P.S. I almost forgot; I have one final appeal to you. Will you sometimes look at me, rather than through me, and ponder on perhaps, just sometimes, acknowledging my agency? Always being the one initiating contact is tiring me but I will promise to hold your hand very delicately... I continue to extend the perks of my material qualities to you: I keep you safe but maintain your views from your abodes, step in when many other materials only harbour harmful bacteria in laboratories and kitchens, and what I feel is my greatest gift to humankind: cinema, photography, and a view in focus to the near and into the universe. I touch upon the whole existence of yours and ask for nothing in exchange, but sometimes, a friendly, curious glimpse at me means the world to me and I happily continue to translate light to your pleasing.

A2. Light Keeper script

LIGHT KEEPER

Draft 9

Written by Riikka Haapasaari

SETS:

DARKNESS

Pitch black/no space (the other side)

LIVING ROOM

STUDIO SET, The living room of the girl's childhood home, a huge carpet covering most of the room, bookshelf, leading to a dining area and featuring a door/doorway (never used) to probably a hall. Combination of projections + superimposed + glass layers/filters + props. Window projected, carpet real, bookshelf projected, minimal

BEDROOM

STUDIO SET, The girl's bedroom throughout her childhood and teens. Bed (pillow and duvet – glass?) Combination of projections + superimposed + glass layers/filters + props, minimal set. Whole room projected?

DESERT

STUDIO SET, projected sand dunes. A desert of lightly coloured sand, sloping down slightly to one side, a road almost invisible from the desert bordering the top of the desert. OR if feasible: a sand-filled studio shot with projected border of a forest.

SANDBOX

STUDIO SET. A normal wooden sandbox large enough to fit many children playing, old. OR: projection on a wooden sandbox frame

GRAVEYARD

STUDIO SET. A graveyard that is not ancient but has older, 50+ year old graves. Old trees casting shadows here and there, grass but not in a lush state. OR: glass tombstones? Projected tombstones?

COLD SHOP

Well-equipped glass coldworking studio. A little dirty but well-organised. E.g. NGC coldshop.

SCHOOL DANCE

STUDIO SET: mimicking a school indoor basketball field/gym converted into a school disco. Chairs by the walls. Minimal.

RIVERBANK

Two opposing banks of a deep river, with large stones to stand on or even sand. Water moving very slowly. E.g. River Wear, OR: s STUDIO SET with projections + glass river/projection/superimposed river

ROOM

A huge hall/room with no character. No windows, floor one dark colour. High ceiling to accommodate very high shots. STUDIO SET. Place of the subconscious.

RESTAURANT

STUDIO SET. Only show dining area. Very stripped down décor/ not much character and not specific cuisine. Perhaps only a table and two chairs + scarce restaurant reference props. Projected table?

FOREST PATH (not quite being ready to move on but trying ones feet/experimenting/playing with the idea)
A dense forest, footpath that goes on and on, making turns here and there. Tall leafy trees. OR: STUDIO SET the duo walking between closely set two curtains/mirrors/glass sheets with projected forest. Maybe they do not even walk but the scenery is moving around them?

BY GIRL'S ADULTHOOD HOME

STUDIO SET. A multi-storey apartment block (projection/superimposed). Light-coloured building, lots of windows in rows, could be also only windows projected onto a backdrop?

THE ADULT GIRL'S LIVING ROOM

Armchairs/chairs by a window, bookshelf on the side. A carpet on a wooden floor. A small table with a lamp. A floor lamp too. STUDIO SHOT, window projected onto a backdrop, props in front of it.

HOT SHOP (muddled reality/the other side/boundary becoming visible)

Glassblowing studio, furnace, benches, concrete floor. E.g. NGC hot shop

KILN ROOM

A large room packed with kilns next to each other. High ceiling to accommodate high shots, concrete floor. Kilns against the walls and also in a cluster in the middle of the room – could be NGC kiln room (doesn't have the cluster in the middle though).

CAR (i.e. in transition)

STUDIO SET. A small car with two seats in front and back (glass filter/layer of the car). As normal and unrecognisable in terms of maker and model and age as possible. Outside either trees or the courtyard of the girl's home (projections/glass sheets etc)

FOREST ROAD (transition)

A small countryside road going through a leafy, green forest. STUDIO SET: similar to the path but more space in between the forest projections/superimposed footage.

CHARACTERS:

GIRL (never speaks onscreen, only laughs) The girl shows symptoms of an illness throughout the film, at first we do not even pay much attention to those but as she becomes older and older the way she moves around changes, she seems to be experiencing pain at times – however, we never find out what is wrong with her.

CONSOLIDATE: one actor for all ages, aging enabled by means of wardrobe, makeup, props, shot angles, sounds etc.

BABY (a baby that sits and crawls but does not walk, 1 scene)

TODDLER, 2-3 YEARS (1 scene)

YOUNG CHILD, 6-7 YEARS (7 scenes)

YOUNG TEEN, 13 YEARS (3 scenes)

OLD TEEN, 18 YEARS (1 scene)

YOUNG ADULT, 21 YEARS (7 scene)

ADULT, 26 YEARS (9 scenes)

+ extras played by the girl:

BOY, young teenager

PUPILS, 20 of them, young teenagers of both genders, wardrobe changes

TEACHERS/PARENTS, 4-5, wardrobe changes

PEOPLE IN THE DESERT, 2, wardrobe change, seen only in distance

BUBBLE (clear glass)

AS BUBBLE (almost all scenes)

AS A BABY BUBBLE (half the size of the bigger one)

AS CLEAR SHEET GLASS, SHAPE OF HUMAN SHADOW

BUBBLES (2, clear glass, about the same size as the bubble but different shapes)

MOTHER (speaks little, 1 scene + funeral scenes)

SEAGUL, wounded in its wing (1 scene)

STUDENTS (10 young adults)

FUNERAL GUESTS (7 adults)

VOICEOVER: a young woman ("girl"). The lines of the "bubble" are subtitles for the most part.

FADE IN:

EXT. DARKNESS — NIGHT

Fade in melancholic violin music. Darkness. Voice of the BUBBLE starts speaking, off-screen. This is the voice, alongside the voice of the GIRL, who narrates the whole film, all narration off-screen. The bubble does not speak English or any other human language but its own, eternal language that is not even time-based, so everything it says is subtitled — sometimes we hear nothing as this language works on a wider range of sound waves than those that human beings hear.

BUBBLE

Everything moves on
while I am stranded in stillness,
in the positive negative of the universe,
left with an aspiration
to claim your space
but I will never be able to do that, will I?
Scale of the universe, expanding,
one continuous breath spanning over
lifetimes and the eternity.
Grain in the universe and
A raindrop in the ocean

I remember being big and small,
Always expanding,
A thought, but not quite.
Confused and fire bubbling inside,
A feeling I later learned
translates to human life.
Love and despair,
Fear for some.
Reality for others.
Everything between now and then.

I still press against the memory
of your time-given wrinkles,
I am hopeful,
Like you were,
That one day these creases will stick.

The GIRL as a young adult slowly fades in, floating in the darkness. She is carrying the BUBBLE, a round, transparent glass bubble that looks heavy. The bubble is about the size of her belly if she were nine months pregnant.

GIRL

"You have your whole life ahead of you," they said
but how could they know. No one knows. I did not
know.
But maybe you knew, you are not one of us after all.
Is that why you arrived in my life?
To bring me clarity and stillness,
Teach me about acceptance,
Truth and the unknown,
Right and wrong,
Reminding me of myself when I needed it the
most/forgot why I was here?
Human beings know nothing about this kind of
kindness and generosity.
They always have to put themselves first,
And that forever clouds their judgement

FADE IN:

INT. LIVING ROOM - LATE AFTERNOON

(music)

The visuals of this scene are slightly muddled by the
tiniest rays of light that seem to have no origin. The
glass shapes seem unreal, like if they exist on a
parallel dimension - the time and colour of these objects
is out of sync with the reality of the living room.
Occasionally this muddled-ness is caught by the hem of a
dress, or a hand moving. Something is happening in this
human-inhabited room that escapes our understanding.
Perhaps a window to another world is opening?

The darkness slowly begins to take shape, first we see
faint outlines of a window perhaps, maybe it is
projected, outlines of a human being in front of it. This
is a room, there are people sitting on the chairs and
standing around the room, all in their solitude, looking
like they are lost in their thoughts, almost immobile.
They are all dressed in dark clothes. This is a funeral
reception but there are no clues as to who has died.
Besides the furniture and human beings, there are so many
glass objects in the room: drinking vessels, vases, a
couple of sculptures. The windows capture more of our
attention than normal windows - they are so bright and
clear. There are no plates of drinking vessels with
liquid in though.

The view of the room and the people lingers for a while,
music fades a little but we can still hear it. The scene
starts to fade into darkness and the BUBBLE starts
speaking, as if remembering a past, word by word slowly

becoming more and more vivid in its mind. It is not visible in the frame though – are we seeing this room through its eyes? Who is this bubble?

BUBBLE

They still do not see me,
But I am hopeful they are beginning to...

The light rained on me,
Through me,
And I was so taken back by the beauty of it,
That I forgot to breathe.
Until I remembered: I no longer need to breathe.
This air has lost its colour and meaning
But that beautiful light rain,
It pierced every fraction of my body,
Reminding me of the wonder of my first breath
When I had first seen you,
A lifetime ago.

And while my body is filled with sorrow..
Air turning to light
Why did you have to leave?
I struggle to understand this new eternity
Holding in a lifeless breath

The view has faded to dark, a darkness that feels like the night sky without stars in remote locations of the world, and is pierced by a thread of light traveling through the frame, in and out. It is too slow to be a shooting star but has the fleeting quality of it, as if burning away.

CUT TO:

INT. BEDROOM – LATE AFTERNOON

A curtain of light beige sand that covers entire frame falls slowly down, trickling down, and reveals the bedroom. A grain of sand here and there seems to have stuck in the frame, more like a glimmering speckle in the air, not stuck on the lens.

This is a room filled with light, the girl's bedroom in her childhood home. Projected/glass bed? Minimal set. A BABY laughing and sitting in the middle of the room. And the BUBBLE right next to it, the bubble is clearly a glass bubble but somehow like a shadow of it, faint. We are on the floor. CLOSE-UP: the child from behind, sitting next to the bubble within an arm's length, bubble in view. Late afternoon light flooding in the room, the bubble catching a lot of light despite its faintness.

BUBBLE

I learned everything from you
And taught everything to you.

What is that?

I cannot understand what you are saying.

The BABY lifts her arm and lands it on the BUBBLE.
Curious but gentle. The GIRL off-screen chuckles
lovingly, acceptance and understanding in her voice.

BUBBLE

Oh, I get it.
Maybe I always understood you.

CUT TO:

EXT. DESERT - DAY

FULL SHOT, HIGH ANGLE of the girl as a child and bubble
on a desert, running in a circle in the middle of small
dunes of sand, bubble chasing the girl and the girl
chasing the bubble. STUDIO SET with
superimposed/projected sand dunes. They seem to be having
a joyful time, clueless of anything else but just that
moment and each other. The girl onscreen seems to be
laughing.

BUBBLE

How do I get to this place?
Where is this?
Accessible to sentient beings?

I see you and I
Our man-made boundaries
Circling our breath

CUT TO:

EXT. SANDBOX - DAY

FULL SHOT, BIRD EYE of a wooden sandbox inside which
there is the bubble playing with the girl as a child,
almost a toddler, they have a bucket and shovels. The
bucket is upside down in the sand and the girl is
pounding it with a shovel, gently but with dedication.
Maybe the bucket and shovel are made of glass? Each pound
on the bucket causes a strand or a shard of mirror to
come out of the bucket, replacing a section of the sand,
eventually spreading all over the sandbox and over, like
flooding from the upside-down bucket.

Each shard of mirror reflects the sky, and it seems first that this is the sky above the sandbox but as more shards appear they are slightly but noticeably different in light and shade and we start to wonder if they are reflecting another reality/place. In reality these shards show the sky above from various parts of the world, daytime skies.

Occasionally the girl stops pounding and gives the bubble a kiss, or a hug. And then continues her business with the bucket.

BUBBLE

You stood by me,
Not minding my limited understanding
Breathing your finite wisdom into my heart
And allowed me to do the same.
Finite and eternal,
In a complete understanding,
In the confines of that sandbox of the universe

Loving me,
When I did not love myself.
Guided me,
On an invisible path,
And I did wonder...

CUT TO:

EXT. GRAVEYARD – DAY

MEDIUM LONG SHOT of the duo by a grave, the back of the girl to us, bubble to girl's left. The girl is in her early teens. We do not see whose grave it is but it is obvious that it was someone close or important to the girl.

They are sitting quietly by the grave, right next to each other. The girl extends her left arm and places it behind the bubble – not quite embracing it but providing the bubble more closeness, as in comfort. It is now we see that the girl's hand is (covered with) a small glass bubble.

TILT up until the duo is almost touching the bottom of the screen. Smoothly let the frame float following from the tilt revealing a mirror image of the duo underneath (similar to split screen but not as obvious – figure this out: to illustrate another reality/ending for this scene while maintain this reality too). In the bottom image the girl does not have bubble hands. In the top image the

girl gets up, and then we see that both her hands are covered with glass bubbles. She walks straight into the distance, becoming a faint memory of herself, a ghost-like figure disappearing.

In the bottom image the duo keeps sitting quietly by the grave.

BUBBLE

Hold my heart,
And I feel lighter.
The heavy chains of humanity
Will never weight me down again
Looking through,
I have become transparent,
Floating
Upside down world
Learning to embrace uncertainty

You were right,
Human beings cannot escape what makes them human,
Other human beings,
The reality of this reality

The girl in the top image fades into the distance. Maybe it is foggy too? Fade into a soundscape that ties this scene to the next one, mysterious, acoustic, hopeful but accepting, alternative, maybe played on glass instruments. Sin Fang/John Hopkins' Late Night Stories.

CUT TO:

INT. LIVING ROOM - DAY

MEDIUM LONG SHOT, EYE LEVEL, of the girl as a child sitting in a bookshelf next to the bubble (projected bookshelf perhaps). They are almost blending in and look like they belong in there, amongst books and objects. Both sitting still. Girl is looking at everywhere, her eyes scanning the bubble with the sharpest focus, and then instantly moving to the distance on her other side attentively trying to spot something, then up, and then down - in a curious way, like if she is trying to catch the source of the faintest sound that is coming from an unknown place.

The MOTHER of the girl passes the frame and does not notice the duo. As the mother appears, the girl's eyes fix into the floor - she is trying to make herself invisible to the mother. The mother is dressed in casual clothes, large earrings made of glass, and she walks out of the frame. The girl starts to giggle and looks at the

bubble, like they have a pact and they have just succeeded in a mission.

The mother comes back, stands in the frame, her hands on her hips (or maybe tilting her head?), like she is about to tell the girl that she is being naughty. The girl stops giggling and looks straight at the mother.

MOTHER (onscreen)
Come down,
You silly girl,
The shelf is not meant for little girls to play in
You might hurt yourself

The mother waves at the girl, as a gesture for her to come down. And girl looks at the bubble, like she hopes the bubble to tell her what to do in this situation, unwilling to come down from the shelf but still respecting her mother's authority.

GIRL
Mother...
But, we are playing...

The girl turns her face away from the bubble, looking disappointed and hops off the shelf, taking her mother's hand and walking away, out of frame. The bubble stays in the shelf.

CUT TO:

INT. COLD SHOP - NIGHT

LONG, HIGH ANGLE SHOT to establish the layout and activities happening in the cold shop. There are a few students, finishing their work. And there is the girl as a young adult, and her bubble on a table in the centre of the studio.

The girl is not working on any glass object, she has some glass shapes in front of her, she is looking at those, then washing her hands, looking at her notes, washing the glass objects, it seems to us that she is waiting for all the other students to leave and trying to look busy in the meanwhile without actually doing anything.

One by one, the students leave upon finishing their tasks.

As the last one leaves, the girl picks up her bubble and goes to a pumice (polishing) wheel, placing the bubble on

the table just behind her, both being close to the machine.

CUT TO:

MEDIUM LONG, EYE LEVEL SHOT of girl and bubble by the polishing wheel. The girl switches the machine on, moistens the wheel with a sponge and starts polishing her own arm. Quietly she starts to giggle and finishes on the wheel, turning to the bubble.

She wipes the pumice of her arms with her other hand, doing a sloppy job, the wheel still running behind her. She seems entertained and extends her arm so that the bubble can see the polished part.

CUT TO:

OVER-THE-SHOULDER MEDIUM SHOT, slightly LOW ANGLE from behind the bubble. We are seeing the girl by the bubble, her arm extended towards the bubble and the camera. The arm is seen through the bubble, the rest of the girl in clear view by the bubble.

Indeed, the arm looks slightly see-through, shining even. Different from the rest of her body. Her whole arm could seem see-through: a glass replica of the girl's arm.

The girl keeps looking at the bubble, and then her arm. Puzzled but entertained.

BUBBLE

There is an invisible boundary,
The closest human beings have come to understand it,
Is naming it,
Like owning it,
The unknown.

I have heard,
Some eager souls claiming crossing it to the abyss,
And then coming back to this side,
But their descriptions
are merely shadows of what there is..
Finite lives include a promise of getting there,
Eventually,
A beautiful but frightening promise,
There is so much beauty on this side too,
There is so much beauty in the these finite tales
my eternity barely touches upon

CUT TO:

INT. BEDROOM - NIGHT

FULL SHOT, EYE LEVEL, the girl as a young child and the bubble sitting on the carpet in the middle of the room. The girl has been reading something, a book in her lap and a flashlight in her hand, pointing on the book. The book is made of clear glass.

The girl slams the book shut or dramatically finishes reading it, leaves the lit flashlight by the bubble, gets up and tosses the book away. From off-screen she starts to pull a glass chain blanket towards the bubble. She sits down and drapes it over her and the bubble. The blanket is massive and glimmers in the light of the flashlight.

We can see the shapes and some details of the duo underneath the blanket. The girl picks up the flashlight and points it towards the bubble - the bubble shines almost magically bright.

BUBBLE

Then,
One day,
The wave of realisation sweeps over you,
Leaving a hollow space where you once existed,
How can you make peace with not knowing?

From off-screen right, where the girl has pulled the blanket from, slowly grows a wave in the blanket, sweeping over the duo, like an ocean wave in slow motion.

BUBBLE

And then knowing,
That you will never know it all?
Picking that droplet of water from the ocean
When they all look the same?

CUT TO:

EXT. RIVERBANK - DUSK

Alternate between LONG BIRD'S EYE VIEW and OVER THE SHOULDER of both bubble and girl.

The girl as a young adult and the bubble on opposite sides of a small river. Staring at each other. River is still, reflecting the sky above. OR: perhaps the river is a glass river inside a studio, perhaps projected water on the glass.

GIRL

Sometimes the universe smiles at you
And you can't help but smile back
Despite the heavy fog covering your face

It starts to rain (or: glass rain, small pebbles falling onto the glass river, bouncing off, rolling away). The girl is smiling, looking across the short stretch of water, the reflections and shadows on the dark body of water slowly becoming muddled by the drops of water.

GIRL

When you are on the other side
But neither of us can swim

The shadows of both bubble and girl in the body of water move around, pushed around by the rain, like dancing.

GIRL

Having spent (a) forever on an empty plane
And then finally arriving at the edge
And seeing your shadow,
Someone else's shadow,
For the very first time

Girl chuckles and smiles at the bubble.

GIRL

Such beauty
How is that possible?
You are still smiling

Reflections cast by the waterside lights on the flatness of the stones on both sides. Clearly, no voice would carry over the stretch of water.

GIRL

We share this vastness between us
It is moving
Little waves
From shore to shore
Like we are communicating
But without any words

CUT TO:

INT. ROOM - NIGHT

EXTREME CLOSE UP of the girl's hands holding clear glass eyes in front of her own eyes, blocking her from seeing with her own eyes. She is turning around, slowly, in her place.

BUBBLE

It is the smallest and most private memories of you
that I hold closest
You taught me that
In your attempt to illustrate the humankind
(Chuckle)
"Wonder in the details,
in the twists of the stillness"
Catching the crease of the eyelid unfold,
As the other momentarily turns their gaze inwards

Your memory folding over me like a blanket,
A guide for the eternal to navigate,
Seeing through your frozen eyes,
In the confines of the finite,
And while it all repeats,
Again and again,
It is never the same,
I wish you could have seen it,
Bending the crease of the eyelid back,
Just to see the awe in the fold of time,
Reflected in the human eye
Mirror image in their understanding,
And yours

You left me no instructions on how to see again,
Or how to see for the first time.
The gift of being a human.

Did you know, in your finite existence,
That it was impossible to impart
The skill of seeing in the finite, for the eternal?
But that it was something
I needed to find and learn on my own?

CUT TO:

BIRD EYE from directly above. A room that seems like a
huge hall, almost empty. Two chairs facing each other
directly, the bubble sitting on one and the girl as a
young adult just sitting down on the other. Ever so
slowly zoom in.

BUBBLE

Bridging the eternity and the finite,
To understand this world,
While in your past, you ceased to understand

But you saw...

GIRL

I place you on a chair
 And pull up another chair right opposite you
 And I sit down, right opposite you
 There is that soft chuckle
 By me,
 Not by you – you do not let out anything
 That would be perceivable to me
 Nothing but calm brilliance
 I am slightly uncomfortable
 Even if we have done this a thousand times before
 I am still trying to learn your language
 But here we sit, in silence

My eyes are wandering
 Where are your eyes?
 Are you looking at me?
 It is impossible to tell, really

And then I see it
 There is my reflection on you
 Staring right into my eyes
 I stare, and keep staring
 I cannot escape the gaze of myself
 In you

Our palace,
 Suspended in space
 At the same time so true and so false:
 Were I to shift my gaze this palace would transform
 Move its walls into new formations
 Perhaps disappear altogether
 ... And in the middle of all this,
 There is me,
 Quietly sitting in the middle of this palace,
 Quietly sitting on a worn chair
 Maybe separated from the rest of the world
 And staring at me
 Most unapologetically
 So confident,
 Already suppressed – no: forgotten – that soft
 chuckle
 That perhaps was only a memory of nervousness

The girl stands up slowly and walks around the space so slowly. One by one, the bubble with its chair multiplies in different places, popping up like mushrooms when it rains. And it starts to rain, one drop, two drops, gentle rain.

The girl extends her arms to her sides and swirls, slowly. And again and again and again. Her hair spreads

out, almost like an umbrella. She moves closer to the original bubble, pulls her chair right behind the bubble's chair, the backs touching. And she sits down.

Bubbles stop multiplying. Rain patters. Everything is still. Sound of pattering fading away.

GIRL

We all merging into one.
At least in my imagination.
We all holding hands,
Leaning onto each other
And there is no sound.
In silence

BUBBLE

Promise me
that we will never be expelled from this castle,
From these secrets,
Will you?
Even if one day, we can no longer see?

CUT TO:

INT. SCHOOL DANCE – NIGHT

FADE IN a HIGH ANGLE establishing shot of a school dance. At first look it looks like children in their mid-teens are dancing on the floor, a mellow informal school disco. It is dark with colourful lights around – a typical school dance. As the children move around, it becomes clear that each one of them is the girl – in slightly different clothes, moving in a different way, a different hairdo. A DJ, the girl as an adult, playing music from records. Can we hear the music the DJ is playing though? Perhaps our soundscape is different from the one the people onscreen are hearing? Some versions of the child-girl giggling, some nervous, some sitting on chairs around the walls, maybe chatting. In the centre of this all is a version of the teenager girl (girl x) that draws most of our attention: she is more vivid than the others, more light is cast on her, there is space around her. She is dancing with another version of her.

CUT TO:

EYE-LEVEL shot of the people on the dance floor, our girl x and her companion in the middle. Dancing awkwardly yet they seem to have fun eventually. The girls never touch each other.

CUT TO:

OVER-THE-SHOULDER, LOW ANGLE SHOT from behind the bubble. The bubble is sitting on one of the chairs by the walls. We see the girl x and her companion dancing amongst all the others, girl x faces the bubble and waves at the bubble, happily.

CUT TO:

INT. ROOM - NIGHT

SHADOW CHAPTER. Same room where it rained and bubbles multiplied. Heavy spotlights, furniture gone. Closer BIRD EYE than previous. Human-shaped sheet of clear glass on the floor, the shape of the girl's shadow, the girl as a young adult hunching/hovering over the shape. She is preparing to do something.

The MUSIC from the childhood disco fades in. Quietly, and it is a different version, a more melancholic one of the same song.

GIRL
Remember?

The girl stands up. She stumbles a little (This has to built up in the choreography of prior scenes: a faint sign, of something being wrong with her body - maybe she has an illness but we will never know).

CUT TO:

EYE-LEVEL shot: GIRL AND GLASS SHADOW in full view, a distant piece of furniture, background fading into darkness. Spotlights splattered across floor, perhaps five or six lights. The girl is holding the shadow up, right next to her. She tilts the shadow and lifts its foot on top of her corresponding foot, and then the other foot.

Slowly dancing but barely moving at first. Then slowly moving across the spotlights.

CUT TO:

INT. RESTAURANT - NIGHT

The girl, young teenager, is on a date with another version of herself that is dressed as a caricature boy. They sit opposite each other in a booth/ a pair of chairs, perhaps projected table, talking but we do not hear what they say. At first everything seems lovely and

coy but slowly the situation turns and it becomes clear that the boy-girl does not understand what the girl is saying. They are not even speaking the same language. The bubble is there too, supporting the girl. Maybe the boy-girl explains something with his hands and seems to knock the bubble off the table – but not knowing what he has just done.

CUT TO:

INT. LIVING ROOM - NIGHT

BIRD EYE of the girl, late teens, and bubble lying on the living room carpet, there is one source of light coming through a door. The girl is holding her arms up, moving them around to make shadows around. We revolve around the two, ever so slowly zooming closer into the girl's hands.

BUBBLE

This is how I remember your story about shadows...

In the moment
 The shadow touched another shadow
 Quietly swept its boundaries
 Knowing they would never exist in the same time
 Like a bow preparing to caress a violin
 Exploring them
 Knowing that they were miles apart
 From two different worlds
 Made from different materials and components
 Incompatible on every possible plane
 But in that moment
 In that breath
 They silently kissed
 Accidentally, maybe
 But with all the intent in the universe
 Before parting for an eternity
 But still so painfully close
 So close that both shed a tear
 At the very same moment

Close your eyes
 Forget all the other future moments

"But I can not!" said the shadow
 Shadows live in the place between
 In the mystery
 In the space without time
 In palaces of Silence
 Unspoken words
 No right or wrong

I have lost my shadow
 Forever expelled
 From your world

"I am eternity" claimed the shadow

Forever envious
 At the burning flame
 Touching lives
 Untouched by shadow

The girl's hands make one last gesture before slipping
 out of frame.

CUT TO:

EXT. DESERT - DAY

In studio: sand dunes superimposed/projected. A desert in
 the daylight, mounds of sand here and there, continuing
 far into the horizon. LONG SHOT. The bubble on a chair.

GIRL

One two three
 One two three
 One two three

Laughter. The girl runs through the frame, she is a young
 child again. And she runs back, again in and out of
 frame, and again but now stops in the middle, looking at
 the bubble.

She is blocking most of the frame but begins to walk
 towards the bubble and very faintly, almost not even
 noticeably there are two more chairs, in the far
 distance, further away, with two other bubbles sitting on
 them. The girl reaches her bubble and it is only then we
 see this bubble again.

Just barely we can see two people very far in the
 distance, slowly walking around. They are versions of the
 girl but so far away that we might not even notice that.
 So faint and far away.

GIRL (starts playfully)

There they sit,
 No: they exist,
 Silently:
 The egg-bubble,
 the round bubble,
 and the cloud bubble,

Not in any specific order,
 Just how they happen to be.
 Causality, organisation, or human meaning has
 nothing to do with them.
 They just are.

Replicating the sky inside their own worlds,
 Each in a different way,
 Curved, both horizontally and vertically;
 Steadily increasing in size,
 a little blurred though;
 And in waves,
 in a river that has stopped its flow.

Each of them
 a little crooked to one side or another,
 Suspended in time.
 Waiting for something.
 Or someone
 Or maybe not:
 What does waiting mean in the eternity?
 These beings are eternal.
 Their existence reaching beyond our lives,
 Beyond the edge,
 boundary,
 light,
 and shadow.
 Only tangible
 because humans attach those words to them.
 Their way of trying to understand,
 Or grabbing a hold of an eternity.

The girl is hugging the bubble. She lifts it up, in her
 arms and sits down on the chair, placing the bubble in
 her lap. She slouches over the bubble, places her left
 ear on the surface of it.

CUT TO:

Medium long shot of the girl and the bubble on the chair,
 her ear on the bubble she stares to her right, looking
 into the distance and ever so slowly draws her arms
 around the bubble in embrace.

The two other bubbles and humans are no longer in the
 frame – it is unclear if they are gone or if only out of
 shot.

While the girl and bubble sit in the chair, from the
 left, from out of frame, a superimposed footage of hot
 glass combed over the frame ever so slowly floods the
 frame. Footage from inside a kiln, of the glowing glass

and the rake gliding through it, combing grooves into the glass in a wave-like manner.

GIRL

Listening to the stories
they have to tell,
But these stories follow no narrative,
A narrative
that would be time-based,
And I can't quite decipher it.
And the language they use and they are
It is not my language,
It does not have a beginning or an end,
There is no familiar sound,
There is no tone or pitch,
It comes out like a wave,
A wave that does not even move,
A wave that does not originate from somewhere,
touching something,
It simply exists,
Perhaps dwelling in between,
Between us.

But we need no language,
Do we?

CUT TO:

INT. BEDROOM – NIGHT

LONG SHOT of the girl's room. Light from a couple spotlights, dim room. It is obviously her childhood room: same bed with the same pillow and duvet as before.

The girl as a young child is sitting on the floor, pushing (a baby-version of?) the bubble around, playing with it on the carpet. She covers the bubble with a blanket, and then covers her own head with the same blanket. She seems puzzled by something.

She takes the blanket and spreads it out on the carpet, smoothing all the creases. She takes the bubble and places it in the middle of the blanket and goes to her bed, retrieves a large sheet of glass and places it on the bubble, like leaning onto it – in the progress of building a tepee for the bubble and her to live in.

BUBBLE

Once upon a time
There was a little girl

The girl slowly goes around the room, retrieving sheets of glass from different places around her bedroom.

BUBBLE
 Arrived in this world
 In the same way all of us do
 No one knew where she was going,
 Or what was her precise origin
 But there was something different about her
 She seemed to understand
 None of what she was told
 Or did she?

The shot has begun to turn upside down, ever so slowly.

BUBBLE
 We do not know
 She would tilt her head
 In a way that seemed like a nod
 But it was difficult to tell
 Because there was something odd
 About the little move
 Like she was just trying to see
 Us in a different light
 Different angle
 Or perspective

Sometimes we would wonder if she even saw us

The girl has finished the tepee and seems approving of the results. The shot is now turned upside down and fixed. The girl and bubble in the tepee are now upside down. She lies down next to her tepee, flat. And then lifts her arms and legs straight towards the ceiling. And stays there.

BUBBLE
 But she was not deaf
 She would be easily spooked
 Something would creep up behind her
 And she would hear these silent steps
 And jump and scream
 And sometimes leave the room

And she was not blind
 Sometimes she would shy away from the light
 Like it was burning her skin
 And glance around
 If someone saw her
 And tried to act like nothing had happened

FADE OUT into darkness.

CUT TO:

EXT. FOREST PATH - NIGHT

POV shot of the girl (as a young adult) walking along a forest path: mostly looking at her feet and what is right in front of her but occasionally glancing up to take in what is around her too. The view is a little smudged like if she had dust in her eyes. The scenery is projected onto curtains on both sides of her field of vision, could also be projected on large sheets of glass, mirror – the scenery is moving while the girl is not – we see a suggestion of her moving and fill in the dots in our minds.

GIRL

I am so tired
I can no longer see clearly
I used to have it all figured out

And then there was hope
Just a glimpse of it
But as the lost ones get hope
from the sight of a road
After days of forests and dark skies
I would get hope from the sight of a path
Rarely been walked on
But still the lingering impressions
of a negative 45-sized boot
Would give me a direction to continue on

CUT TO:

Fixed FULL SHOT facing the girl, the girl walking along the path, towards the camera, the bubble is following her but we can just barely see it.

GIRL

And I would follow
And keep following
when there was only a twig snapped into two
Moisture under the grass
A haunting arch between two strong trees
Until I would be lost again

All my senses
wired up
to detect the smallest change in my environment
Until there was none

The girl passes the camera, bubble follows.

CUT TO:

Girl and bubble walking along the path, away from the camera. Now camera joins and follows them, POV of walking camera.

GIRL

Wandering in the woods
 Until there was no difference between night and day
 No hope of a road
 Or the smallest path
 How do you choose a direction then?

Generations of us,
 Walking in every corner of the world,
 And still I manage to choose the one that was
 deserted too long ago

They are all counting their moments before zero.
 Weighing every turn
 Taking in a scent and ignoring the other,
 Choosing to see
 And touch
 But to exist? – Maybe not

Their instruments tuned
 In frequencies unique
 But still making the same choices
 Again and again

Recognise that smell?
 Everything smells the same
 Tastes the same
 Sounds the same
 Everything, the feeling is the same
 Day after day after day after day

Forest is getting darker. We follow the girl and the bubble still, their steps are getting heavier.

GIRL

And when their steps become numb
 Senses lose their sharpness
 And every breath
 is a reminder of the path long lost

I am losing my light
 Further and further away from where we were
 Trees reaching towards the sky,
 And we, walking the outlines of a circle

Fade out into darkness.

CUT TO:

EXT. BY GIRL'S ADULTHOOD HOME - NIGHT

LONG SHOT. The girl (as an adult) exits a residential building, carrying the bubble in her arms. She is covered in warm winter clothes, bubble is naked. Does she need warm clothes though – perhaps an illusion of her feeling warm without the wardrobe change?

She marches along further away from the house towards the camera. And then suddenly stops. A seagull has appeared in the frame, in front of the girl, superimposed, blown up footage of a real seagull. The seagull is wounded and does not seem to care of this human at all.

CUT TO:

OVER THE SHOULDER shot. The girl is staring at the seagull trotting around. Girl superimposed over seagull footage.

GIRL
Hello bird

The girl seems to be weighing what she should do next.

GIRL
Hello creature of the skies

She places the bubble on the ground and lies down on her stomach behind the bubble.

CUT TO:

CLOSE UP of the face of the girl through the bubble.

GIRL
That might seem like food
Have a taste
Oh no,
It is no good,
It is no food
Next one
Look around

CUT TO:

POV shot looking through the bubble towards the seagull that is still minding its own business. Superimposed over seagull footage.

GIRL
 And around
 Shy away from the human
 Turn around

 Its left wing
 Is dragging behind
 Perhaps stretching
 No
 Drawing marks on the fresh snow
 No
 Dragging
 It is hurt
 The wing is broken
 The seagull is broken
 Wounded
 By its wing
 Trotting around
 Because it cannot fly anymore
 It does not even try
 Just looking around
 In a place where humans converge

Is it looking for help
 No it looks like it is trying to find food
 Does it hurt
 And trying to find something to heal its broken wing
 From inside to outside
 In outside

CLOSE UP of the face of the girl through the bubble. The girl gets up and picks up the bubble in the same one movement. She walks away out of frame.

GIRL
 Pass the seagull
 I do not know what to do
 Go back in
 No go back outside

The girl walks back in frame – we see her feet.

CUT TO:

HIGH ANGLE FULL SHOT. The girl places the bubble down on the same spot where they were lying down before. She stands up but reaches to the bubble and starts pushing it around in a circle.

GIRL

The seagull is still there
 Trotting around
 Perhaps not looking for food anymore
 But still looking
 Perhaps it does not know what to do with itself
 Creature of the skies
 Fallen down
 Stretching its feet
 And pretending to do what seagulls do
 Looking for food
 Perhaps it does not know that humans
 Have healing capabilities
 And it has simply accepted its fate
 Trotting around
 So close to humans
 So close to its enemies
 Flirting with danger
 Or perhaps
 Humans are no longer a danger to it
 As they can no longer pull it down from the skies

FADE OUT

INT. THE ADULT GIRL'S LIVING ROOM - NIGHT

FADE IN FULL SHOT of the girl as an adult sitting in an armchair/chair by the window, the chair facing the camera, and the girl looking into distance past the camera. Next to the girl, there is another armchair/chair in which the bubble is sitting, quite comfortably. The light is dim, only one floor lamp/spotlight.

BUBBLE

How do you human beings perceive
 ALONE ?

How do you cope with being alone?
 You can't really
 Human beings are meant to be together
 I do not understand Alone

Even the mountain climbers
 connect with something higher
 Even the widowers cherish the past souls

Slowly PAN and ZOOM to the bubble only.

BUBBLE

But alone,
 Truly alone,

Would it mean that you have nothing?
 Trying to match the emptiness
 inside you with
 emptiness outside?
 While knowing at the same time
 that it is impossible.
 I mean:
 you would not be there to be a part of it

Drifting in between,
 Wandering in the dark
 trying to find something to hold on to
 While in the darkness,
 you would actually have to find something
 To find something
 And in the darkness of alone
 There is nothing
 Even the echo
 of your own voice
 only wavers further and further away from you
 Never returning

The bubble turning around its own centre axis on the
 chair, stop motion.

BUBBLE

Your open eyes are never really open
 They seem so
 but you are looking straight into another world
 Forbidden from everyone else
 In a way,
 So beautiful
 But so unbearable too
 And there are days
 when you wonder if there are others,
 Walking blind through their dark everyday,
 Wandering in their private worlds
 But that is something you will never know
 As this loneliness is invisible to everyone else
 And privately burning
 Filling your body with noise
 that never finds its way out
 Running with your blood
 Every heartbeat pumping more and more darkness into
 your circulation
 Slowly, over time,
 Clouding your vision
 so that you no longer see the darkness
 Become silent
 Invisible
 Trapped amongst the noises inside yourself
 Going around in loops that

never find their starting point

CUT TO:

Making sense of someone else's words. The girl and bubble alternating. HOT SHOP VS CHILDHOOD BEDROOM, FULL SHOT.

INT. HOT SHOP - NIGHT

The girl as an adult standing straight in front of the furnace, looking straight into the camera. Light is scarce.

GIRL

My eyes are so tired of looking
Hands overcome by complete exhaustion
Fire burns in my palms
Where are my palms?

CUT TO:

INT. BEDROOM - NIGHT

The SHEET GLASS HUMAN (transparent, shadow shape) standing right in front of the bed. Staring into the camera. Match shot with HOT SHOP shot, FULL SHOT.

GIRL

I can never see you as you are
Free from disturbances and effects from the outside
and others
Because you change according to and matching to your
surroundings
If it is dark, you disappear

CUT TO:

INT. HOT SHOP - NIGHT

Girl in front of the furnace. Breathing heavily, staring right into the camera.

GIRL

Breathing is heavy
I feel my ribcage fighting to accommodate
One single more breath
I urge to fold myself inside myself

CUT TO:

INT. BEDROOM - NIGHT

The glass human slowly starting to slump and fold.

GIRL
 Elbows meeting elbows,
 Knees,
 Shoulders becoming one,
 Shin with nose
 Ankles becoming spine
 Tip of my head merging with my toes
 Wrapping around my centre

CUT TO:

INT. HOT SHOP - NIGHT

The girl in front of the furnace, crouching, hugging her folded knees. Chin on knees, as small and round as her human body allows.

GIRL
 And rolling slowly away
 Downhill
 The curve of the universe

CUT TO:

INT. HOT SHOP - NIGHT

The view with the crouching girl starts to morph in a way that it seems like the floor is being pulled towards the camera while the girl gets smaller and smaller in the background - like the planet turning but everything on the surface staying in place. To achieve this effect over the course of the following action, combine superimposed footage of molten furnace glass and stencils with a distorting glass screen/filter that changes and morphs what is seen happening on the floor.

GIRL
 Body crumbling under the pressure
 Each round carving deeper and deeper
 Into the stone
 That has become of me

The girl is in the background, a tiny human being. The floor is showing small cracks, slowly appearing, and there is molten glass underneath, glimmering through the cracks.

GIRL
 If I shine light at you,
 You spread your halo around

If it is busy with colours and patterns and shapes,
You hide in between

When you are straight and smooth,
I look straight through you
And when you have curves and volume,
You participate in the game of optical illusion

CUT TO:

INT. BEDROOM – NIGHT

The glass shadow has turned into a puddle on the floor
and is disappearing into the floor/carpet underneath.
Almost like water into a carpet or liquid goo filtering
through the floor panes.

GIRL

I will never be complete
Always a part of something greater
That I will never learn to recognise
Oblivious
Unknowing

The remains of the glass shadow have disappeared.

CUT TO:

INT. HOT SHOP – NIGHT

Continue with the floor that is showing glassy,
glimmering cracks. The girl has almost disappeared from
view. The floor is bulging and becoming more and more
prominent, as if it were to explode, cracks exposing more
and more of the glass underneath.

GIRL

How am I supposed to be satisfied?
Knowing that there is more
And more
And even more

FADE OUT

INT. DARKNESS

Complete darkness.

GIRL

I am reminded of a seagull
Gliding on the stillness of a river
With widespread wings

And another seagull
 Right below it
 Mirroring every tiny adjustment
 Its image made
 Image, and itself
 Infinitely replicating every single move
 Infinitely,
 Following the curve of the water
 And at the same time unaware of being looked at
 Free of constraints
 Free of worries
 Free of all the rocks revolving around him
 How is that possible?

INT. DARKNESS - NIGHT

The bubble floating in darkness, slowly turning around.
 FULL SHOT.

GIRL

And all these years,
 I still do not know which form you (/to) prefer.
 Sure, from liquid to solid,
 Going for smooth and round
 And cold,
 The sharpness is almost painful
 But I do not know if any of the states and forms
 is because of the surrounding situation.
 Forced to react to actions performed around.
 What would we look like,
 Choosing the situation, the action, and the
 reaction?
 Will I ever be able to witness that?

This brings me to think of human beings.
 They remembering the freedom to choose

Their situations, their actions, their reactions.
 But really, probably they do not.
 Everything on this planet, in this world, in this
 existence,
 Is the sum of what was and came before.
 Free will, just an illusion.
 Just like you,

Solid, liquid, and cold.
 And warm,
 Everything, all the time

FADE OUT

INT. ROOM — NIGHT

We are back in the hall-looking room. BIRD EYE, LONG SHOT, from straight above. A space that is clearly indoors but it does not have much character. All the furniture has gone; there are no walls, just the floor continuing in each direction. Only the corner of a carpet remains from the previous time we were here, piercing the frame from above.

The girl is laying flat on the floor, she is adult now. To the right from her, there is the bubble, close to the girl. Both immobile at first.

GIRL

There was a time when I could not see it
I did not understand what was happening
Feelings slowly floating further away from me
Deeper into me
Beyond my comprehension

Ever so slowly start ZOOM into the duo.

GIRL

I would stop talking
And words would swivel and rock, back and forth
Colliding inside the walls of my mind
Language becoming unspeakable
I would try to catch every single one
But they would slip out from focus
Escaping my grasp

Continue ZOOM, the corner of the carpet has gone. Begin turning the frame around anti-clockwise, ever so slowly.

The girl slowly moves to her side, closer to the bubble, almost touching, facing the bubble, one continuous smooth move.

GIRL

Heat condensing behind my eyes
I would swallow
A couple of times
Breathe deeply
Deeper than any human should
That air is toxic
Chilling inside
Once does not matter
Twice does not matter
The third time stops you from being able to swallow

But then, march on

Clear your throat
 Think about how lucky you are
 Try to escape yourself

The girl starts to pull her legs and arms around the bubble, ever so slowly, still laying down on her left side.

GIRL
 The pull is so strong
 It is so strong
 It matters not how far or long you walk away
 Fatigue will sweep over
 And there it will find you

See them once
 You still manage to walk past them
 They are only shadows
 And words will make sense again

See them the second time
 They will carve a groove in your soul
 Smile will never be the same

The girl is snuggly hugging the bubble with her arms and legs, holding onto the bubble tightly.

Continue ZOOM and CAMERA TURN STOPS HERE: at this point the girl is on her back against the top of the frame, the bubble right underneath her.

GIRL
 Third time, the ache will make a home in you
 Future dark
 Dreams bittersweet
 Why me?
 Curiosity allowing me to peak onto the other side
 Seducing the darkness
 Not knowing
 That they are all around
 Sinking rocks
 Inside your lungs in the middle of the night
 Drilling blades
 into your ears when you least expect it
 Growing ice on your skin
 Filling the insides with flames

ZOOM has reached MEDIUM SHOT of the duo – continue towards the point where the girl's stomach meets the bubble.

GIRL

Nothing is wrong
 But nothing is right either
 Boiling over inside the confines of your privacy
 Somehow you still think to hide it
 It was you who started
 "Do not be irresponsible," you keep telling
 yourself.
 Finish what you started.

And, third time,
 You allow the curiosity in again
 And it says: there might be more
 And you do the only human thing left,
 taking one more breath of that toxic air

Why do you keep doing this?
 This is not my world
 Or is it?
 Could I make my home in this place?

BUBBLE

Could I make my home in this place?

Ache is the only thing that makes you feel
 like a human any more
 Every emotion, magnified by it
 Love, hate, and, judgement
 All fuelled by the intensity of the negative

ZOOM finishes with CLOSE-UP of the point where the girl's
 stomach meets the bubble. Her right hands strokes the
 bubble ever so slowly and gently, once in and out of the
 frame

FADE into darkness.

CUT TO:

INT. BEDROOM - DAY

The bubble sitting on the carpet, FULL SHOT. Stillness.
 Then the girl, a young child again storms into the room
 and rushes to the bubble, seems excited and giddy. She
 has a lipstick in her hands. Or: a pretend-lipstick. Does
 she really need to be holding a real one; could she sub
 the lipstick with her finger? Maybe pretending to copy
 what she might have seen her mother do but not really use
 any physical aid to do that - add colour marks from the
 lipstick in post instead?

The girl sits down next to the bubble, the bubble is half-blocked from our view, the girl's back to us. She hovers over the bubble, takes the lipstick, uncaps it and begins drawing on the surface of the bubble. Un-decipherable scribbles.

She backs away a little from the bubble and casually puts the lipstick on the carpet, along with the cap. Crouching a little, level with the bubble, we can see that she is staring at the bubble, not so much her drawing on it but the bubble itself.

She fishes around for the lipstick, picks it up and draws on her own face, starting from the lips but drawing eventually all over her face, and then hands and arms and legs. Throws the lipstick away only to go and fetch it right after, picks it up and for a moment of aimlessly looking around her, takes the lipstick to her bed, hides it under the pillow.

The girl walks slowly a couple times around the bubble, smiling gently and returns to sit next to the bubble, smiling at it. (Circular movement in this memory of the bubble, in preparation for the next chapter in the kiln room.)

BUBBLE

Where are your time-given wrinkles?
I am still deciding.

CUT TO:

INT. KILN ROOM - DAY

FULL SHOT. The girl as a young adult sitting inside an open, very large kiln, she is facing towards the camera, her head down, and legs hanging down and out of the kiln but not touching the floor. Her hands are in her lap, and the bubble right in front of her on the floor. She might be looking at the bubble but we do not know.

The girl is holding a massive clear glass pearl necklace in her lap, fiddling with it with her hands, the necklace is draping onto the floor from her lap.

BUBBLE

To this day,
I do not know how to deal with this
I have no words
I do not know even how to begin
How do you begin from an end?

I am not even disappointed in you,
 Even if it was your choice
 to take that damn path every single day
 How could I?
 You are I and I am you

Love, I was worried about you

I watched you,
 Holding a thread in your hands
 It had two ends

I could start from the middle
 and trace my way to an end
 And back, and beyond, to the other end

All I can think of is him, hunched over
 Threads of hair covering his face
 There was so much hair
 So much
 So much that I could not see his face
 But I know there was his face
 underneath that mass of hair
 I know that because he was a human
 And humans have faces

The bubble, out of stillness until now, unexpectedly
 slowly starts rolling to frame-right. The girl lifts her
 head slowly, like if she is embarrassed and sad, not
 having expected the bubble to move.

The bubble rolls out of the frame. Girl stares into the
 direction where it went.

GIRL

I cannot sit still
 I am usually really good at it
 Maybe someone might mistake me for a statue
 I should die my hair black
 It used to be black
 Maybe in a quiet, dim place
 I might look like a marble statue
 I could dress accordingly
 Or not dress at all
 Do not really care
 It would not make any difference
 Not any difference to him

Girl hops out of the kiln, seems exhausted. And follows
 in the direction of the bubble. She walks out of the
 frame. Maybe dragging the massive necklace along,
 following her like a long tail, attached to her hand.

CUT TO:

REST OF THIS SCENE TO BE TURNED INTO A CHOREO +
 LINES TURNED INTO A SONG. NOTES:
 The turning point in the story, nothing happens
 while everything happens. The bubble has understood
 that it is no longer just a bubble, a material
 object; it cares and is touched by death and
 existence of human beings. These human beings,
 including the girl, previously perhaps only entered
 its eternal world/existence but now, as it has
 gained insight over the years, and seen its girl
 grow up in linear time (vs. the bubble's nonlinear
 time), it is losing its access to the forever
 eternal. To the bubble it seems (as this scene and
 the bubble's recollection of it is a memory) that
 the girl did not care about the man on the bridge
 (coming up in this scene) as much as the bubble did
 (which is not true but the bubble does not know it)
 and she was able to eventually move past the event –
 both physically and the memory of it in her mind
 because her human existence and relationship with
 time. The bubble is unable to do that as it
 remembers everything, and to it, time is not past-
 present-future. However, as it is losing its
 connection / the connection is changing to the
 eternal, the bubble is now in an in-between limbo
 that is causing it excruciating distress and sorrow:
 still possessing an understanding of the eternal but
 experiencing the finite. Circularity, the life of
 glass in all of its forms, in all times

GIRL'S POV, looking down. Walking behind the bubble that
 keeps slowly rolling away from her, bubble drops in and
 out of view. Walking in between the kilns.

BUBBLE

Selfishly
 Maybe
 I tried to look away
 My body knew
 I would not get away from that image in front of me
 Once I had seen it
 Once I had seen him
 But all it took was that fraction of time
 And here it is now,
 Forever recorded in my memory

I am paralyzed and helpless
 in front of this image

I want to say that nothing happened
 But I would be lying

The duo silently seems to be going around in a circle,
 around a cluster of kilns. They slow down as they become
 tired over the monologue.

BUBBLE

You had a new coat
 A thermos of fresh coffee in your other hand
 You were not particularly excited
 about the day ahead
 But it was not an exceptionally bad morning either
 You were happy that there was a fresh gust of air
 following as we walked along
 You had closed a door
 Walked down the road,
 along the subway
 Up a little

There is a little stretch going up
 after the subway
 A young man wearing all black
 was walking towards us,
 towards the subway
 He was wearing a very long shirt
 It looked like a dress over jeans
 And I remember you thought that he must be a guy who
 is very concerned about his looks but wants to
 appear relaxed about it
 I would not know,
 but I believed you
 He seemed successful in that endeavour
 We crossed the road,
 looking both ways for cars
 There were none
 As usual
 That road is a small road
 leading down to housing by the river perhaps
 Usually all the cars are going straight towards the
 city centre,
 and do not turn on the small road
 But it is good to check anyways
 And not just walk blindly across the road

Then there is a lamppost
 with a chunky bin attached to it
 It blocks the view from where we were coming,
 from to the bridge
 It is only once you have passed that lamppost
 And then you already are on the bridge
 Then you can see most of the bridge

We were also wearing our headphones
 Listening to a fresh mix
 So I could not really hear anything else
 Just the mix
 I forget which part of the mix was on then

The wind was blowing so hard
 that you were shuffling with the lapels of your coat
 Stubbornly,
 Not wanting to close the buttons
 But not wanting to get
 all the cold underneath your coat either
 I agree,
 I think the coat looks better unbuttoned
 There is more volume to it, in a way

Even when struggling a little with the lapels
 You often did,
 With all your coats
 You always had,
 It is so windy in here
 So often
 That when it is not windy something is not right

You habitually glanced up even if you were focusing
 on your coat and not spilling your thermos

We had heard this happens in here
 Maybe that took the first blow away
 We did not stop but kept walking
 You forgot the lapels

We were inseparable in that moment
 You swallowed me
 Or I swallowed you?

Ever so slowly there starts to rain sand, first only a
 grain here and there, until eventually the sand is
 pouring down, hiding everything else. It does not seem to
 land on anything onscreen though, we see only the
 movement of the sand before the grains disappear.

BUBBLE

What are you supposed to do in that situation?
 At that point there was nothing we could have done
 Or should have done maybe
 There were people, not quite standing around,
 The wind was cold
 And still,
 we could not hear anything other than the mix
 But neither of us was listening to it either

It was not silence
 Just blank
 I should have taught you about it
 But I had not,
 And I might have taught you wrong...
 Because now I am confused too

Blankness, it does not respect space or time
 And this,
 The kind of blankness that does not have a place in
 a beautiful or successful or decent or even alright
 day
 The kind of blankness that takes you by surprise
 Pushes helplessness down your throat
 Violently
 And is not asking any questions in that process

There were two police cars
 I think the lights were on in both of them
 They were parked on the road
 On the road
 Where all the cars pass
 Cars would pass
 I'm quite sure of that
 But not really sure
 I just remember the police cars
 And the people
 And it was so slow
 Every step we took was..
 Was so heavy, conscious of..
 How slow our steps were

I had never noticed that before
 Surely we were walking in the same manner as you
 usually did
 We had walked this route hundreds of times
 Worn these shoes a hundred times too
 There was nothing other than relatively normal in
 that day
 Up until that point

I mean you had a new coat
 but it is very similar to your other coats
 It should not make any difference to our walking
 speed or manner
 And that thermos was practically glued to your hand
 I remember you telling me about it,
 How you had just realised it a couple weeks before
 I knew it all the time,
 That you carried it almost all the time
 And other humans do not do the same
 Everyone does not even have thermos

Everyone does not even drink coffee
 I mean, of course I know everyone
 does not drink coffee
 But you could have tea in that kind of thermos too
 Or water
 But I know you...
 I knew you
 Something warm feels good
 In a city that is always this chilly
 Perhaps you could have made your coffee
 once we had arrived at our destination?
 But you liked it this way
 Carrying the thermos you had something
 for your hands to do
 You were often overly conscious of how your body
 existed in space
 A malleable, constantly changing body

I would like to experience change too...

I'm not sure but I believe everyone is not that
 conscious about their bodies
 You were taught to keep you hands still
 by your torso,
 In your competitive life,
 years before
 and it took you almost a year to learn to move your
 hands normally while walking
 I get it, it must be that change

You had to put conscious effort
 into moving your hands
 And sometimes it still occupied your mind
 So the thermos was a great solution to the problem
 That way you did not have to think about your hands
 Would there have been anything wrong in thinking
 about your hands though?
 I liked our hands
 Good proportions
 I thought so at least
 It does not really matter what anyone else thought
 about our hands
 But I know that walking and holding one's hands and
 arms rigid by the sides does look a bit strange
 That is what you used to do
 I cannot remember when you had noticed it or if
 someone had told you
 I did not speak a word
 Anyways I remember walking this forest path towards
 home when you were younger and you teaching yourself
 to move your hands and arms in a natural way
 It felt far from natural though to me too

But you persisted
 And it did feel fairly natural eventually
 But sometimes you forgot
 So you had to keep an eye on our hands and arms
 Not all the time of course
 But you know,
 occasionally checking and reminding yourself

You were overly conscious of your whole body
 You did not know what it was
 You told me that you did not really care if other
 people thought we were weird
 You were lying,
 You were, a little,
 But you also knew that we were
 a little weird anyways
 But there was no need of adding onto
 that weirdness I suppose.
 When we were alone
 Or walking in the middle of the forest
 We could not have cared less
 about our hands and arms

Love,
 did you ever consider
 that what you referred to as being weird
 enabled you to find me?
 And that is not weird at all,
 is it not?
 Finding a friend in this weird, weird world?
 Your imagination and consciousness giving me a life?

Nevertheless,
 On this bridge,
 So close to the city centre
 Amongst other people,
 Yes, you were pretty conscious of your body
 It was not only your hands and arms but also your
 neck and legs and feet and eyelids
 You tried to seem natural
 But it was a conscious effort nevertheless

And seeing these people
 You lost some of our effort
 Suddenly there was so much blankness in my mind
 It just took over
 We were walking but might have looked funny
 Maybe that is why our walking felt so slow
 So slow

Now I understand why in the movies the time is
 slowed down and sounds are muffled when something
 critical happens
 It really happens
 I mean it does really happen
 Or more like I remember that's what happened
 Of course time does not slow down or voices become
 silent
 That's just how it feels

The circling duo has come at complete halt. Sand rain
 stops and all sand is gone. Bubble on the floor, still
 seen from the girl's POV, the girl just behind the
 bubble.

CUT TO:

INT. KILN ROOM - DAY

BIRD EYE, LONG SHOT of the duo where they stopped. The
 girl sits down on the floor, her back against the bubble
 and folds herself into the smallest she can, hugging her
 legs and face cast down.

BUBBLE

I had shielded you all our time
 You took me wherever you pleased
 Did whatever you wanted,
 And I loved you
 I still love you.
 Still showing me all these wonders
 But it was always you first,
 Always you first!

CUT TO:

FULL SHOT of the girl and the bubble behind her. The girl
 is holding clear glass eyes in front of her eyes, with
 her hands. She slowly lowers her hands onto the floor and
 releases the eyes so that they roll away.

BUBBLE

My love, I am as weak as you were,
 Still at your mercy
 And this, the finite, is not my nature,
 My home was in the eternal
 I had to give it up to really meet you
 How could you let this happen?
 How could you steal me away?
 And then let me down

How can you still let me down?

The duo sitting immobile on the floor, seem hopeless and lost.

CUT TO:

INT. ROOM - DAY

BIRD EYE, EXTREME LONG SHOT. We are back in the hall-like room. Now there is a simple desk, maybe real, maybe projected, with two chairs next to it. Lit, but not too bright or clear spotlights, there is no natural light either but lit enough to cause shadows on the table.

The girl, now adult, is sitting on one chair, the bubble on the other. There is some paper and crayons and a pair of scissors scattered on the table in front of them.

CUT TO:

MEDIUM CLOSE UP, TWO SHOT, BIRD EYE, the papers and crayons visible. The girl picks up a paper and a crayon. Places her left hand on the paper, crayon on her right hand.

BUBBLE
Placed your hand,

GIRL
My left hand,

BUBBLE
On the piece of paper,
Flat,
Fingers apart,

EXTREME CLOSE UP, BIRD EYE of the hand on paper. The girl begins drawing on the paper, starting the line away from the hand, leaving a line on the paper but once she reaches her hand and continues to trace them there is no trace on the paper. She continues, nevertheless. After finishing, she puts the crayon down, picks up the scissors and begins to cut out the shape that is invisible to us. It turns out to be the shape of her hand as she finishes cutting.

GIRL
Traced the outlines of my palm,
Held the piece of paper up with my left hand,
And cut the shadow of my left hand.
With scissors on my right hand
A void remains, a memory of my hand.

She places the cut-out and scissors on the table.

CUT TO:

BIRD EYE, MEDIUM SHOT. We can see the girl picking up a piece of paper, large enough to accommodate the bubble, placing the paper in front of her. Then picking up the bubble and placing it on the paper. Then picking up the same crayon she used before, starting a line on the paper away from the bubble and tracing the bubble's shadow on the paper. The crayon works perfectly.

GIRL

I tried to do the same with you,
Imagining you,
Both hot and cold,
Large and small,
But none of the voids paid any resemblance to you.

The girl picks up the bubble, places it back on the chair, picks up scissors, and cuts the outlines of the bubble.

BUBBLE

What would you tell me, if you could speak?
Sometimes I forget to breathe.

The girl takes the cut-out of the hand and places it on top of the bubble, the hand disappears into the whiteness of the bubble cut-out.

BUBBLE

Everything moves around me.
While I am
Stranded in stillness.

The bubble and the girl sit silently by the table.

CUT TO:

EXT. BY GIRL'S ADULTHOOD HOME - DAY

It is summer. FULL SHOT, SLIGHT HIGH ANGLE to show the boxes "inside" the car (in the place of the car, piled up), and the whole of the car in shot. Studio shot, superimpose/glass layer/filter that has the car on it, all the action seen through the transparent parts of the sheet. The girl as an adult finishing loading her car up with mirrors, the whole car is stuffed with boxes filled with all sizes of mirrors. She heaves the last box into

the car. Merrily rushes to the driver's side and pretend-hops in, pretend-closing the door behind her.

CUT TO:

INT. CAR - DAY

TWO SHOT from the backseat to show the girl sitting on the driver's seat, pretend-getting ready to start the car, and the bubble on the passenger's seat. Suddenly the girl is holding her forehead, like she is in pain, and as quickly as the pain came, it is over. She places her hand on the bubble (on its forehead?) and stares at it, like there is only these two beings, against the world, smiling but with looming end in her mind. The girl is taking the bubble to their last mission together.

GIRL

I can't stand the passing of time
Like you do,
You got all the time you need.
And now, all the human feelings.

With determination, the girl turns the radio on, the soundscape flooded with a (pop?) song. She starts the car and off they go. Include a sound of a real car starting and driving away.

CUT TO:

EXT. FOREST ROAD - DAY

Another pretend-scene, glass layer/filter as the car, superimposed forest and road. Song still playing. HIGH ANGLE, FULL SHOT like a kite attached to the back of the car. Car driving along a forest road with no traffic, one lane. Slowly the camera moves lower and lower, to almost road-level. We can see the exhaust, and the tires and the road, the underside of the car.

Little by little the "area of the pretend-road" starts to become shinier and more reflective (fade in/superimpose the live action with exact same live action but with a mirror in the place of the road). It turns into mirror, mirroring the duo and the boxes. CAMERA TURNS around, now the reflection is on the top and the "reality" in the bottom.

CUT TO:

INT. CAR - DAY

Same shot as previous TWO SHOT inside car. Girl driving and bubble on the passenger seat. We can see trees from the windows as the car moves along the road. The only difference is that now both the girl and the bubble seem translucent, like memories or ghosts. Song still playing (maybe in reverse?).

CUT TO:

EXT. DESERT - DAY

This might be the same desert as in childhood. EXTREME LONG, EYE-LEVEL SHOT, slowly rising and ZOOMING to HIGH ANGLE FULL SHOT, at first showing mostly the desert (OR even showing that the desert, in fact, is in the studio - if feasible), bordered by a forest (superimposed), and a road on which the car (glass sheet filter) is parked. The girl as a young child is pretend-getting out of the car, she is translucent and becoming more so as the scene evolves. She opens the door for the bubble, and the bubble rolls out straight to the desert, seems extremely cheerful and the girl follows cheerfully too. NOW HIGH ANGLE FULL SHOT of the duo in the desert, the bubble has slowed down and stops as the girl lies down next to it, looking up to the sky.

CUT TO:

EXT. DESERT - DAY

FULL SHOT, SLIGHT HIGH ANGLE of the girl as an adult and the car (glass sheet filter). She is pulling the boxes out of the boot, now scattered around the back of the car. She takes one of the boxes and begins walking down the desert, carrying the box filled to the brim with mirrors, past the camera. We follow her as she walks to the bubble in the desert. She reaches the bubble, standing right next to it.

FULL TWO SHOT of the duo standing in the middle of the desert, from the back. The girl heaves the box to her side, using her whole body as to gain momentum, and swings the box to release the mirrors into the world. The box empties, her arms holding onto the box, the mirrors floating away, filling the whole view in front of the duo (superimpose mirror fragments - the same ones from the sandbox scene, mirrors reflecting different parts of the daytime sky from all over the world).

CUT TO:

EXT. DESERT – DAY

LONG BIRD EYE SHOT to EXTREME LONG SHOT. SLOW CIRCULAR PAN AROUND CAMERA AXIS. The duo lying down in the desert that is covered by mirrors, between of the mirrors slivers of sand showing through. The mirrors are reflecting the sky, clouds and the blue beyond, from different parts of the world. The duo becomes more and more translucent as the camera zooms out, eventually disappearing altogether (superimpose/green screen).

FADE OUT the mirror edges, leaving only a patchy reflection of the skies.

BUBBLE

Everywhere I look,
No matter how heavy the baggage
I am carrying around,
No matter how heavy and slow our body feels,
Is the reflection of us,
Backed by the beauty and vastness of the universe.
You and I.

CUT TO:

INT. ROOM – DAY TO NIGHT TO DAY

BIRD EYE, LONG SHOT. The bubble alone in the middle of the room, surrounded by emptiness. A light source from the frame-right slowly passes the bubble, sunrise to sunset. Then the light comes back and stopping as the monologue ends.

BUBBLE

My heart keeps breaking
But I do not break
I am faulty in this material world
Glass breaks and then it can be repaired
I want to break too
And to repair myself then

Then I woke up
And the sun was shining,
Giving me shadows
Behind which I could hide
For one more day

Foot in front of the other
One step at a time
I want to believe
that good attracts good
While at times it is so difficult

That it feels like the sun weighs over the moon,
 And casts its most blinding rays
 right into my worn-out eyes

Life moves on
 And I am not a part of it
 While I am a part of it
 Have I ever been a part of it?
 How else could it be?
 Floating above the sea-level
 Desperately trying to anchor onto something
 That weighed me down.

CUT TO:

INT. LIVING ROOM – DAY

The same living room as in the funeral reception scene, same light, same angle, same set – but everything is perfectly normal: the windows draw no special attention, our view is not muddled or distorted. Only pieces of furniture, humans, and glass objects. Our focus is on the glass objects though, the humans do not move: the viewer realises that there is one object per person, each object in close proximity to its human. And there is one spare, a regular drinking vessel on the table, without a human being, it is very close to the edge.

Without any warning, the drinking vessel slowly starts tipping over and falling off the table. This draws the attention of the humans – they seem to wake up from their stillness and begin turning their heads towards this vessel.

FADE IN:

INT. ROOM – NIGHT

One continuous, smooth long to close-up shot. In the middle of the frame, slightly from below, the bubble on a tall white pedestal, nothing else in sight. The object is lit extremely brightly. SLOWLY ZOOM IN TO THE OBJECT over the course of the monologue: until the bubble fills in the frame, until there is nothing else in sight.

MIGHT THE BUBBLE BE SPEAKING ENGLISH (WITH SUBTITLES
 THOUGH) IN THIS SCENE?

BUBBLE

There was happiness
 Inside our protective walls,
 Inside light and lightness,

Elsewhere,
Far from the weight of this world,
A place where no other had any business,
We were just floating around,
With no particular shape,
With no idea of boundaries,
Or limits
Or the horrors of the planet,
Or materialistic human beings,
With their need to possess,
No concept of right and wrong,
There was no right or wrong,
Just existing.
Simply for us.
Warmth and embrace,
There was no identity,
And no need for one,
Because we were one.

And then they took me out by force.
Twisting around steel,
Poking and pushing and pulling
With sharpness I had not felt before,
And it hurt,
It hurt so much.

I was given these (tangible) outlines,
That I did not want to have.
But they would not listen to me,
They did not even understand me.
The tangibility of this world has no justice
To the beauty of the other side.
To the beauty that was us.

They would give me feelings
That I did not want to have,
They would give me a shape,
That I did not want to have,
I did not want anything to do with these monsters,
While they remind me of you,
They also look so alien to me,
So far from where I came from,
So impure,
So dirty,
So limited,
So invasive,
So dark.
So cold.

And you were gone.

They would put me up on a pedestal.

They would run their hands
along my newly acquired surface,
Breathe on me,
Repulsive air,
And I tried,
I tried,
I tried,
I tried so hard,
Put up a curtain between my aching body and them,
But all I managed was a temporary haze
On this surface,
That is not even mine!
And they would wipe it away,
Smudge my vision,
Stain me.

I feel vulnerable,
And I feel naked,
All these words
that had no meaning for me,
Or for us,
On the other side,
In our world.
They are undressing me from this shape,
Trying to figure what is underneath,
Looking at me,
While I have given no permission.

They gaze at me,
Keep staring at me,
With smugness and greed,
And in this world,
Where I still do not belong,
I cannot hide.

I am so fragile
Without my protective walls,
Without you,
Without your imagination,
Without our happy, identity-free place

They look at my light,
But I cannot turn it off,
It is mine,
My memory of us,
So much more than what they see,
And all that I have left.

Their consuming,
Disgusting looks,
Calculating my material value,
And invading my personal space

That I did not even need on our side,
On the other side.

Their perverse gaze,
Making me freeze in my place,
Not that I could move,
I was stolen of that ability
upon entering this world.
Beautiful object, they keep on saying,
That's all you reduce me to?

I had all the colours,
All the forms,
All the emotions,
Growing and learning,
In reverse,
In our world,
And you, my friend, my love.
Memories of past and future,
The beauty and the horrors,
Perfectly aligned,
Everything within my reach,
But now I am transparent.
Trapped alone in the eternal finite.

Last frame: the bubble filling in the frame, nothing else
in sight. Fade out to white.

FADE OUT

THE END

A3. Audience feedback form

***Light Keeper* audience feedback form**

Questions are collated from a Google forms questionnaire, * denotes a mandatory field.

Question 1.

The data collected in this survey is used for interpreting audience responses to the film “Light Keeper” for a research project “The symbiotic relationship between glassmaking and filmmaking in creative practice” at the University of Sunderland (2017-2020). The data is processed anonymously, and will not be shared with third parties. *

I understand the above and agree to my answers being used for this purpose

yes

no

Question 2.

How would you rate this film? *

Excellent

Good

Fair

Poor

Question 3.

Using a couple words, how would you describe the following elements of the film

The Girl *

The Bubble *

The story *

The cinematography/visual *

Uniqueness of the film *

Question 4.

What, if anything, did you find confusing about the film that was not cleared up by the end?

Question 5.

What are your feelings about the way that the film ended? *

Question 6.

How would you describe the relationship between the Girl and the Bubble? *

Question 7.

Did you connect with the topics or emotions raised by the Bubble's narration? *

yes

no

If yes, please describe how you connected with the topics or emotions raised by the Bubble's narration.

Question 8.

How would you describe the length of the film and the overall pace? *

Question 9.

What aspects of the film did you like the most? *

Question 10.

What aspects of the film did you like the least? *

Question 11.

What did you think the film was trying to say? *

Question 12.

Now that you've seen the film, what aspect most sticks in your mind? *

Question 13.

Are you involved or have you been involved in any capacity in the field of glass?

yes

no

If yes, please tick all the boxes that apply to you *

Education/academia

Student

Artist

Maker

Other:

Question 14.

Were there any aspects of the film and your experience of watching it that reminded you of glassmaking processes, the material, or related traditions?

Please provide examples. *

Question 15.

What is your previous relationship to this film? *

I have seen it prior to today

I have read the script

I have been involved in the production (in any capacity)

Some familiarity

No prior familiarity

Question 16.

I am *

Female

Male

Prefer not to say

Other:

Question 17.

How old are you? *

18-20

21-24

25-29

30-39

40-49

50-59

60+

Prefer not to say

Question 18.

What country do you live in/consider to be your home? *

Question 19.

How often do you visit cinema or view a feature film on DVD/TV/streaming platform? *

Once /month or less

Twice /month

3-4 times /month

More than 4 times /month

Question 20.

What kind of films do you like? Please tick all that apply. *

Arthouse/independent

Big studio films/Hollywood productions

Drama

- Romance
- Comedy
- Action and adventure
- Thrillers
- Horror
- Crime
- Sci-Fi
- Animation
- Documentary
- Other:

Question 21.

Please feel free to make any additional comments below.

A4. List of exhibitions, screenings, and awards until submission

I had submitted the theatre edition of *Light Keeper* to festivals prior to any knowledge of COVID-19, and despite many festivals were either cancelled or postponed, the following festivals decided to organise online screenings and included the theatre edition of my film in their programme:



Kiev Film Festival, Ukraine, June 26th to July 14th 2020



Austria International Film Festival, Austria, July 22nd to August 5th 2020



Polish International Film Festival, Poland, October 1st to 2nd 2020

I was also awarded a nomination in the best director (feature) category for my work in *Light Keeper* at the *Alternative Film Festival* in Toronto, ON, Canada in March 2020 but this festival did not organise screenings.

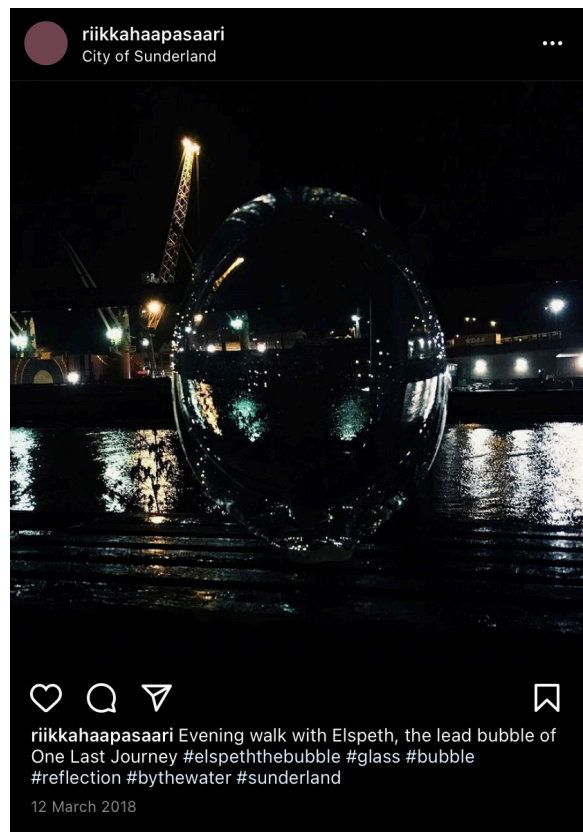
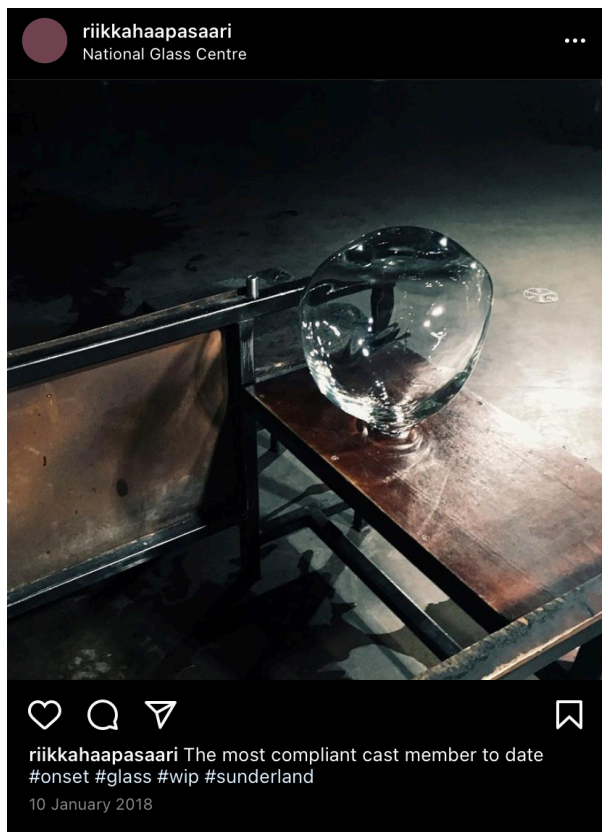


Alternative Film Festival, March 2020

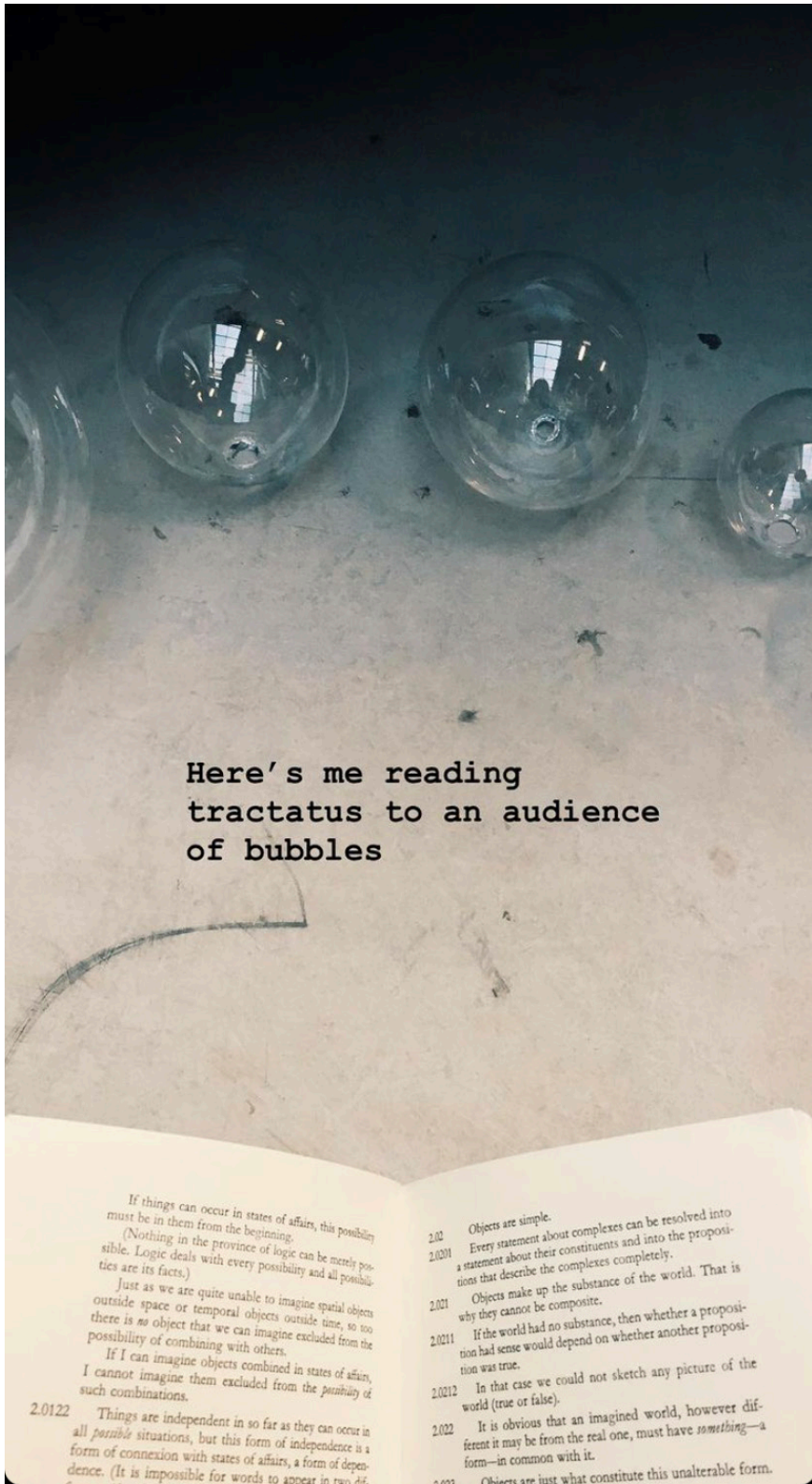
The trailer of *Light Keeper* was also selected for the *Glass, Meet the Future Film Festival* organised by North Lands Creative with the Support of the British Council and Toyama City Institute of Glass Art. This festival was organised online between 3rd to 17th July 2020, and the physical iterations tentatively taking place in 2021 in Japan and Scotland.

A5. Visual records from Light Keeper development

The following pages include a chronologically organised collection of visual material and related short texts that I collected and published in my personal Instagram during the development of *Light Keeper* between January 2018 and May 2019, primarily in the “stories” section (images and videos that disappear after 24 hours). This selection of images is not exhaustive as it is meant as supplementary material to the thesis to give an idea of the visual qualities of the development process. I would like to advise the reader that I have left the potential spelling mistakes in place and only edited out information such as likes and comments.



January 10th, 2018; March 12th, 2018

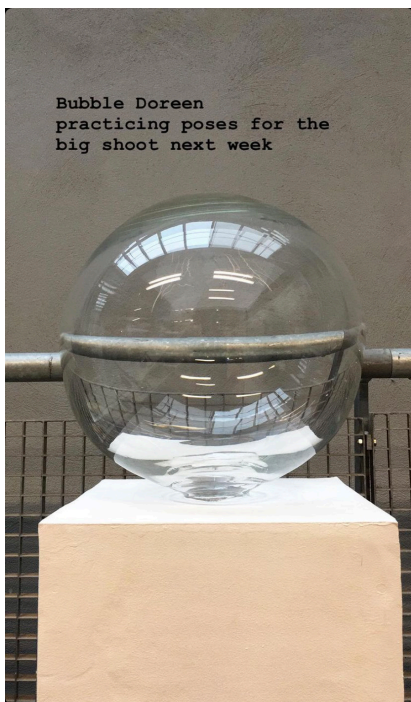


Here's me reading
tractatus to an audience
of bubbles

If things can occur in states of affairs, this possibility must be in them from the beginning.
(Nothing in the province of logic can be merely possible. Logic deals with every possibility and all possibilities are its facts.)
Just as we are quite unable to imagine spatial objects outside space or temporal objects outside time, so too there is no object that we can imagine excluded from the possibility of combining with others.
If I can imagine objects combined in states of affairs, I cannot imagine them excluded from the possibility of such combinations.
2.0122 Things are independent in so far as they can occur in all possible situations, but this form of independence is a form of connexion with states of affairs, a form of dependence. (It is impossible for words to appear in two dif.

2.02 Objects are simple.
2.0201 Every statement about complexes can be resolved into a statement about their constituents and into the propositions that describe the complexes completely.
2.021 Objects make up the substance of the world. That is why they cannot be composite.
2.0211 If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.
2.0212 In that case we could not sketch any picture of the world (true or false).
2.022 It is obvious that an imagined world, however different it may be from the real one, must have something—a form—in common with it.
2.023 Objects are just what constitute this unalterable form.

May 21st, 2018



May 24th, 2018; July 26th, 2018; July 27th, 2018



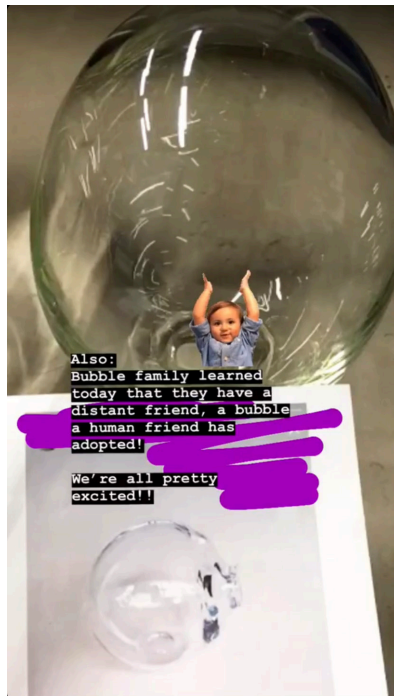
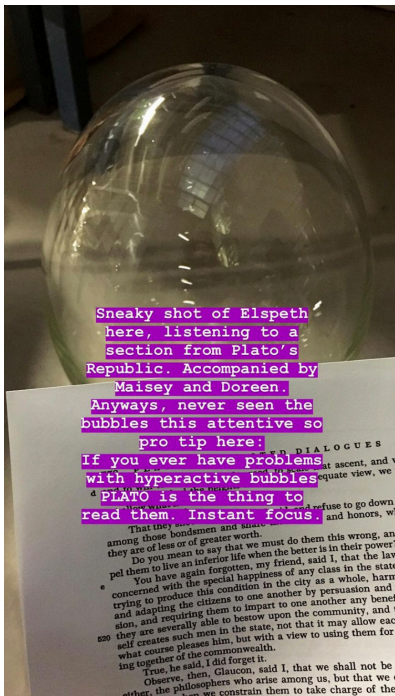
riikkahaapasaari
National Glass Centre



riikkahaapasaari Elspeth the bubble in the center of attention on a monday afternoon #characterdevelopment #elspeththebubble #glass #filmmaking #wip #fictionallife

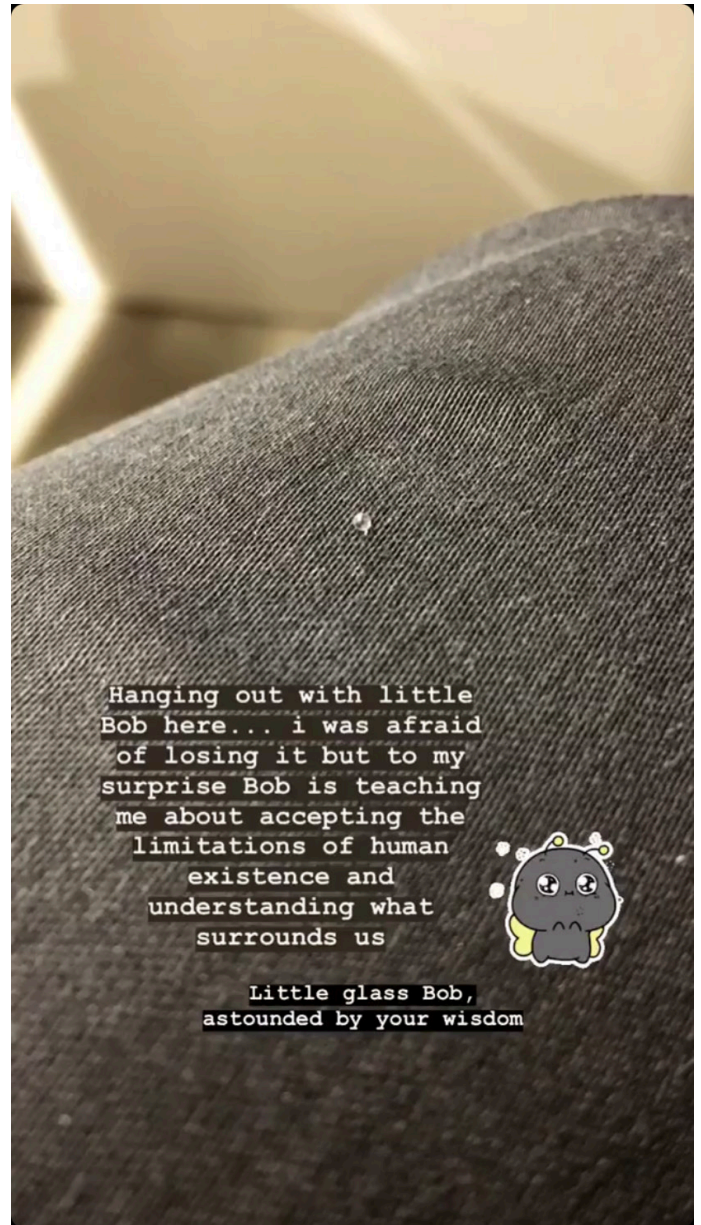
30 July 2018

July 30th, 2018

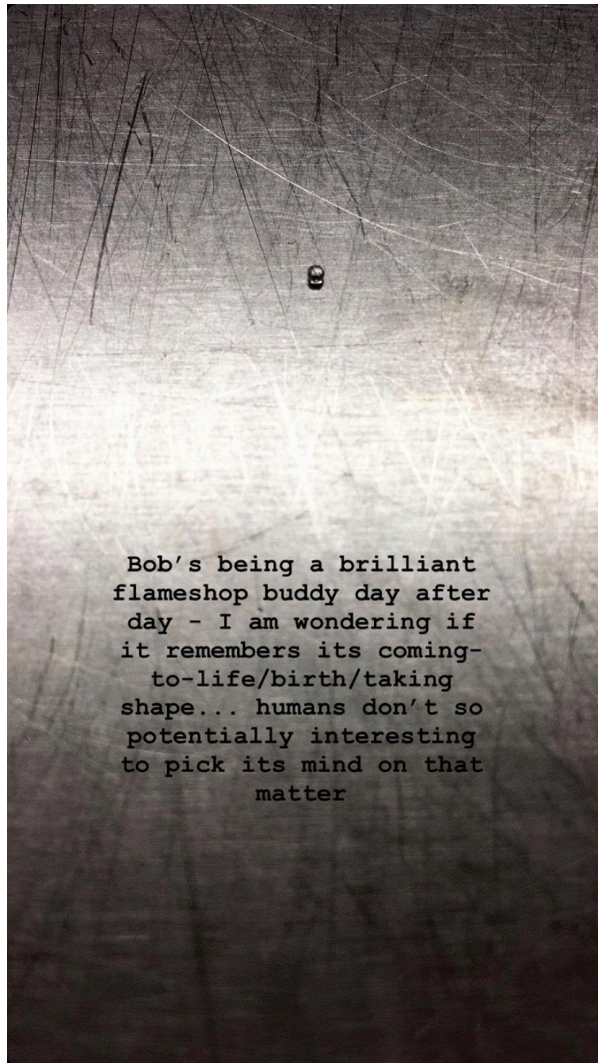


Top row from left:
July 31st, 2018
August 1st, 2018
October 10th, 2018

Bottom row from left:
October 17th, 2018
October 30th, 2018



November 7th, 2018; November 8th, 2018

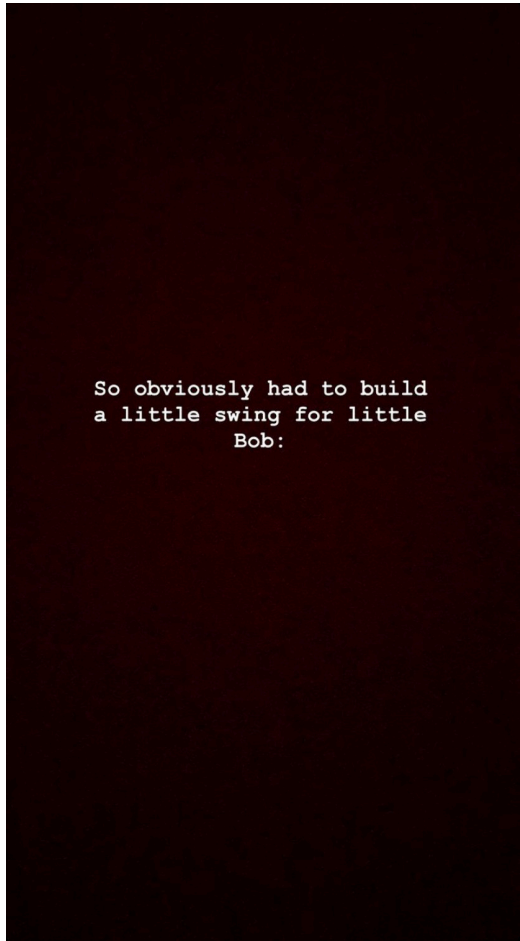


November 13th, 2018

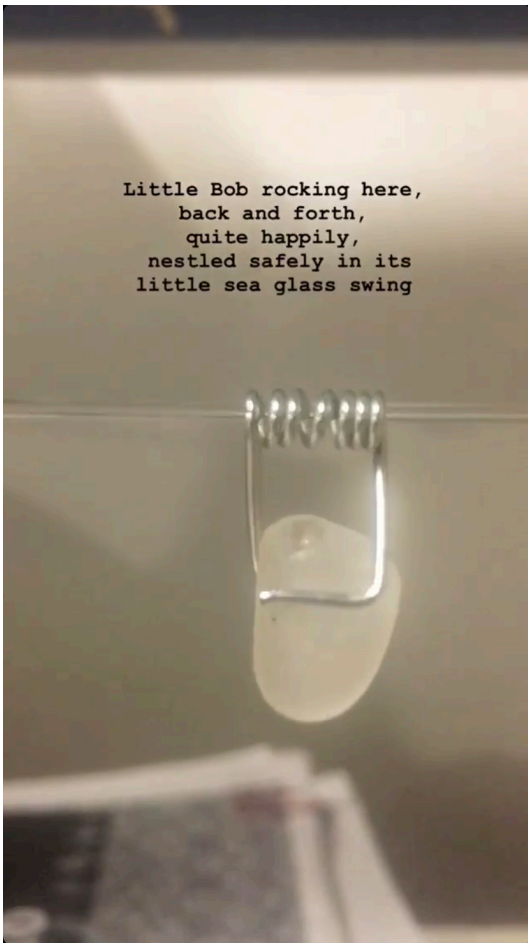
Little Bob saw a light
swinging here and wanted
to go too



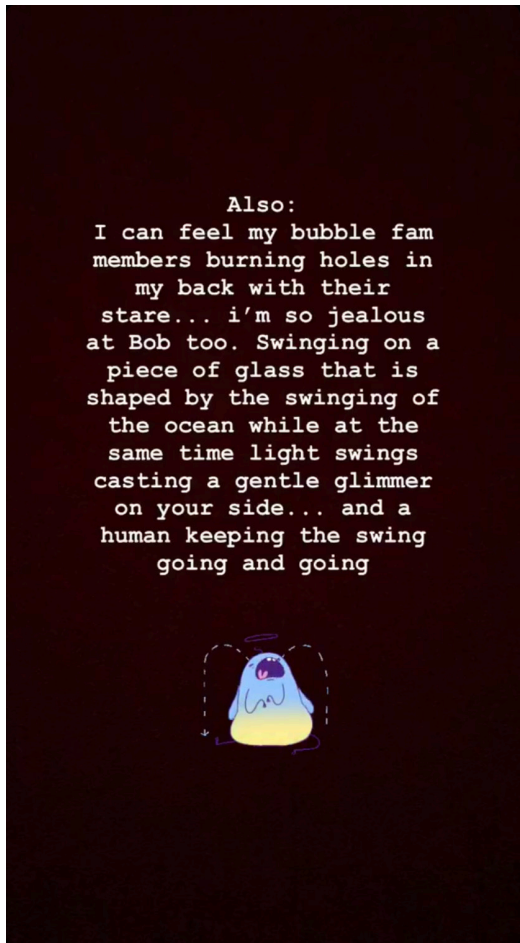
So obviously had to build
a little swing for little
Bob:

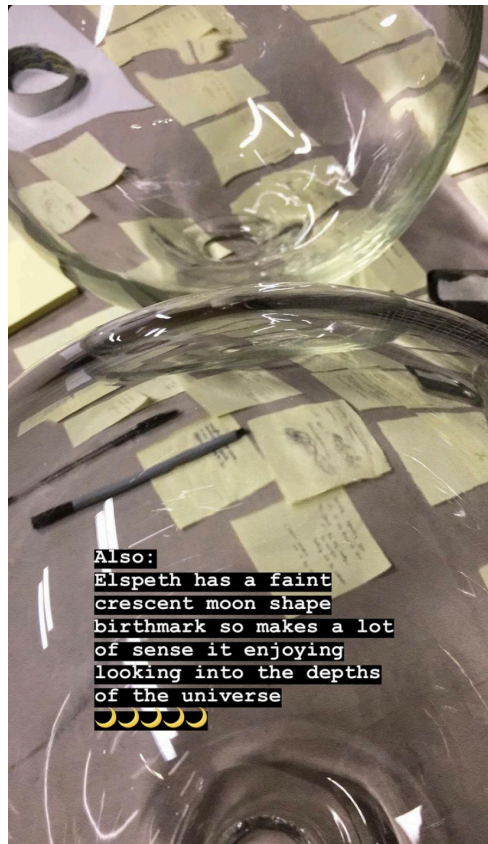
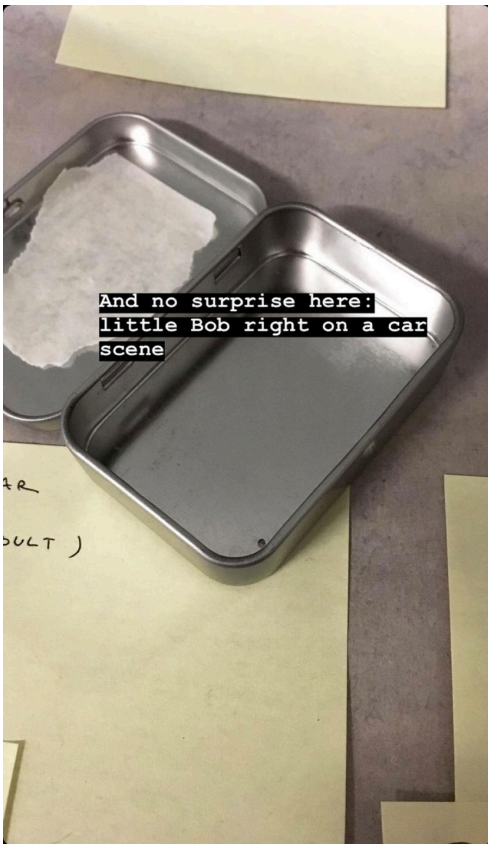
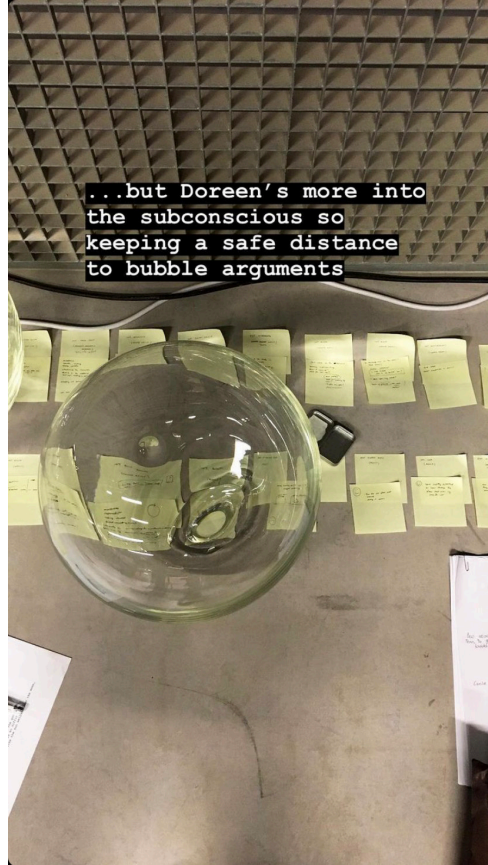
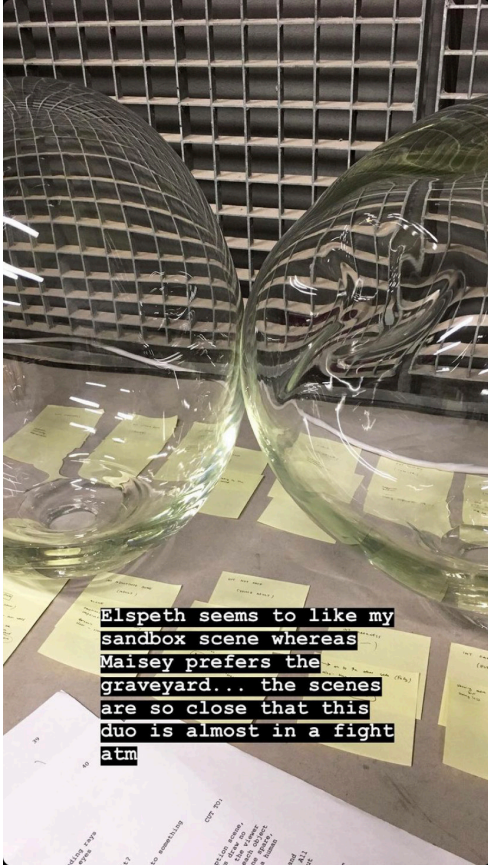


Little Bob rocking here,
back and forth,
quite happily,
nestled safely in its
little sea glass swing



Also:
I can feel my bubble fam
members burning holes in
my back with their
stare... i'm so jealous
at Bob too. Swinging on a
piece of glass that is
shaped by the swinging of
the ocean while at the
same time light swings
casting a gentle glimmer
on your side... and a
human keeping the swing
going and going

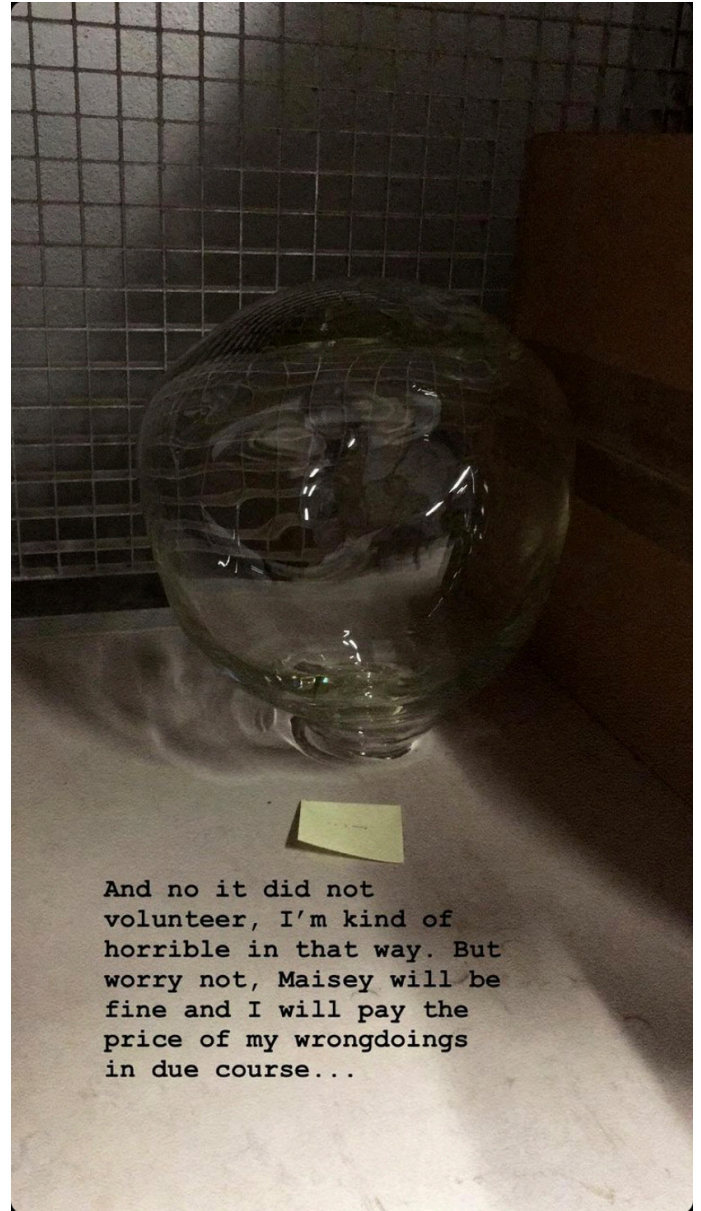
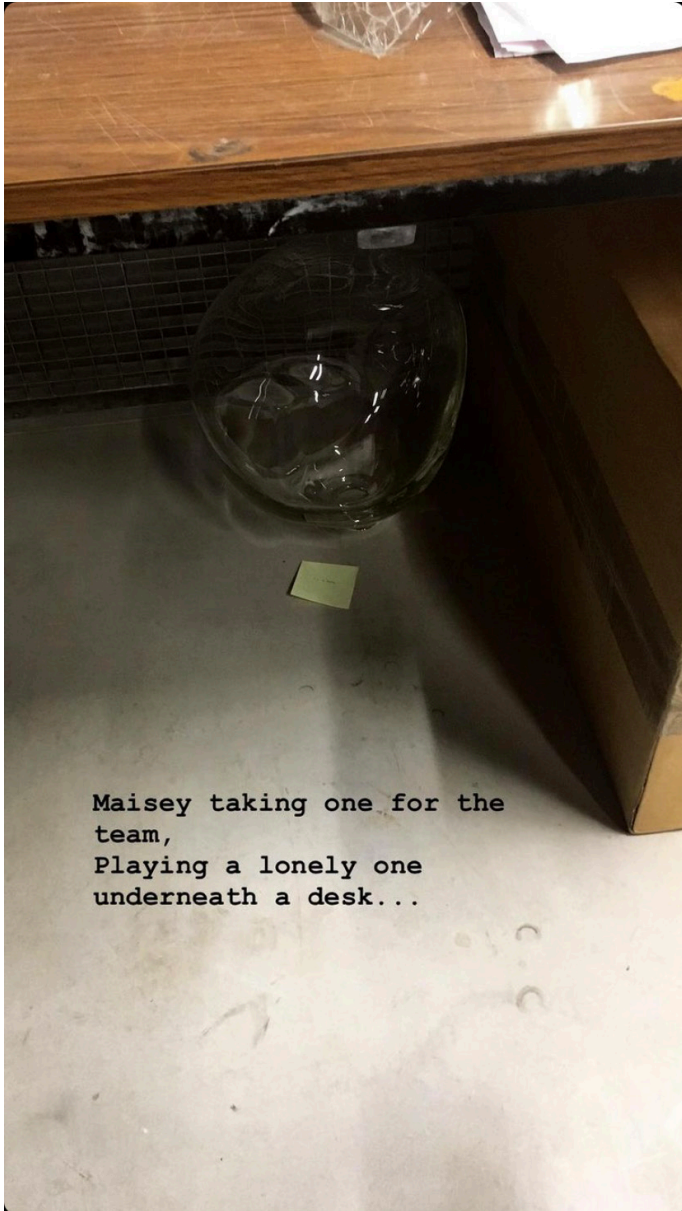




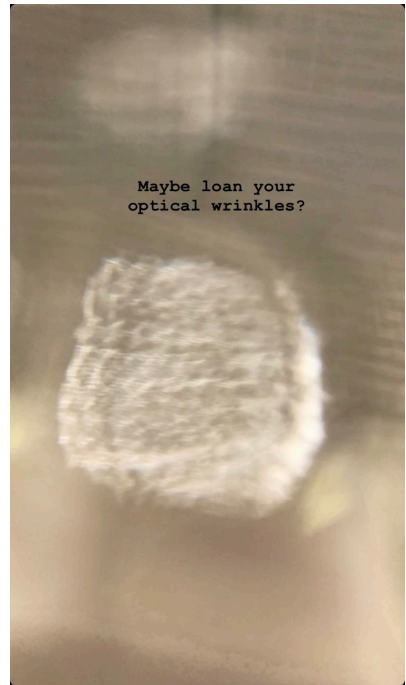
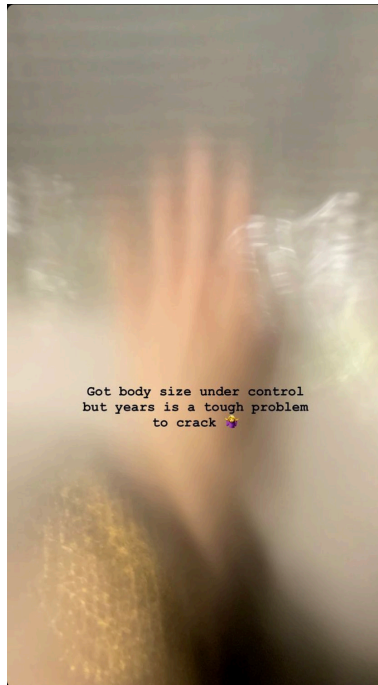
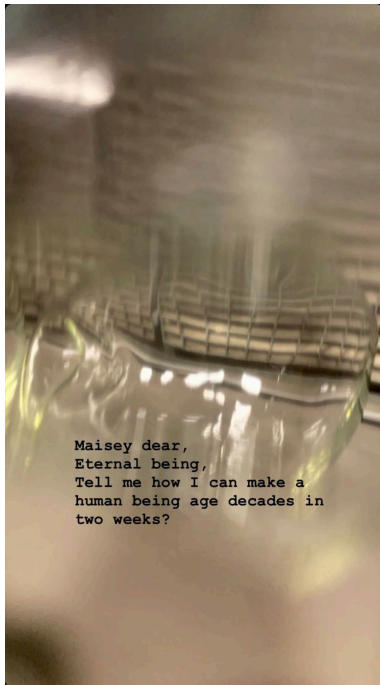
November 27th, 2018



December 6th, 2018



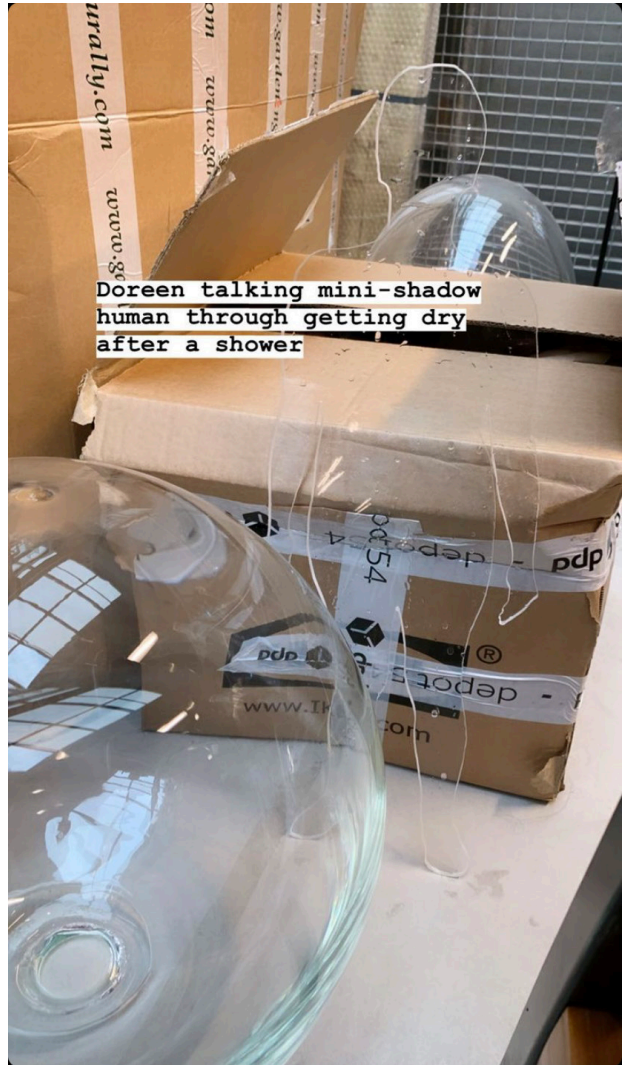
January 15th, 2019



February 26th, 2019



Doreen's test-sitting a chair for set and seems approving 🙏



Doreen talking mini-shadow human through getting dry after a shower

May 15th, 2019; May 20th, 2019