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A person is seen from behind, standing in a dark room. The scene is illuminated by a strong blue light that creates a complex network of glowing, ethereal lines and patterns, resembling light trails or a spectral map. The person is wearing a dark, horizontally striped tube top. The overall mood is mysterious and contemplative.

Refracting Spectres

deep time mourning in a cinema of catastrophe

*A thesis presented in partial fulfilment of the requirements for the degree
of Master of Design at Massey University, Wellington, New Zealand.*

Elise McIntosh

Preface

I have been struggling with a deep sense of paralysis from climate change dread. Growing up in Aotearoa New Zealand, climate change has always been this looming danger. In primary school, we learnt about the damaged o-zone. In intermediate, we watched documentaries about the effects of climate change on glaciers. In college, we researched ways in which climate change has affected the Great Barrier Reef, the Maldives, and Aotearoa. All through this was an ongoing consumption of apocalypse and dystopia fiction, which began to feel more real with every year that passed.

This research project has been a way for me to process this paralysis, to find a path through it with an act of mourning.

Acknowledgements

Thank you to my supervisors, Meg Rollandi and Sven Mehzoud, for deep conversations, guidance, and continuous support throughout.

Thank you to all the technicians at Massey for answering my questions, assisting with gear, and being incredibly helpful overall.

Thank you to all my family and friends for your endless encouragement and strength. Especially to:

My aunt, uncle, dad, and grandfather for helping in construction of the cave.

My mum for talking through too many ideas to count.

My sister for proofreading my thesis and ruthlessly correcting my grammar.

My friends Claire and Amy for aiding in construction and setting up.

And my grandmother who inspired my love of geology and deep time.



Fig. 1.

Abstract

Refracting Spectres explores sceno-cinema-installation practice to facilitate mourning of catastrophic multirealities. The project uses a framework of deep time thinking to reorientate current climate change paralysis that is influenced by an overload of apocalyptic media, especially films. To mourn climate changing land is to recognise the grief of things already lost, or are in the process of being lost. Beings, landscapes, and ecologies are disappearing without the needed processing through mourning. Deep time is a geologic concept that offers a different understanding of time which is expanding and incomprehensibly slow; It conflicts with modern, fast-paced time evident in many apocalypse films. Multirealism opens opportunities to explore deep time through a tangled weave of possible futures that are lived in differently, and through different perspectives. *Refracting Spectres* is a haunted transition space – like a cinema – where the audience is immersed by the entanglement of multirealities, and forms a perpetual atmosphere of mourning.

This practice-based research engages with projection, film, and scenography to form an atmosphere to mourn. The use of projection and film enables a strong connection to both death and modernity. A film is already part of the past. Within a cinema, films immerse the audience in the spectrality of already 'lived' narratives. Scenography and installation allow for people to experience a constructed atmosphere – to create a shift in time and place. Through an exploration of apocalyptic media as multireality presents and futures, this project encourages the release of audience's hidden grief in a climate changing – and changed – world. It is an invitation to mourn.

mourning, deep time, apocalypse, cinema, climate change.

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Glossary

A collection of terms, and my interpretation of them.

Apocalypse : An event of cataclysmic scale. A violent, destructive change.

Architecture : Constructed forms which we live in and with. A reflection of society and palimpsests of time. Materially derived from the earth.

Cinema : A place where films are shown. A public space for entertainment. A product of Modernity, and a force that drives Modernity.

Deep Time : Geologic time. A layered timespan beyond the human experience of time. Physically layered in the earth. Slow, expansive and ever-moving.

Grieving : An intense internal feeling of sorrow. Often experienced after a death.

Modernity : The quality of being modern. New.

Mourning : The outward expression of grief. Often enacted through ritual.

Multirealism : A conceptual way of thinking about reality. Many realities, many possibilities, many different scales of living.

Aboveness : A heaviness of something above. A feeling of pressure when underneath something.

Sceno-cinema-installation: An installation that frames a scene. A spatial narrative. A performative atmosphere.

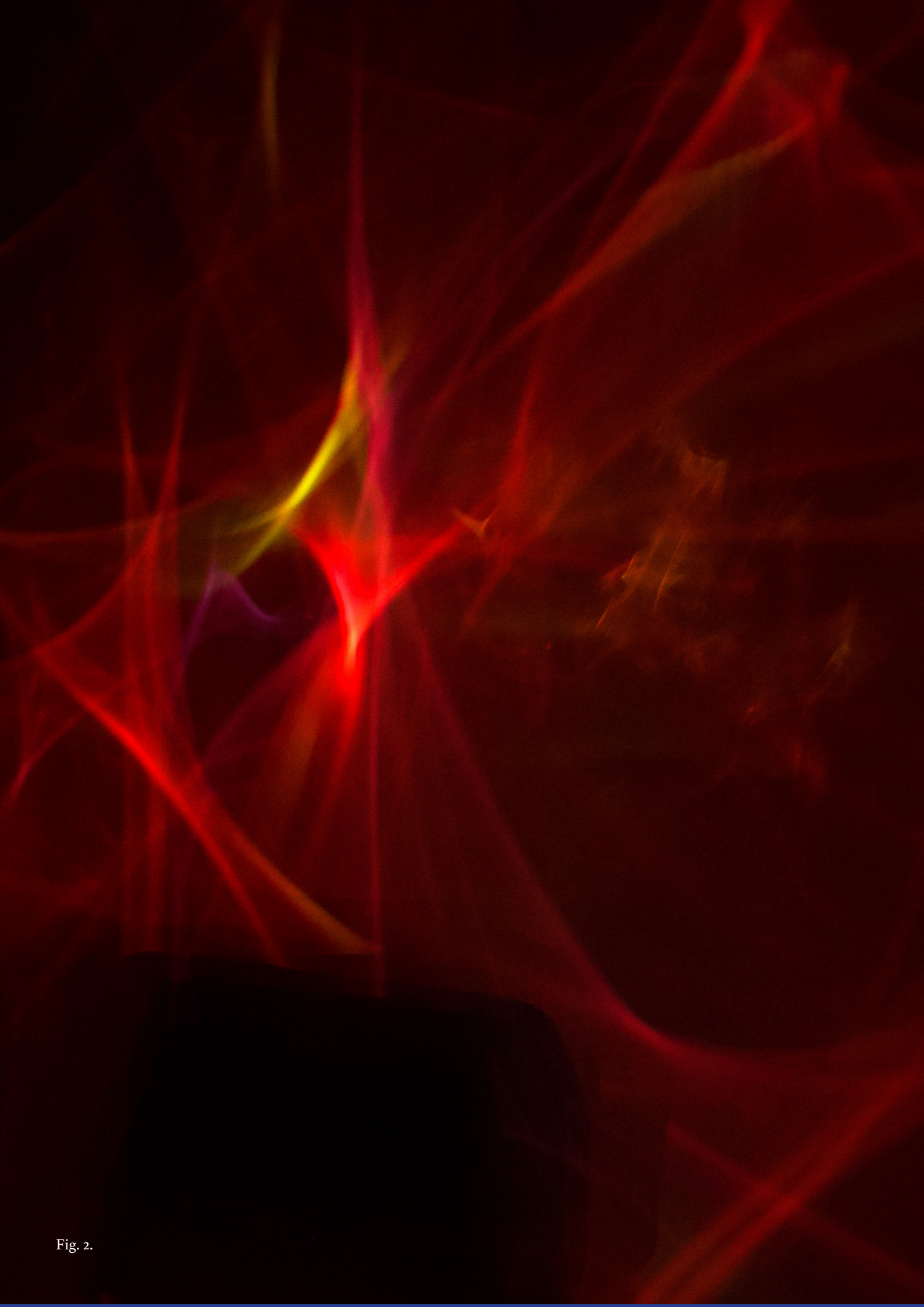


Fig. 2.

Introduction

*Deep histories tumble in unruly graves that are
bulldozed into gardens of Progress.*

Anna Tsing et al (6)

The climate crisis is an overwhelming and ever present reality. An ongoing event at the world scale, the looming grief of losing what is slipping away is either all-consuming or pushed away. *Refracting Spectres* suggests that recognising and processing this grief is a necessary step to move towards the mindset of 'what can we do now?'. Mourning is essential to the understanding of what is lost, in process of being lost, and what there is to lose. Only then can we understand how to move towards a reality that is kinder and more lively; to guide away from realities that head towards apocalypse.

Context

Apocalypse – it is a word that denotes a cataclysmic event on a world scale. Originating from Greek, apocalypse meant 'revelation', 'uncover' and to 'reveal'. As philosopher Sergio Fava explains in his book, *Environmental Apocalypse in Science and Art*, "Apocalypses focus truth into a single event, a single point in time, a single entity or person, a single regime, a single source of authority to the total exclusion of all others" (23). An apocalypse is a moment in time, and is seemingly always on the horizon. Centuries of doomsday prophets have put dates to the apocalypse, forecasting the time in which the world as we know it falls to ruin. The looming apocalypse dates were, and are, meant to incite change in society to combat the always approaching apocalypse. As doomsday dates roll over, the looming threat of apocalypse has lessened its affect in its repetitive use.

In his book, *Everything Must Go*, Dorian Lynskey explains that the apocalypse appears as six distinct scenarios: pandemic, bomb, impact, climate, machines and collapse. All but 'impact' (as in an impact with something from outer space) have the potential to be consequences of human actions. Lynskey references Australian philosopher Toby Ord, who has estimated, "the natural risk of an existential catastrophe within the next one hundred years [as...] one in ten thousand and the anthropogenic risk [...] as one in six" (10–11); putting in perspective the immense power humans now have on the planet. Humans are the most likely cause of an apocalypse, and even we know it.

The apocalypse is everywhere, in everything, and encounters everyone. A person can experience disaster through any media: books, movies, newspapers, TV, social media, podcasts, etc.. It confronts us through media, but also through lived-experience. Both fictitious and real disaster exist. In a hyper-connected world, there is a "numbing apocalyptic overload" (Lynskey 340) where the deluge of disaster in media consumes the consumers. Within Western society, people are often physically and emotionally separated from ongoing disasters. As Lynskey considers the events of 9/11, and the aftershock, "American cinema-goers were so saturated in images of collapsing landmarks that they experienced nauseating déjà vu, as if a monster from the realm of disaster fiction had suddenly infiltrated the real" (284). The cinema and fictional media created a disconnection between disaster and the real; but once it became a lived experience, fiction and the real crossed over.

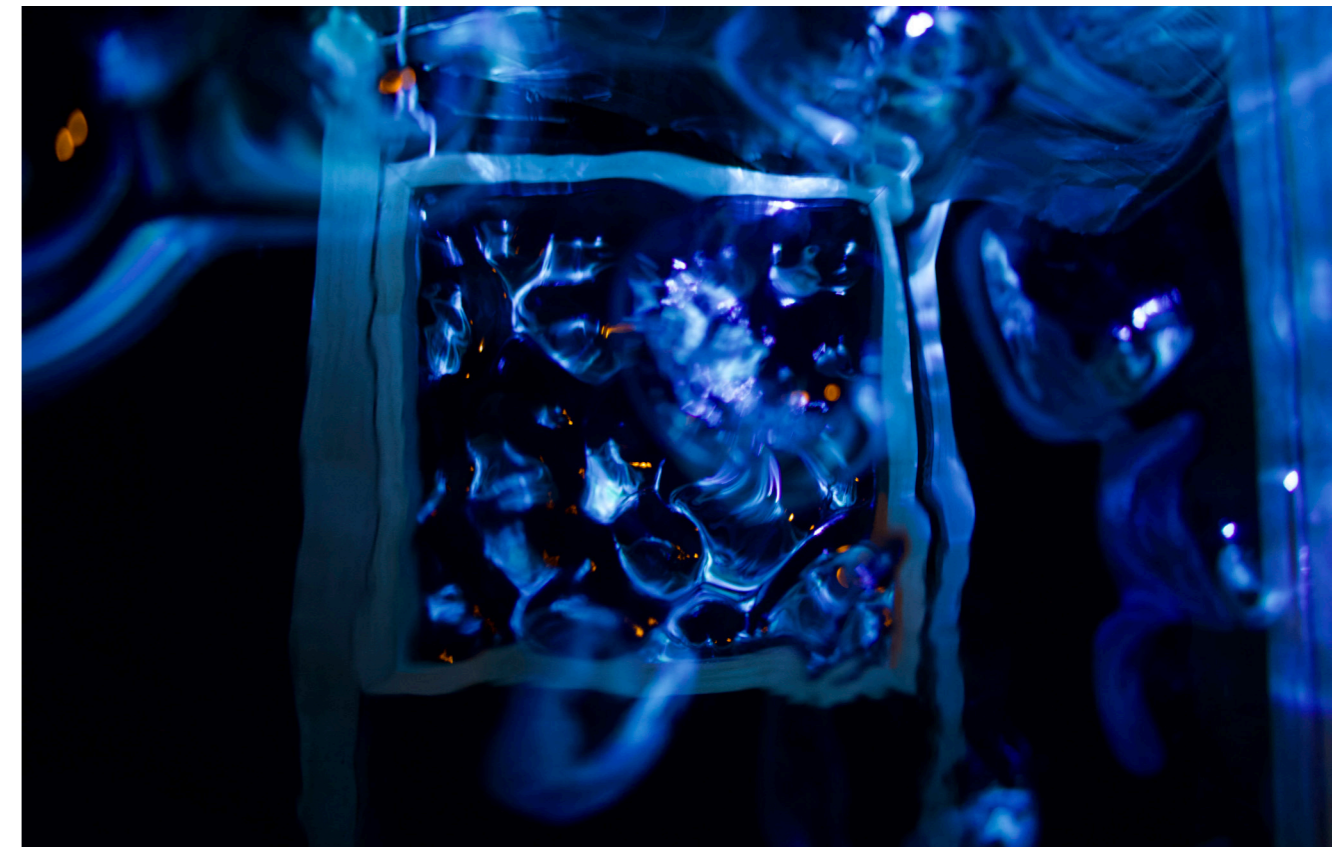


Fig. 3.

We are now living through an age of blurriness between fiction and the real. It could be said that climate change is an environmental apocalypse in motion. Climate change is very real, and already we live in a climate changed (and rapidly changing) world. Within the Western sphere, people living in privileged communities are often more sheltered from the everyday effects of climate change. Although those with privilege are not always fully experiencing the shifting of the climate, the media we consume is constantly ringing alarm bells. This alarmism can either be detrimental to action, or incite action. As Suvi Alt explains in her essay, "Spatialising the Environmental Apocalypse",

On the one hand, the widespread popular portrayal of environmental issues through the apocalyptic frame can be alarmist and counter-productive because its sense of doom paralyzes people. [...] On the other hand, it is argued that the sense of urgency that the environmental apocalypse narratives carry can mobilize people to take the necessary political action to address environmental degradation. (390)

Can urgency be pushed without the possibility of paralysis and inaction? Can we instead navigate out of this state of paralysis? An ever-looming sense of doom envelops us, to the point that the coping mechanism is to selectively forget and block out what is happening now, and what is to happen.

Exegesis Overview

In the following pages;

The Literature Review outlines the theoretical foundations of the design project. This section is an examination of: apocalypse media and fictions, deep time, cinema, and the process of mourning. It will also highlight scenographic, cinema, and art installation precedents that explore these concepts.

Methodology and Design Process looks into the development of *Refracting Spectres*. It defines the methods undertaken in this process to reach a complex and compelling experience.

The Outcome section documents and reveals the scenographic-installation.

In the Conclusion I reflect on the process and experience, and express any further thoughts.

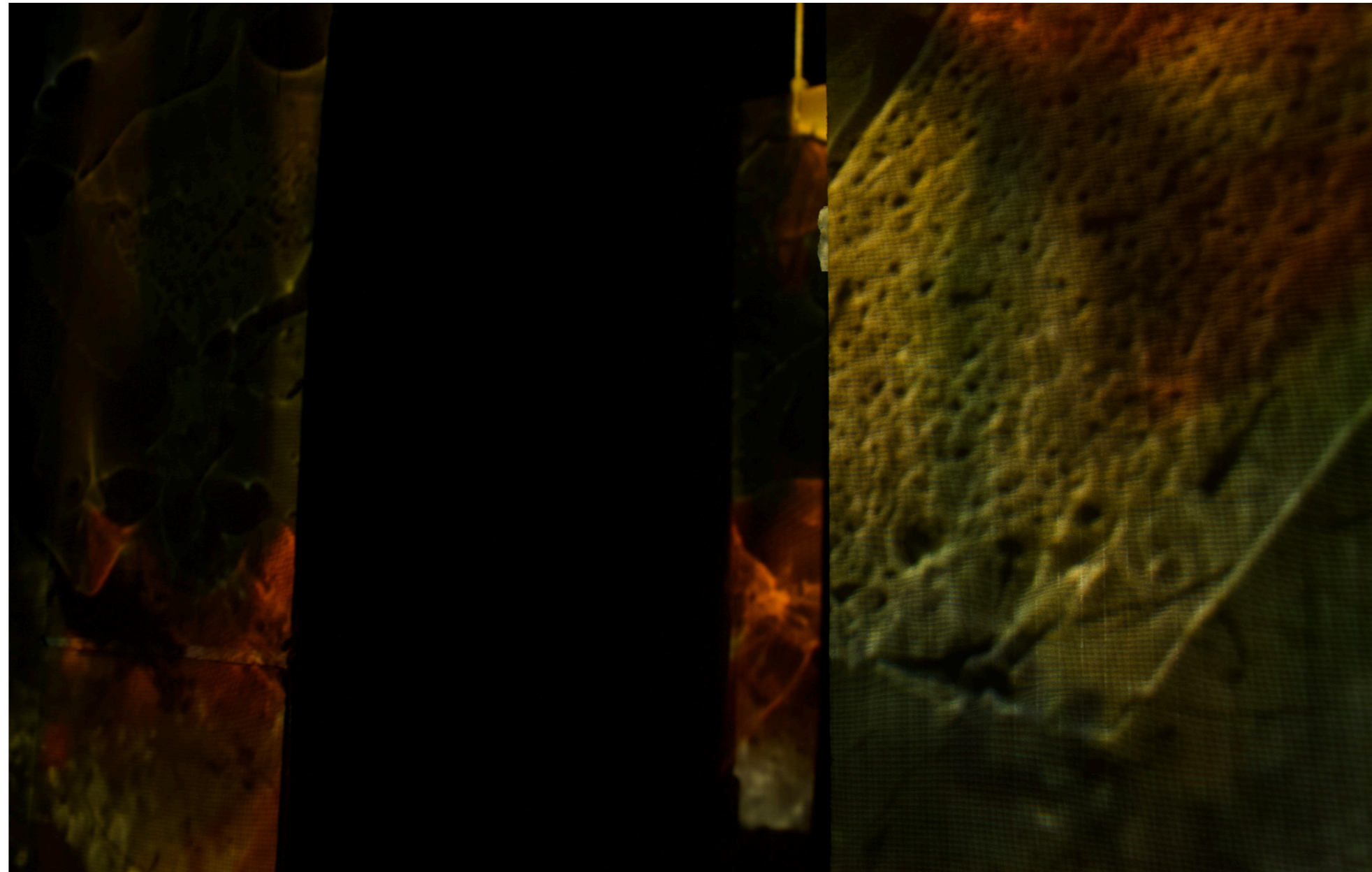


Fig. 4.



Research Statement

Inviting mourning of ongoing climate catastrophe through a scenographic exploration into multirealities, deep time, cinema and apocalypse.

Climate change is an apocalyptic event unfolding out in the present time, affecting all systems, human and more-than-human. The climate apocalypse is everywhere, it paralyses us. The cinema blurring into reality, fictional narratives bleeding into lived experience. In terms of a human life this event is seemingly slow. Yet, through geologic deep time this event is abrupt, sudden, and all encompassing. A deep time perspective therefore opens up a different way of thinking about the current catastrophe. It is a slower sense of time that can allow us to catch up our emotions to the present, creating a chance to mourn what is already lost.

Mourning is an act of grief, it recognises loss and ushers in a path to continue through. To mourn is to accept grief.

As a spatial designer, I have chosen to meld this research into a slow-cinema-influenced scenographic-installation to be experienced. This is a combination of specific approaches from: slow-cinema (film techniques, duration, set), scenography (performative, narrative, scene), and installation (sculpture, immersive). It cannot be narrowed down to one descriptor as it encompasses elements from each of these; forming a space to enact mourning.

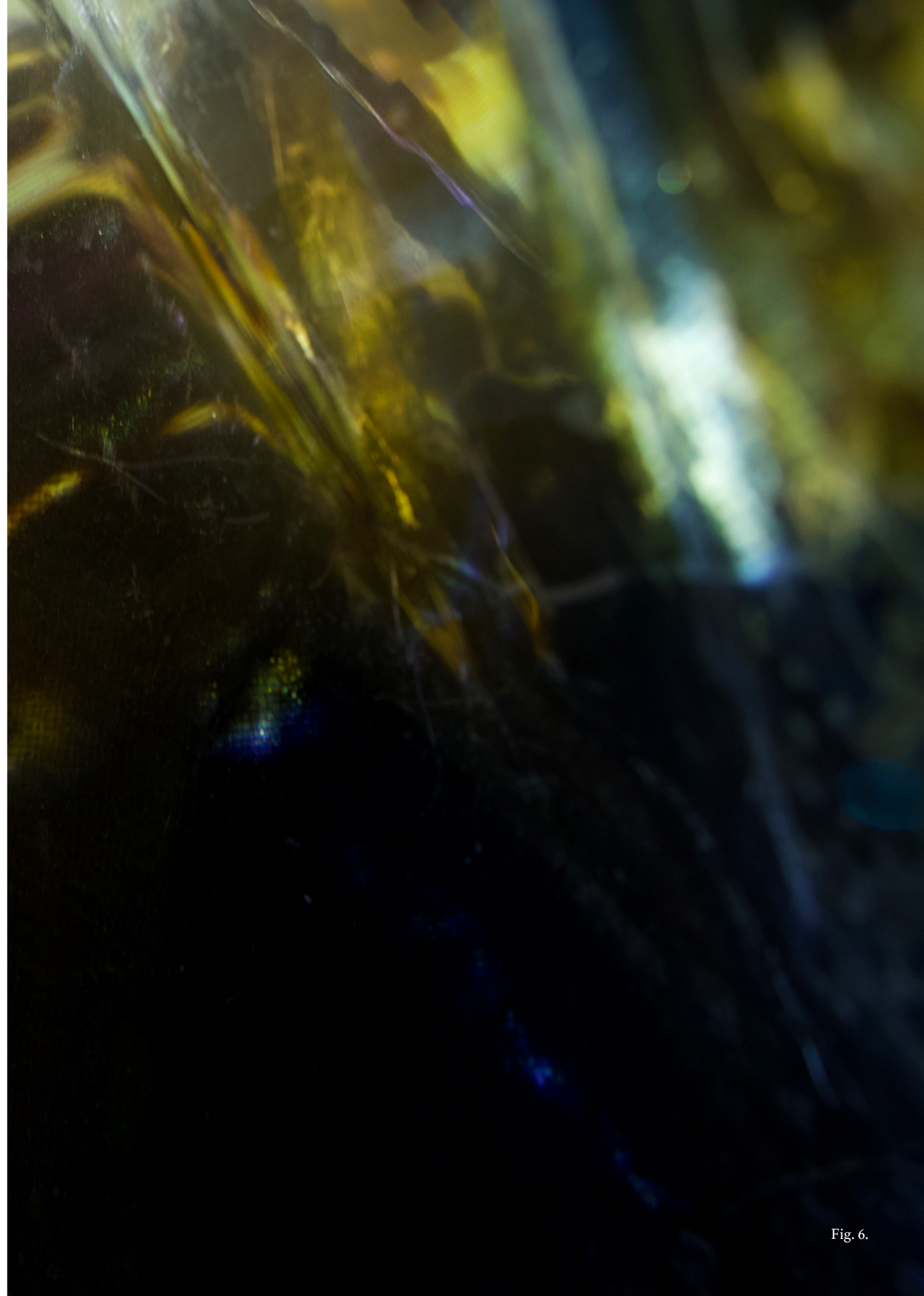
Refracting Spectres attempts to confront climate change paralysis through a facilitation of mourning in catastrophe and apocalypse cinema. It is not a solution, only an invitation to unfold mourning at the same time as the event being mourned. It is a constructed sceno-cinema-installation that shifts into a deeper, and different sense of time.

Literature Review

The Marrow

*There was a word inside a stone.
I tried to pry it clear,
mallet and chisel, pick and gad,
until the stone was dropping blood,
but still I could not hear
the word the stone had said.
I threw it down beside the road
among a thousand stones
and as I turned away it cried
the word aloud within my ear
and the marrow of my bones
heard, and replied.*

Ursula Le Guin. (Tsing et al. 11)



Apocalypse Film Fiction

Apocalypse emerges repeatedly within the medium of film. Dramatic narratives of catastrophe are tested out fictionally, and they imagine worlds that are inflicted with deluges of disaster. In *The Anthropocene Unconscious*, Mark Bould cites Amitav Ghosh as follows, "What fiction [...] makes possible is to approach the world in a subjunctive mode, to conceive of it as if it were other than it is; in short, the great, irreplaceable potentiality of fiction is that it makes possible the imagining of possibilities" (33). Possible apocalypses are walked through, experienced through a barrier of a screen, and are often survived or solved through heroic feats. Popular movies such as *WALL-E* (2008), *Snowpiercer* (2013) and *The Day After Tomorrow* (2004) (see Fig. 7) are examples of this, as they attempt to illustrate potential climate catastrophes, as well as potential aftermaths.

Yet herein lies an issue. Films take place within a compressed time frame – around 90 minutes to 120 minutes for mainstream movies – and only have that long to conceive a beginning, middle, and end. So either you focus on the aftermath, or you consolidate an apocalypse into 1-3 hours. As Lynskey points out, "Global warming may move too fast for the planet but it is too slow for catastrophe fictions. How does one craft a tight plot out of a crisis that unfolds over decades rather than months or days?" (373).

The Day After Tomorrow (2004) directed by Roland Emmerich is a particularly pertinent example of a compressed apocalypse. The premise of the film is that climate change has caused a drastic shift towards an ice age, the shift occurring in only a couple of weeks. The film revels in extreme imagery of modern cities being ruined by natural phenomena. As Alt explains, "apocalyptic environmentalism relies on a dramatic imaginary of the organized world descending into chaos as a consequence of a future catastrophe" (392). Film has the ability to construct visions of destruction without physical destruction occurring, and tends to do so on a huge scale to encompass the enormity of the situation. As shown in *The Day After Tomorrow*, "apocalyptic narratives tend toward a representation of climate change that pictures a uniform global catastrophe, while giving little recognition to spatial differentiation[...]" (Alt 394). Apocalypse is seen as a world event, and while this could be true, it obscures lived experiences of apocalypse. Generally, in apocalypse films, the depth of loss and grief is brushed over and never sunken into; it is an overview of an event not the mourning that occurs afterwards. The fictional world event in film can, and often does, descend into an aesthetic of the sublime.



Film has an obsession with the sublime; as Mary Louise Pratt describes in her chapter, CODA: Concept and Chronotope, from the book *Arts of Living on a Damaged Planet*, "Apocalypses are the territory of the poetics of the sublime, the merging of beauty and terror" (172). Film is a medium for entertainment, and therefore relies on sublime aesthetics to present: a cityscape being enveloped by a tsunami, a storm encroaching along a coast, a meteor hurtling towards Earth. These dramatic bird's-eye-views and long shots are meant to prompt both awe and terror (see Turner's paintings, Fig. 8). Rosalind Williams in her book, *Notes on the Underground*, mentions, "The emotion of sublimity is, above all, related to perceptions of immense scale. The immensity of time, as well as that of space[...]" (87). Cinema is an experience of immensity on a large screen, such that it is easier to sink into the narrative compared to other media. The apocalypse in the film – in its shortened time-span – becomes a reference point for future and current disasters as we 'live' through it on screen. Immensity also equals smallness. As we consume media of the sublime, that of catastrophe and disaster, we are overloaded with a sense of paralysis in light of our current world climate.



Fig. 7. *Apocalypse Overloading*. Elise McIntosh, 2025.

Fig. 8. *Snow Storm - Steam-Boat off a Harbour's Mouth*. J.M.W. Turner, 1842.



Fig. 9. *Doomed*. Tracey Moffatt and Gary Hillberg, 2007.

Apocalypse Fact

"Rose had read books, Rose had seen movies, Rose knew how this story would end." (Lynskey 13)
Rumaan Alam, *Leave the World Behind*.

Our experiences of apocalypse in film and media translates into our experience in reality. As we see world events of apocalypse over and over again, it both overloads and desensitises us to real catastrophes. Tracey Moffatt and Gary Hillberg's 2007 video work *Doomed* (FIG) is a montage of disaster films that engages with this overload of disaster. The 10 minute long video is caught in a loop of cinematic catastrophe, a never-ending cycle of fear; reflecting what is occurring in the 'now', an endless cycle of terror that numbs over time. Film itself is a medium that has become, as Susan Sontag describes, a way to "participate in the fantasy of living through ones' own death and more, the death of cities and the destruction of humanity itself" (qtd. in Lynskey 13).

Moffatt and Hillberg's work also touches on, what Nathan Andersen describes in his book *Shadow Philosophy*, a "tension between the horror of the experience and the casual ease with which it can be inflicted" (6). Disaster in film is removed from directly influencing our physical bodies, and therefore detachment allows for ease of the horror.

Kathryn Yusoff and Jennifer Gabrys express in their journal article, "Climate change and the Imagination", that sci-fi (I'll also add disaster fiction), "emerged from modernity and its cultures of catastrophism displayed a distinct fascination with disaster at moments in history when it became easier to imagine the end of the world than alternative futures" (520). This links back to conceptions of apocalypse, and explains that apocalypse and disaster fiction stem from real world events. There was an outburst of nuclear fallout fiction after World War Two; and after 9/11 an increase in societal collapse fiction. Furthermore, an ongoing and developing climate crisis has, and continues to influence environmental apocalypse fiction. It could be said that catastrophe and apocalypse fiction also form futures; these fictions instil a perceived knowing in how it all ends. As Richard Irvine asserts in his book, *An Anthropology of Deep Time*, catastrophe narratives "become as much a source of dissonance as means of collective consciousness" (168). These fictions become our futures, inasmuch that they are influenced by our disastrous past and present.

Our collective (un)consciousness is heavily influenced by the onslaught of rapid apocalypse media. Compressed apocalypses are out of alignment with the ongoing climate apocalypse event. The slowness and ongoingness of climate change loses its dread as it is not immediate. We live fast in a modern age, and the slow effects are blurred in our peripheral vision. Donna Haraway describes this in her book, *Staying With the Trouble*, as a refusal "to be present in and to onrushing catastrophe in time; of unprecedented looking away" (35).

Modern Time

Clock time, or modern time, is abstracted from earthly rhythms, leading to our disconnect with the ongoing climate disaster. We now live by the clock and the calendar, a system which created, and creates, structure for industrialisation and capitalism. This controlled time, “enables the production of a fixed present[...].” (Irvine 66–67). Alongside the speed and extensiveness of media, clock time fixes us in the present; only ever progressing and developing more ‘new’. Although media can be a deluge of climate crises and disaster, the disjuncture between contemporary activity and the resources we rely on lacks visibility. The waste is hidden from view in everyday Western living (Irvine 94). Following on from the previous section, a key reason of climate change denial and paralysis is that “catastrophe invests a sense of rupture in time” (Irvine 160). Since climate change is not an immediate event the ongoing catastrophe is yet to feel like a rupture.

Olafur Eliasson’s 2003 installation, *The Weather Project* (Fig. 10), confronts modern time and climate paralysis by holding a moment in time. An artificial sun hovers in the Turbine Hall at Tate Modern, suspended at sunset. It is a machine, the technical set-up creates an illusion of natural light and experience. The sun is an inverse illusion of the order Western civilisation has set up – the ‘natural’ is brought inside. As described by Fava, “Eliasson constructs a piece that is, in a first moment, phenomenologically pleasant, coherent, and soothing. In a second moment, it reveals what sustains that experience” (157). The assemblage of the natural phenomenon to the viewer unveils that they are experiencing something constructed. The mirrors on the ceiling reveal themselves, the participants and audience, as part of that construction of experience; the viewer can selectively forget they are in a manufactured environment. Eliasson is intrigued by this shift, from seeing an event, to seeing how the event came to be; “conceptually, once the shift had occurred, the second moment interfered irremediably with the return of the first” (Fava 158). Although observers can choose to selectively forget, the shift never leaves from the subconscious.

Eliasson puts focus onto perception. Fava quotes Eliasson, “[T]he reason you [the artist] want to show the machine is to remind people that they’re looking. At certain time you can sit in a cinema and become so engaged with the film that you kind of join that level of representation” (158). Eliasson wants to constantly reveal what people are looking at – bringing to the forefront the viewer as the subject – and the connections and disconnections between subject and object.

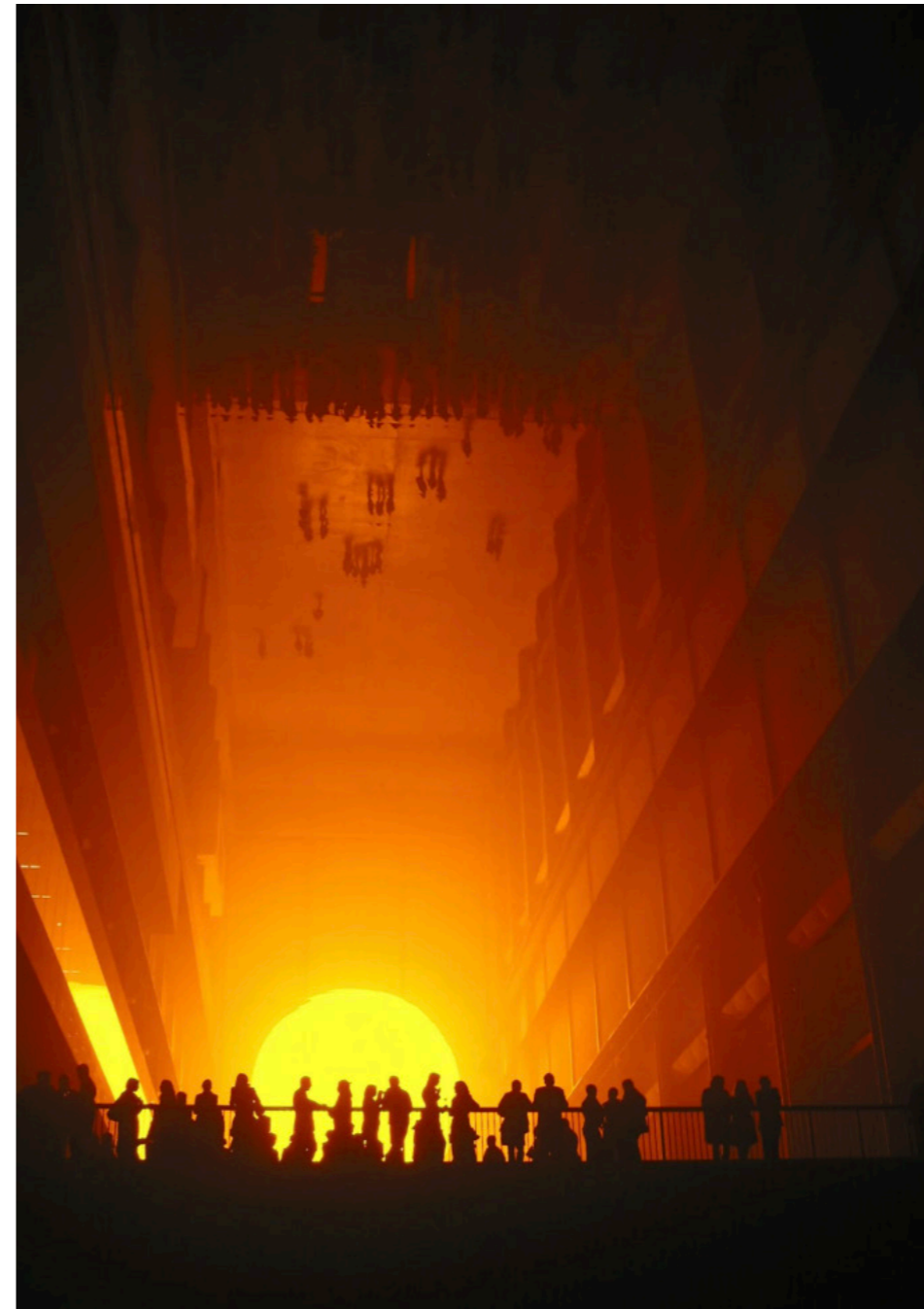


Fig. 10. *The Weather Project*. Olafur Eliasson, 2003.

The Weather Project, articulates connections and disconnections, not only through its ‘machine’ construction, but also through the suspension of time; so that, in Eliasson’s words, artworks “have an affinity with time — they are embedded in time, they are of time” (qtd. in Fava 172). The manufactured sun holds the moment, allowing the spectators, and the participants, to acknowledge all that it is constructed of. It is a reflection of a modern way of living that is hidden in the peripherals; a time in which climate change is lurking within the construction of the modern. A change of experiencing time needs to happen for rapid action against climate change to occur. Paradoxically, a slow deep time perspective is a potential pathway for this need for immediate action.



Fig. 11. *Imaginary Explosions, Episode 1, Eyjafjallajökull*. Caitlin Berrigan, 2018.

Deep Time

Our living in the 'now' is based on clock time – one that is extracted from deep time – and “[r]ather than understanding ourselves entangled in relationships that stretch through time, we write ourselves out of the story as best as we can” (Irvine 187).

Deep time is a term originating from geology, Referring to the long timespan of regeneration and destruction of the Earth’s surface. It is an understanding of layered time through physical means (stratigraphy), and also conceptually of the past and future extending far beyond the life of a human. The term, deep time, was first conceived during the 18th century. It is thought that the geologist James Hutton (1726-1797) named the concept through many years of observing and speculating on the layering of rock. Contrary to popular belief at the time of rocks being unchanging and only being thousands of years old, Hutton’s proposal of deep time stretched this to millions, even billions, of year beyond. As Irvine explains, “Hutton presents a view of the earth as a “beautiful machine”, the exterior of which is being subjected to decay and wear through heat, cold, the action of water, and gravity; yet the timescale of this decay and wear is such that it becomes near impossible to observe it in action” (28). It is important to note here the wording of ‘beautiful

machine’. Deep time as a concept was developed during the Age of Enlightenment by Western scientists, meaning it was deeply intertwined with “considerations of human utility” (Irvine 30). It was used to justify the suitability of the Earth for humans (in this case the West). Deep time is only one possible pathway into slower time; several indigenous cultures hold centuries of slow, relational, time understandings. Although deep time holds a history of anthropocentric ideals, I use the term ‘deep time’ as it is deeply connected with rock, earth, and layering; The geology of the Earth informs deep time understandings.



Fig. 12. *Imaginary Explosions, Episode 2, Chaitén*. Caitlin Berrigan, 2019.



Fig 13. *Imaginary Explosions, Episode 3, Artifice*. Caitlin Berrigan, 2023.

Caitlin Berrigan is an artist that works with deep time and she attempts to communicate within it. Berrigan's multidisciplinary project, *Imaginary Explosions* (Fig. 11-13), negotiates geologic deep time with human trauma and modes of communication through feminist perspectives on technology. As part of the project, a series of video works explore different geologic locations, interweaving fictional narrative with documentation and affective embodiments. In an interview titled "Fault Lines and Fractures" with Sasha Englemann, Berrigan expresses that deep time, (within her accompanying book) "is both the subject [...] also the concept at the root of "becoming mineral." Both extend the idea that in our individual human shapes we exist alongside other forms and materialities of time that extend before, after, and through us" (Berrigan). This extends the concept of deep time further into a more plural way of existing; Irvine also asserts that because the Earth is constantly in a state of flux,

An encounter with deep time, then, is a recognition of both emplacement and displacement. To ground ourselves, knowing that that ground is shifting. (Irvine 56)

Therefore, deep time thinking recognises the expanse of time beyond the human, but also that time means nothing is stagnant. Rocks are not stationary, but are in a constant state of decay – along with our bodies – and will be brought back into the folds of the earth to reform..



Fig. 14. *Look Then Below*. Ben Rivers, 2019.

To be 'in' the rock is to be in the body of the Earth; and the underground is an intrinsic part of being human. It is both a place of safety, and mystery; of terror and of awe. As Williams says, "If we imagine going underground, we not only imagine an environment where organic nature is largely absent; we also retrace a journey that is one of the most enduring and powerful cultural traditions of humankind, a metaphorical journey of discovery through descent below the surface" (8). The underground as Hell, a place for the dead; and the underground as origins – our beginning as human cave-dwellers.

Caves themselves, are places where deep time is an immense presence that cannot be ignored. Being in rock feels like a different reality; time moves slower than on the surface; your body is more in tune with its surroundings. Ben Rivers's 2019 film, *Look Then Below* (Fig. 14), is a study of the Wookey Hole Caves in Somerset, England. As a finale to a trilogy, this film looks into the future and imagines an altered reality beneath the surface. It both calls back to our cave-dwelling history, and calls to a future cave-dwelling species within a climate changed world. In Rivers's film, the underground is both a suspended reality, and a recognition of deep time that is not still. Time is longer, stratified, and layered within the walls. Underground photographer, Wayne Barrar, was interviewed by Julieanna Preston for the article, "Subterra", in which he asserts a connection between the cinema and the underground: "When people go to the movies they are expecting to suspend reality. When they experience or view the underground, their senses bounce around; people are stimulated by what appears normal but isn't" (38). A person's reality is shifted under the earth, an unexpected move into deeper time.

Multirealities

To think in only one reality is to exist in a very set perspective. As Natalie Osborne has clearly asserted in her article, "For Still Possible Cities", "The monorealism that dominates Western thought makes an apocalypse the apocalypse. Multirealism makes apocalypses possible, and while that is depressing in its own way, plurality means possibilities" (148). Monorealism causes a cycle of dread for the future. Instead we should embrace multirealism, to know that there are many realities to exist in. Karen Barad asserts in her chapter "No Small Matter" (in *Arts of Living on a Damaged Planet*), that "Time, like space, is subject to diffraction, splitting, dispersal, entanglement" (106). This addresses both multi-futures as well as multi-perspectives – a tangled weave of possible futures is lived in differently depending on the perspective. Every being experiences different knots in time, different threads – and these cross over and tangle.

Although heavily religious and depicting a linear narrative, *The Garden of Earthly Delights* (Fig. 15), created around 1490-1500 by the Dutch painter, Hieronymus Bosch, is an open world of multiple beings intertangling. It is a triptych, depicting scenes of Paradise, Eden and then Hell. The name, *The Garden of Earthly Delights*, was ascribed to this painting around the 19th century. The original name is unknown, in fact, a lot about the painter, Bosch, is unknown; allowing for art historians to formulate many different interpretations of the painting. Upon the triptych panels, lie worlds within worlds. There is an inherent chaos of activity in the landscape, and many symbolic connections that have been made over the centuries. It is a tangled web of meaning, a labyrinth, that clearly has changed context over 500 years. As Rebekah Rhodes describes in "Contemporary Adventures with The Garden of Earthly Delights", "Although Bosch's storyline may be implacably linear – from sin through to punishment in hell – the visual effect of *The Garden of Earthly Delights* is that of an open world: the viewer's eye and imagination are actively invited to wander" (Rhodes). And as Karen Barad clarifies in the article "Troubling Time/s and Ecologies of Nothingness", "(even) linearity is susceptible to radical reworkings from within" ('Troubling Time/s' 68).

There have been numerous interpretations and reimaginings of this triptych over the past two centuries. Philippe Quesne's 2023 performance, *The Garden of Delights* (Fig. 16), uses Bosch's work as a starting point to travel through, as he describes in an interview with Éric Vautrin, "vast historical, aesthetic, intellectual, spiritual and psychoanalytical territory ... among others!" (6). *The Garden of Delights* is a retro-futuristic epic, one that floats in a space of transience and



Fig. 15. *The Garden of Earthly Delights*. Hieronymus Bosch, 1490-1500.



Fig. 16. *The Garden of Delights*. Philippe Quesne, 2023.

communal creation of utopia. A small community of people seemingly try to craft a utopia in “a space of possibility” (Quesne 9). As Quesne explains, Bosch’s painting “belongs to an era of uncertainty” (8) where the Middle Ages is heading into the Renaissance. It then holds similarities to the period of uncertainty we live in now. The bizarreness and inherent fantasy is a space of possibility. Quesne uses the stage as a laboratory, where the surroundings influence the performers. He often uses text, found objects, plastic and papier-mâché to form the landscape of performances, he doesn’t hide the construction of the set; in fact, he reveals it. Quesne explains that his scenographies are, “the sites of an ending and also of a kind of initiation, they often allow for this double reading” (8). The end is not an end – but a possibility.

Possibilities, and therefore realities, are endless. In talking about the entanglement of these realities, Barad says that “In an undoing of the inside/outside distinction, it is undecidable whether there is an implosion of otherness or a dispersion of self throughout spacetime mattering. Hence, matter is an enfolding, an involution: it can’t help touching itself” (“Troubling Time/s’ 80). Realities in time cannot help but touch themselves and each other. Perspectives of differing scales brush up against each other: deep, shallow, miniscule, immense, human, and more-than-human. Multirealism fused with deep time thinking opens up new ways to pull out of climate change numbness; to explore realities that touch with our own individual realities.



Fig. 17. *The Paradise Institute*. Janet Cardiff and George Bures Miller, 2001.

Cinema

Cinema, the actual physical encounter with film within a theatre, is a shift in reality. This shift, or view, on reality is frequently talked about in relation to Plato’s Allegory of the Cave. Within Plato’s allegory, there is a fictional conversation between Socrates and Plato’s brother Glaucon.

To summarise, Socrates describes a cave where people have been chained down so they cannot move – forced to only face one direction. There since childhood, the wall of the cave is all their vision has ever known. Behind them is a low wall, and beyond that a fire that illuminates the space. Between the wall and the fire, workers move to and from the entrance of the cave, carrying all sorts of equipment. Some talk amongst each other, others are silent. The chained people only see the flickering shadows of passersbys, their own shadows, and the shadows of one another. If a prisoner were to be freed from the chains, they would naturally be inclined to look behind them, towards the light and the cave entrance. But the glare of light would be agonising, and they would not immediately be able to see the realities beyond; realities that are far different than the shadowy phantoms they have grown up seeing and believing. (Andersen 35–37)

The cave can be likened to a cinema – a dark, enclosed space where we all face one singular screen, with the projection coming from behind. Andersen quotes the director Alain Resnais, “The prisoners compare to the audience, seated in the darkened theater on cushioned seats, not captive but captivated by the spectacle unfolding before them” (49). When we watch a film in a cinema, on some level we believe in the reality on the screen.

The 2001 audio and visual installation *The Paradise Institute* (Fig. 17), created by artists Janet Cardiff and George Bures Miller, is an illusionary, sensory experience of a cinema. Walking into the installation you sit within the seats of the theatre and look over a hyper-perspective balcony towards the diorama screen. With headphones on, the experience of watching the film is layered with audience members rustling and people talking. Realities cross over, the cave-cinema’s illusion is not broken, but rather enhanced by the ghostly audience members. As Sarah Keller puts it in her book *Anxious Cinephilia*, “The spectator is aligned with the apparatus of cinema: though she may be swept away in a film, she has the power to start and stop it, and she is both reflected in it and reflects it” (100). The sound of the whispering audience is as much a part of the illusion Cardiff and Miller have set up as the actual participant of the installation. The film, the cinema, and the audience form a reflection of each other.

In the article, "Cinema and its Ghosts", Antoine de Baecque and Jousse Thierry interview the philosopher Jacques Derrida, who says that the viewer watching a film projects something of themselves onto the screen (27). All of these 'ghosts' amalgamate into a collective; but we should carefully address this as a communal representation. Cinema, "calls up collectivity, communal spectacle and interpretation. But at the same time, there exists a fundamental disconnection: in the movie theater, each viewer is alone" (de Baecque et al. 29). So, although the cinema is a collective space for watching, it is also inherently an individual experience. It is neither entirely individual nor communal though, as each still influences the other. Derrida calls the cinema a "singularity" (de Baecque et al. 29) where social bonds are unwoven, dislocated, and become different. This undoing that occurs within the cinema means that we also slip into a spectral atmosphere.

The cinema is a space of spectres, a haunted interior of projections. As Derrida asserts, "Every viewer, while watching a film, is in communication with some work of the unconscious that, by definition, can be compared with the work of haunting[...]" (de Baecque et al. 26). Cinema is a space to converse through, and with, spectral images. Utilising projection, the play of light on surfaces, and floating dust particles, hints at a passage into a ghostly reality. It is a carefully constructed scenography, the fabricated, spectral, atmosphere magnifies the experience of the film on the screen. Following this, cinema/film is "grounded in reality while also mysteriously akin to memory, imagination, hypnosis, or dreaming" (Keller 26). It is an unconscious, dreaming, memory capsule, separated from the 'real' world in a way that changes our perception and time within it.

Film theorist Laura Mulvey explains that cinema and film are "necessarily embedded in passing time [and] . . . come to be more redolent of death than of life" (qtd. in Keller 25). This is especially addressed within Tsai Ming-liang's 2003 slow cinema film, *Goodbye, Dragon Inn* (Fig. 18). The 82 minute long film holds only a few moments of dialogue between inhabitants of a dilapidated – and somewhat ghostly – cinema at its last screening. The theatre is playing the 1967 film *Dragon Inn* in its last moments. It is a rainy night, drops of water trickle inside the building and land in buckets. The lights are glossy and sparse, the atmosphere is dark and grim. The grief of losing this place is felt through the quietness of the theatre caretakers, and is broken up with moments of humour as audience members wander around (the theatre is a known gay cruising spot) and watch the film. Tsai, the director, mentioned in an interview with *Reverse Shot*, "happiness and sadness are really parts of the same thing, so often the absurdity of a situation makes it seem

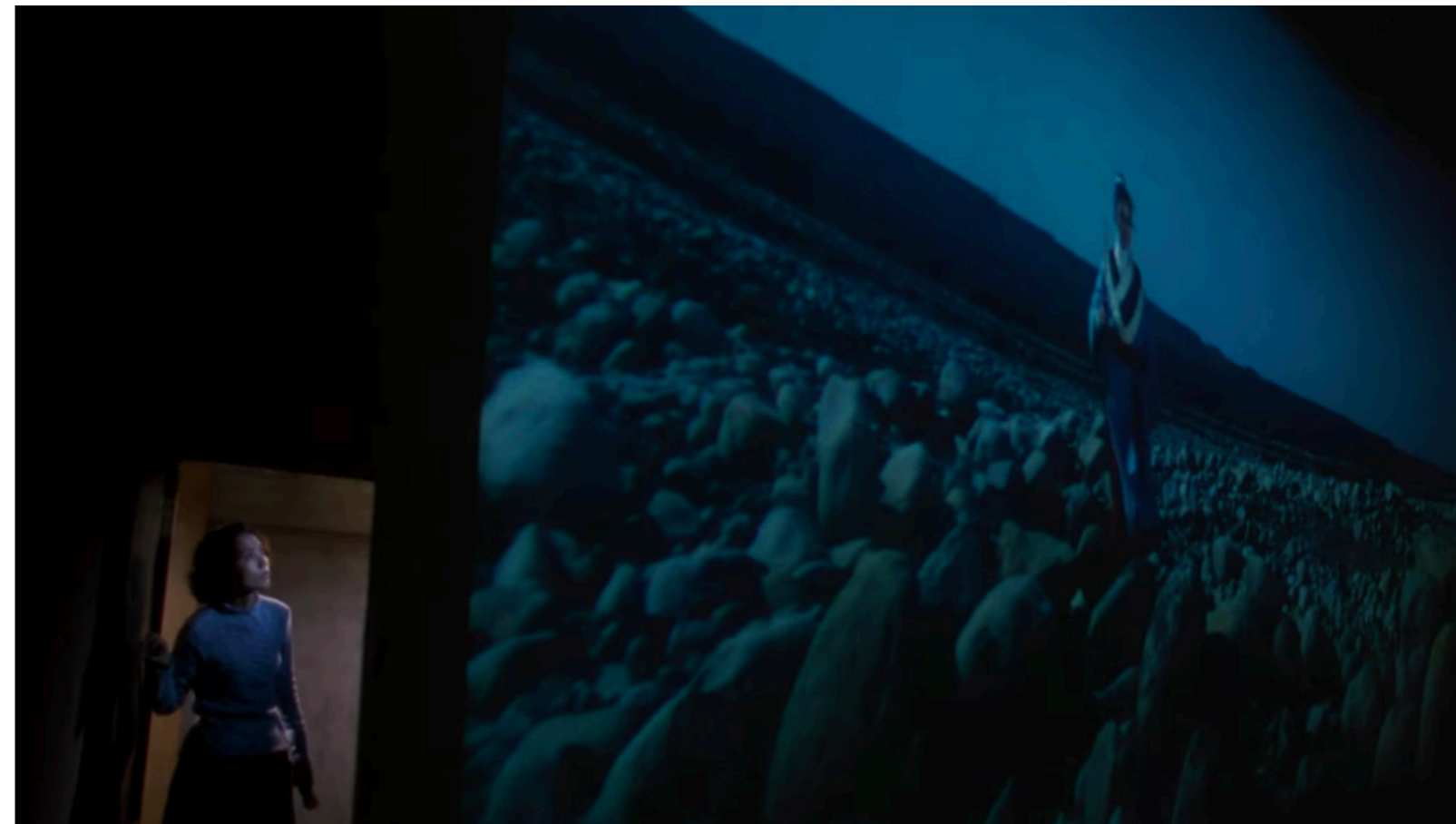


Fig. 18. *Goodbye, Dragon Inn*. Tsai Ming-Liang, 2003.

funny, but the core of the moment is really quite sad" (Tsai). There is a duality of emotions when you soak in this film. As Tsai remarks, the heart of the film is sad, yet there are moments that are tinted with joy, melancholy, confusion and curiosity.

Tsai has a fascination with the medium of film, and the cinema itself. He says that entering a theatre,

has a quality of crossing across time and from the human realm to the non-human. Whenever you enter a theater you are actively giving up your own "real" time. (Tsai)

Cinemas are ghostly architectures that actively change everyday-human time. *Goodbye, Dragon Inn* is both a mourning of the cinema, and a mourning of the film itself. In Tsai's words, "Film can keep something eternal. It saves the youthfulness, but it's also dying as well. Whatever you film is slowly dying at the same time. Whatever you film is no longer there" (Tsai).



Fig. 19. *Duelos (Mourning)*. Clemencia Echeverri, 2019.

Mourning

To think about death is to also think about grief. Grief, by definition, is intense sorrow, an emotion often evaded to prevent ourselves from harm; yet it is an intrinsic part of being. To grieve is to live. To grieve openly is to act upon it. To mourn is to show sorrow and often follow rituals of mourning. Haraway expresses that, "Mourning is about dwelling with a loss and so coming to appreciate what it means, how the world has changed, and how we must ourselves change and renew our relationships if we are to move forward from here" (38). Furthermore, as architect Sabina Tanović paraphrases Sigmund Freud in her book, *Designing Memory*, "... mourning was necessary for the grief-stricken to avoid melancholia when one can lack a point of focus, unable to put loss into perspective." (96) To understand how to construct a future is to first live through the grief and dread. This especially links to climate paralysis and dread as it is entirely possible that, "many worlds are [already] closed to us, many futures are not in the becoming—too much damage has been done, too much lost, too many lifeways extinct or already living ghosts" (Osborne 148). To move through climate paralysis is to mourn, to process, and emerge through grief – while acknowledging it will always be there.

To acknowledge is to remember, and one of the collective gestures to remember takes place as memorials. Tanović describes a memorial as a space that "addresses the facilitation of mourning instead of only representing loss" (9). Memorials are physical, tangible spaces where grief,

mourning, and remembrance are engrained in their architecture. They are also archives, recording moments in time where tragedy has occurred. Often, public memorials are created by national organisations such as councils or government. This also can mean that these disastrous events are seen through the eyes of the people in power. Therefore, architectural spaces of mourning are political, and this should not be forgotten when discussing such spaces. Memorials are "carriers of cultural memory [...] and are therefore considered immediate agents in the construction of identities" (Tanović 79–80). Memorial spaces tell us what we should mourn collectively, just as spaces such as graveyards and mausoleums are for individual mourning. This is similar to a cinema, an architecture created to hold collective cultural memory and curated to hold particular atmospheres of engagement. Clemencia Echeverri's 2019 installation work *Duelos (Mourning)* (Fig. 19) communicates a sense of communal mourning in response to the seemingly endless tragedies in Columbia. It directly links to slow-moving excavations in the area of the Escombrera, Comuna 13, Medellín, where dozens of 'disappeared' people are thought to be buried in a landfill. The video installation confronts viewers with a sense of heaviness and enormous scale. It is an endless cycle of grief, as at that point in time (and still now) people are mourning the loss of loved ones, and are still suspended in the ongoing-ness of Columbia's political climate that refuses to acknowledge it.

Haraway acknowledges the feeling of grief as also being "a path to understanding entangled shared living and dying; human beings must grieve with, because we are in and of this fabric of undoing. Without sustained remembrance, we cannot learn to live with ghosts and so cannot think" (39). Haraway highlights the importance to grieve with. In the context of climate change, deep time and apocalypse, grieving is a process to work with to reach the possible futures we want to nurture. As Barad states, "Re-membering is a bodily activity of re-turning" (*Troubling Time/s'* 84). Remembering and mourning loss within a climate-changed world is to re-turn to it. To return to live with ghosts and spectres (Haraway 39), to dwell underground within the folds of the earth, and to mourn collectively – all through an understanding of the apocalyptic narratives we surround ourselves with.



Methodology and Methods

*I want to stay with the trouble, and the only way
I know to do that is in generative joy, terror, and
collective thinking.*

Donna Haraway (31)

Methodology: *Research Through Design*

Refracting Spectres is aligned with a 'research through design' methodology. This highlights the inherent quality of iterative and generative design processes that are, itself, a way of researching. In the article, *Research Through Design*, Eli Hatleskog identifies that this particular methodology, "is a designerly response to practice-led research, through which knowledge can be developed via the person, the process and or the product" (13). This methodology is a way of developing knowledge through the creation process of a design. Therefore, the methodology aligns with the research question of this thesis as it allows for phenomenological and experiential ways of researching and learning. Creating a physical installation, addressing film narratives of catastrophe – and mourning them – is not a clear solution to climate change paralysis. Instead, the installation embodies my research into these notions and "seeks to work between tensions, not necessarily to solve them" (Hatleskog 12). This project cannot fully 'solve' a problem as it is more of an invitation: to mourn, to observe, and to encounter a cinema of catastrophe in a different, deep time perspective.

Furthering this, Jillian Hamilton and Luke Jaaniste conclude in their article, *The Effective and the Evocative*, that "knowledge is a broad enough term to include the knowing-of the world that is experienced through evocative artefacts" (11). The finalised design of this project acts as an evocative artefact that imparts embodied knowledge through the experience of it. Together, with a research through design approach, the process of developing *Refracting Spectres* is as important as the finalised artefact. It reveals the connections and disconnections made between concepts through the development of the projection, the physical space, and the materiality.

The process was non-linear, a continuous act of exploring concepts, developing, revisiting, and developing further. This allowed for both the design and the theory to guide me towards a complete installation, rather than a set process restraining it.

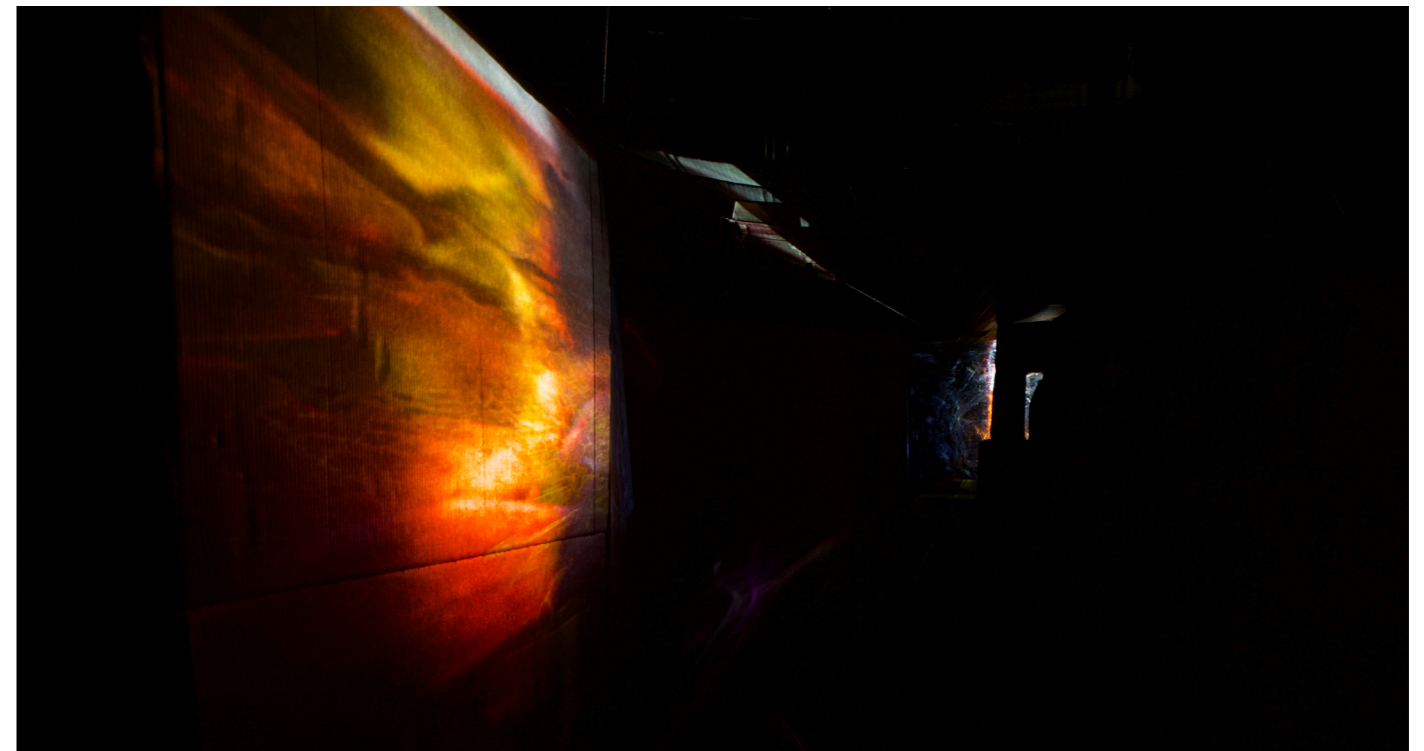


Fig. 21.

Methods:

The methods used in this project were all derived from three main practice areas: film and cinema, scenography, and installation. As these are all distinct areas, I have chosen to coalesce them into a practice that suits this project and its complexity. A sceno-cinema-installation.

Film and Cinema

To begin this research project in 2025 I immersed myself within apocalypse/disaster video media. It was this initial (and on-going) absorption that led to the project having a heavy focus on film and the physical structures that celebrate it – cinemas. This focus was also influenced by the affect films have on constructing modern culture, and how the apocalypse and disaster is conceived in a shared imaginary. As James Lastra points out, cinema has an ability "to emblemize in the most compelling and visceral way, the frequently violent shifts in social and cultural life, especially the newly possible (if not inevitable) forms of spatial, temporal, and sensual restructuring" (qtd. in Keller 139). Therefore, a valid way to explore mourning of disaster and apocalypse is to look towards the cinema (and the films they show) as a space of shifting – a space where audiences are compelled to be part of the narrative on the screen.

Thomas Elsaesser and Malte Hagener also describe the compelling nature of cinema in their book, *Film Theory: an Introduction through the Senses*:

In the cinema, the specific set-up of projection, screen and audience, together with the 'centring' effect of optical perspective and the focalising strategies of filmic narration, all ensure or conspire to transfix but also to transpose the spectator into a trancelike state in which it becomes difficult to distinguish between the 'out-there' and the 'in-here'. (77)

The cinema is an architecture of illusion and immersion. All attention is drawn forwards towards the screen, yet it is from behind where the image source originates. Throughout the development of this design project, projection has become an important element of investigating film and its illusions. This is to reverse how we watch films, especially disaster and apocalypse genres, and look into the source instead.

Scenography

Scenography is another practice that is intertwined into the development of *Refracting Spectres*. In *Beyond Scenography*, Rachel Hann defines scenography as being, "a crafting of place orientation" (69). Traditionally, scenography was the designing of theatre stages, but in recent times the definition of scenography has expanded to encompass space beyond a stage. Like Hann mentions, scenographers craft 'place atmospheres', and orientates the audience, participants, and actants within it. This method of immersion is especially significant in creating a space to invite mourning,



Fig. 22.

as atmospheres are inherently linked to emotions. Furthering this, Lars-Åke Thessman comments in his book, *Time Here Becomes Space*, that,

to influence and be influenced by scenography is to be in a relational exchange; an exchange where our roles alter as the environment changes, and our presence can impel the setting to transform and appear in new, unexpected ways. (7)

In using scenography as a practice, the development of *Refracting Spectres* is influenced by grief, and it works towards creating an atmosphere that prompts mourning. But the design does not create the atmosphere, it is the audience in relation to the design that forms a feeling of grief. Scenography does not aim to shape things, it aims to facilitate relationships that form phenomena and atmospheres (Hann 171).

Installation

In many ways, installation art/design holds many similarities to scenography, yet is distinctly different. Installation design aims to use space to immerse the audience, it "surrounds the central position of the viewing subject, contrary to the usual disposition of object(ive) display at museums" (Fava 159). Often in contexts such as galleries and museums, this type of immersion reverses the previously traditional way to view art. With the audience inside or part of the art, there is a different, sensorial way to connect with the concepts of the work. Installation design is a key way to use existing spaces to alter perspective; an important shift needed in *Refracting Spectres*.

Eliasson is an artist who distinctly uses an installation practice to change the participants perspective, to "see the whole set-up with the artefact, the subject and the object" (qtd. in Fava 157). To see the 'installation' part of installation art is to reveal the constructed nature of it. To be immersed, only to then disturb the construction and demystify. The reveal, or second moment, is a clear way to show the relationship of apocalypse media to lived experience in this project. An installation that creates wonder, awe, a sublime feeling; to then unfold itself into a constructed existence to mourn. A physical reveal of the multiple realities intertwining.

Sceno-cinema-installation

These practices by themselves converge into what I have termed a sceno-cinema-installation. Linking scenography, cinema and installation together is the idea that each practice aims to, set out a space “as spectacle for the eye of a spectator” (Elsaesser and Hagener 21). Whether it is a crafting of atmosphere, a framing of a narrative, or an immersion of the body and senses – each practice engages with space and its influence on the viewer/participant/audience. In creating *Refracting Spectres*, I want to “orientate and situate the encounter as an act of staging, of theatring” (Hann 12). This encounter is with mourning; its place in a world where the mourning needs to happen alongside the ongoing events causing the grief.



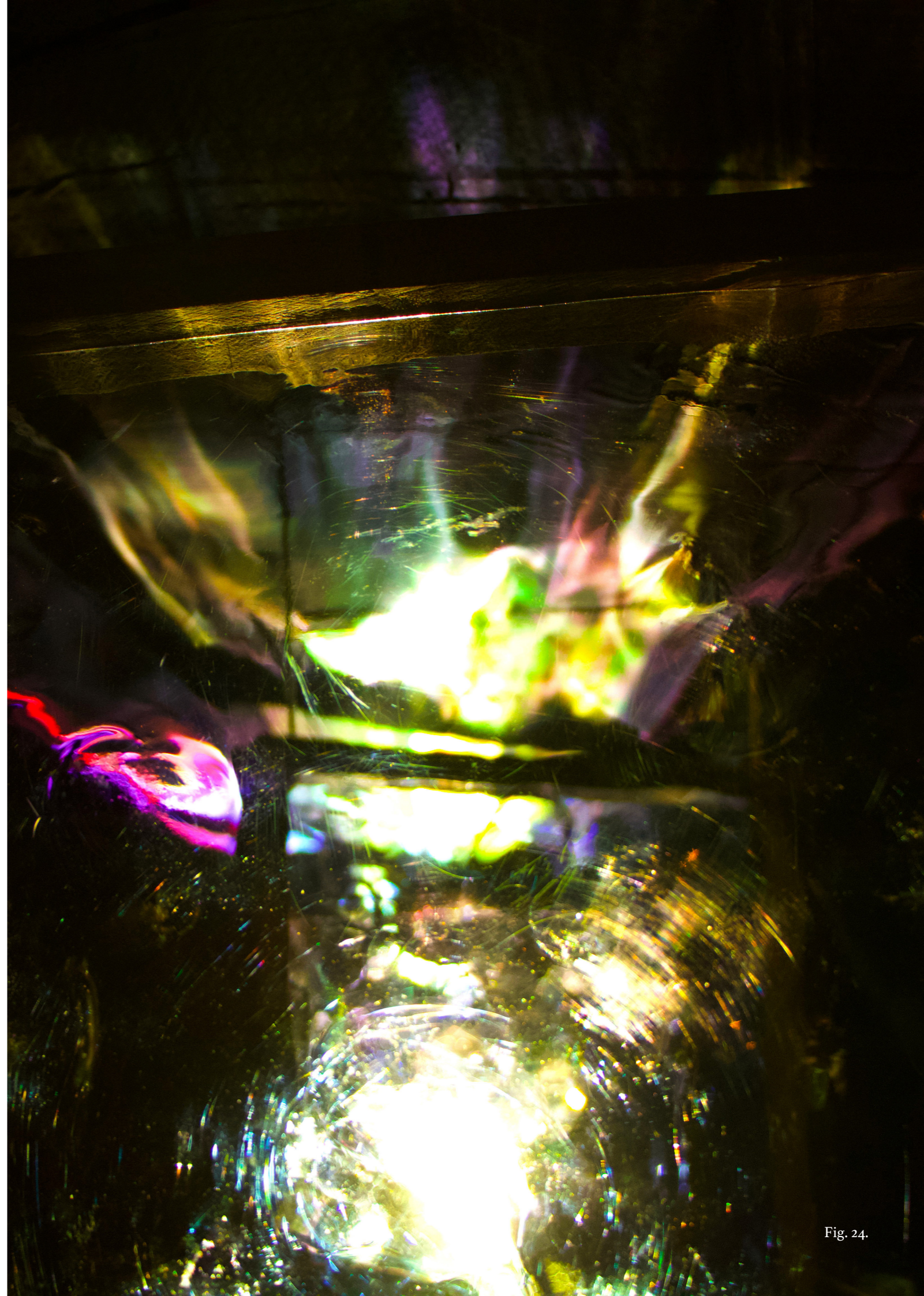
Refracting Spectres frames a narrative of apocalypse mourning, within a constructed cave-cinema. It's layers unfolding an atmosphere of hidden and ever-present climate grief.

Fig. 23.

Design Process

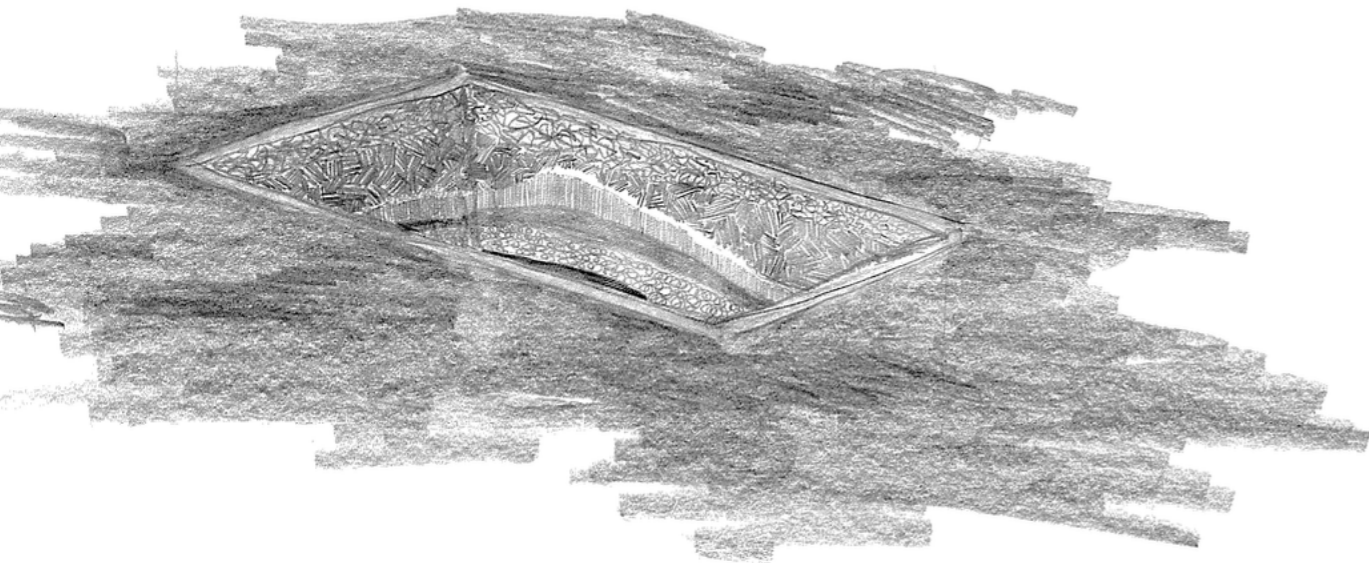
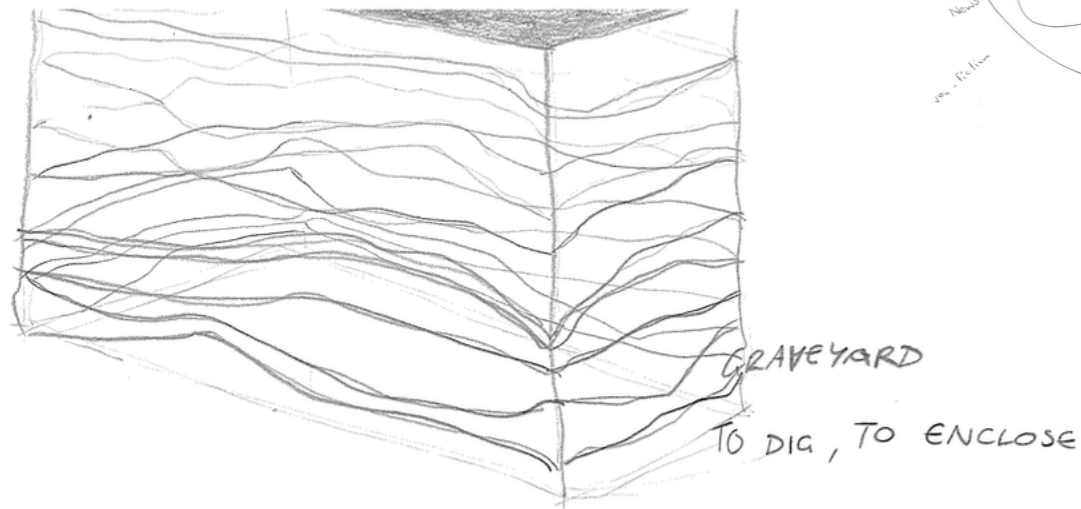
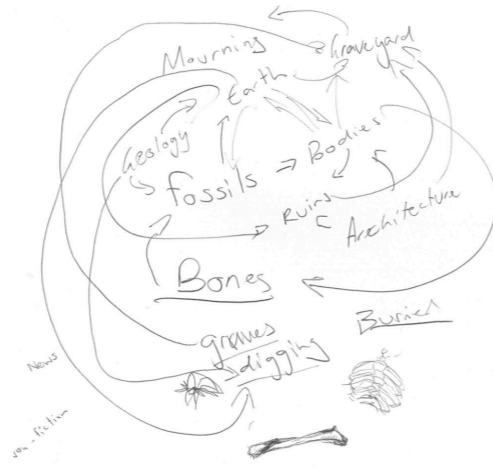
*[Q]uiet contemplation and active participation in
the space of memory.*

Sabina Tanović (38)



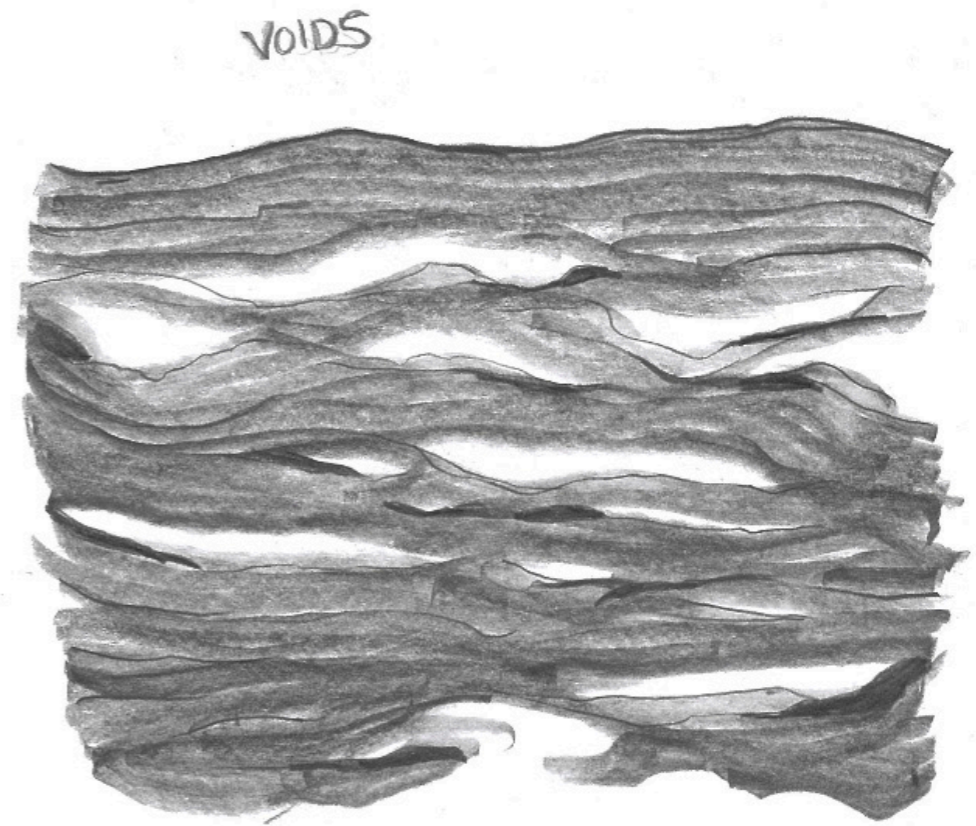
Rock, Ground, Fossil

Initially, my design explorations for this project looked into the earth; deep time was a heavy focus. I attempted to link deep time layering to climate grief and mourning. This led to an interest in fossils, things that were alive but are now dead – an imprint of life in the rock.



Does noticing death lead to a recognition of mourning? If so, how do you surround yourself in beings that are 'dead'? To be in the earth is to be among layers and layers of what was living (or still is?). The underground has always had strong connections to death.

Fig. 25, 26.



Caves are natural fissures within the earth. Thinking about these gaps as pathways fascinated me, especially, the transition space through the entrance right through to the deep spaces.

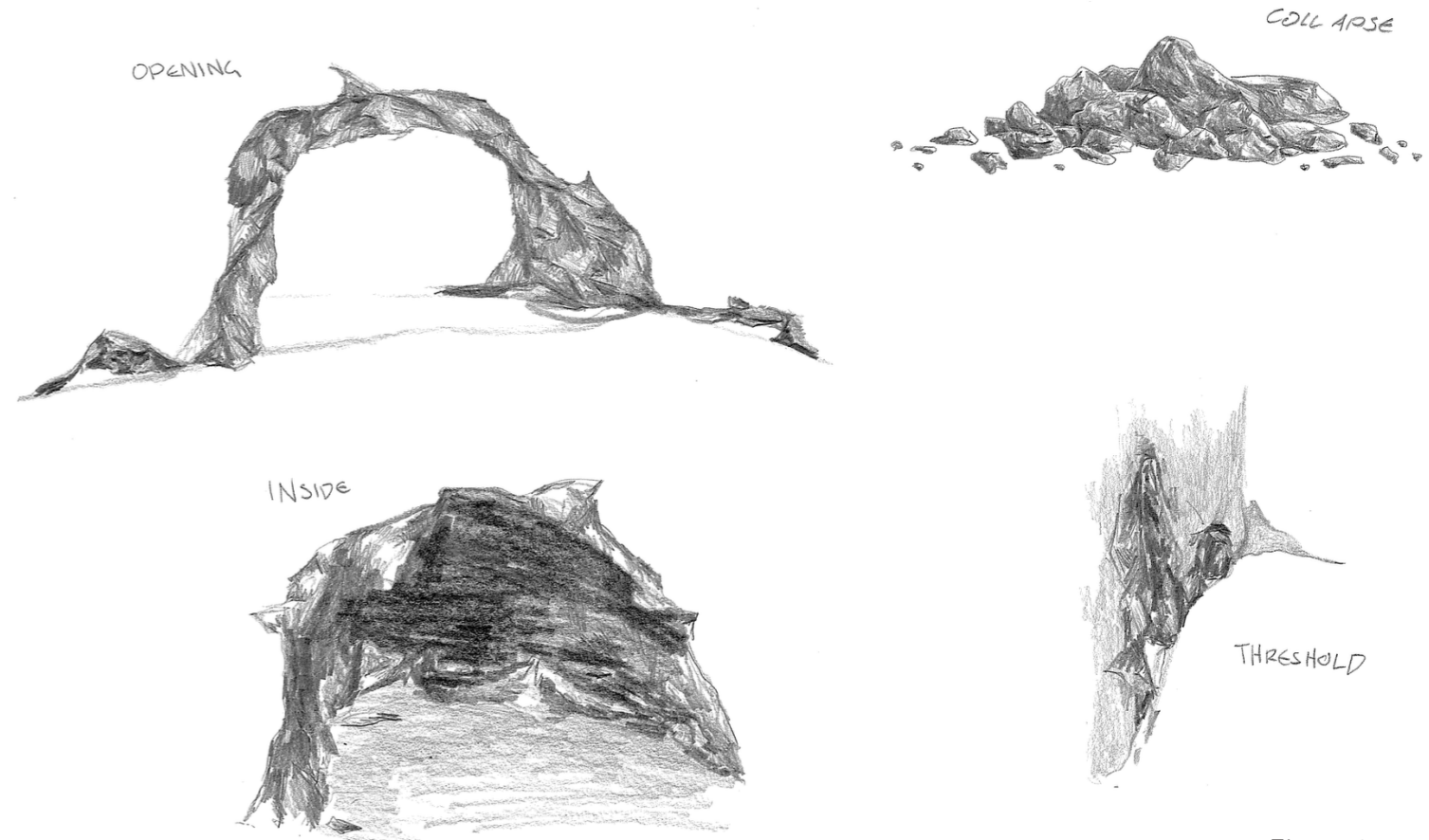


Fig. 27, 28.

Gaps, Caves, Voids

I spent time making and thinking of caves. How does a person experience them? I moulded caves from clay and papier-mâché, exploring them at small scales.

At all scales, caves are passageways through time.

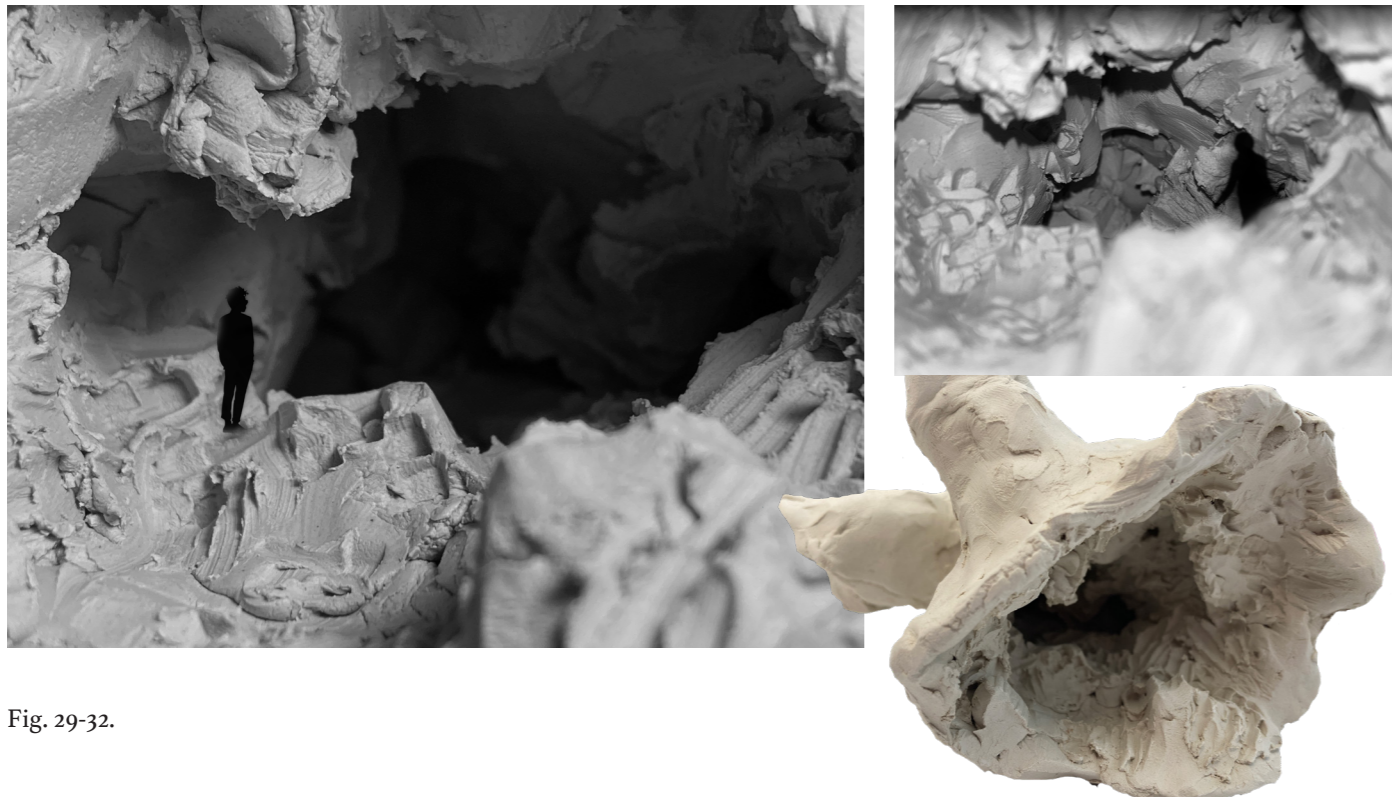


Fig. 29-32.

Aboveness

In exploring caves, I spent time thinking about the feeling of something heavy above. This 'aboveness' is almost a sense of foreboding – of weight and pressure – but also can be of comfort.



Grief is a sense of heaviness, and mourning is the processing of that. Aboveness came through in my designing process as I played with ideas of weight above a person, whether it was cave structures, tilted ceilings, or stalactites protruding down towards you.

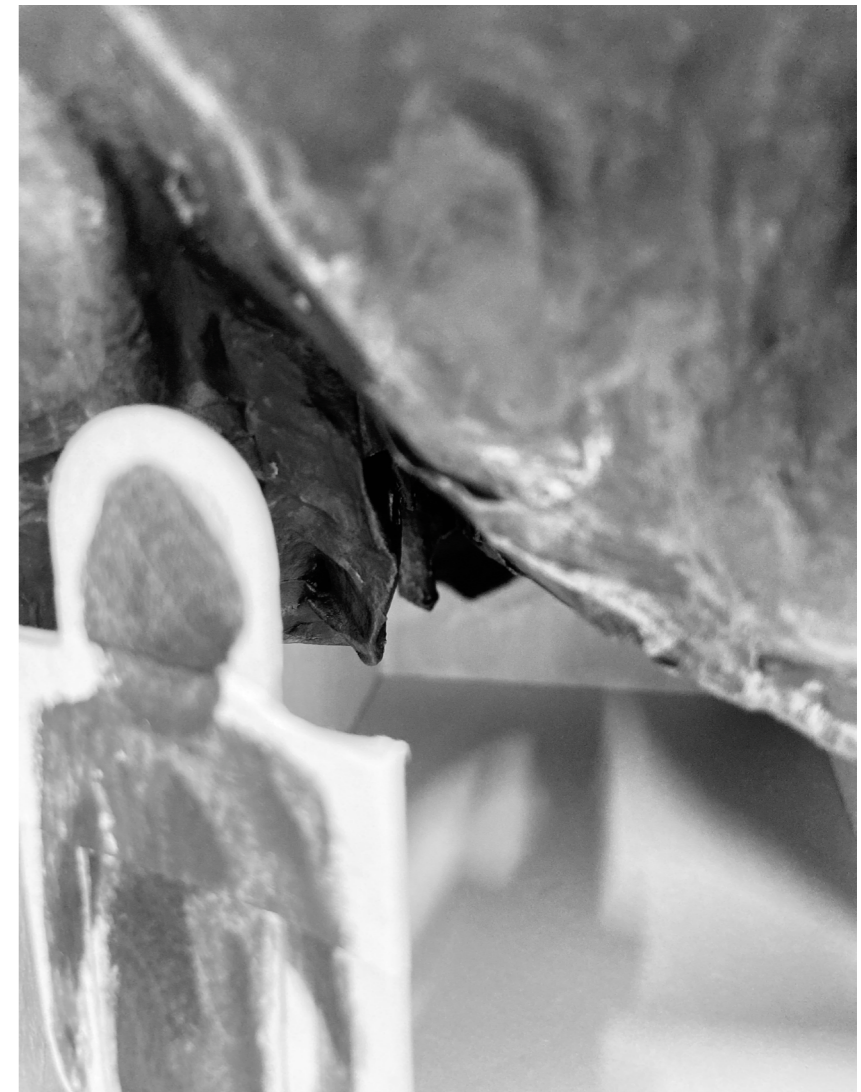
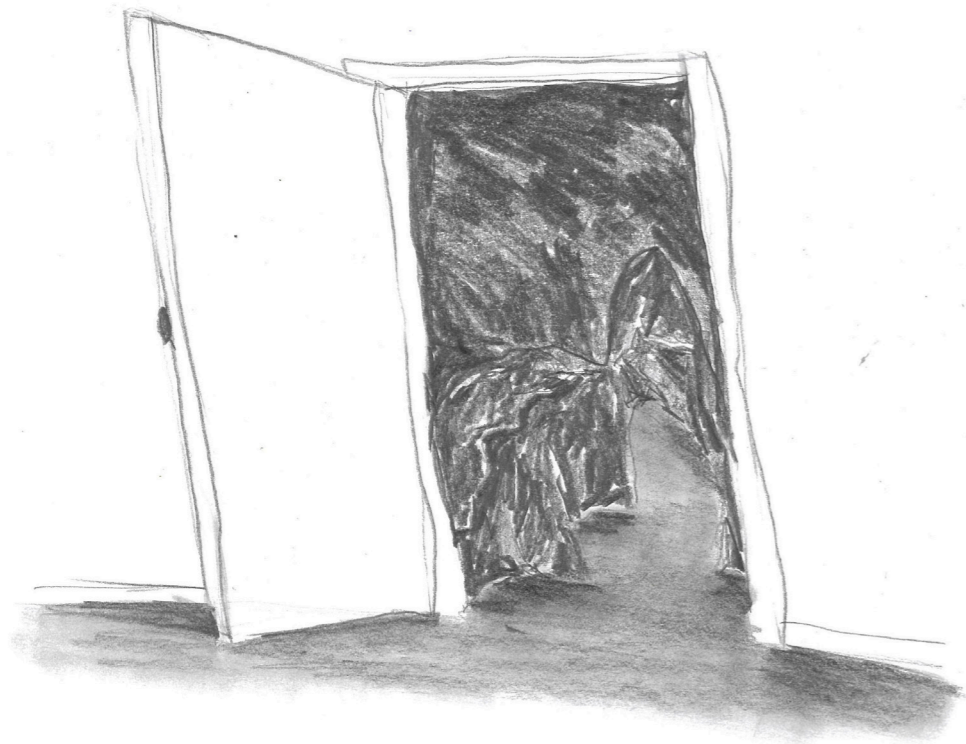


Fig. 33-35.

Architectural Crevices

Thinking about cinema and apocalypse, my designs began looking towards gaps and crevices in architecture. The depth of time, of the earth, crept into everyday architecture, always there, but not always seen.



It led me to thoughts of how we view films on a screen, what happens when that screen is behind a vent? Or viewed from a crack in the doorway?

Fig. 36-38.

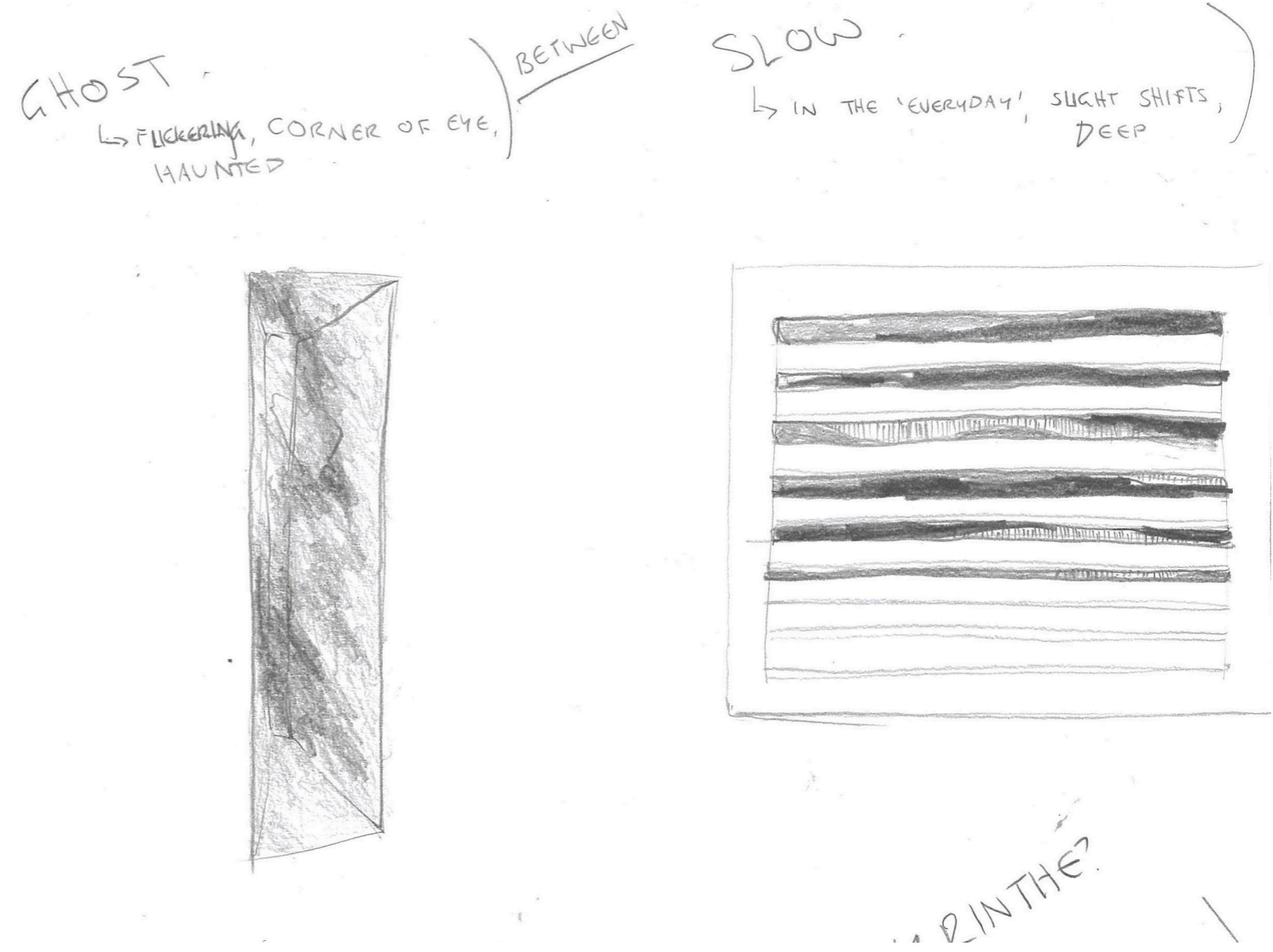


Fig. 39.



Fig. 40.

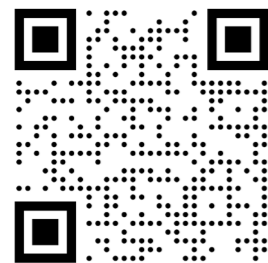
Film Overload

Stepping away from physical design, I also began to think through existing apocalypse films. What do they show us? How does that contrast with the speed of deep time, and even the speed of climate catastrophe?



Fig. 41-43.

Using footage of apocalypse film trailers that I had watched in researching this project, I digitally collaged snippets together. This formed a jumbled narrative of apocalypse rushing, an overload. Using footage of my papier-mâché caves, I juxtaposed slow moving rock with the overload of disaster footage..



[View films here](#)

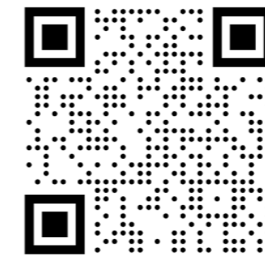
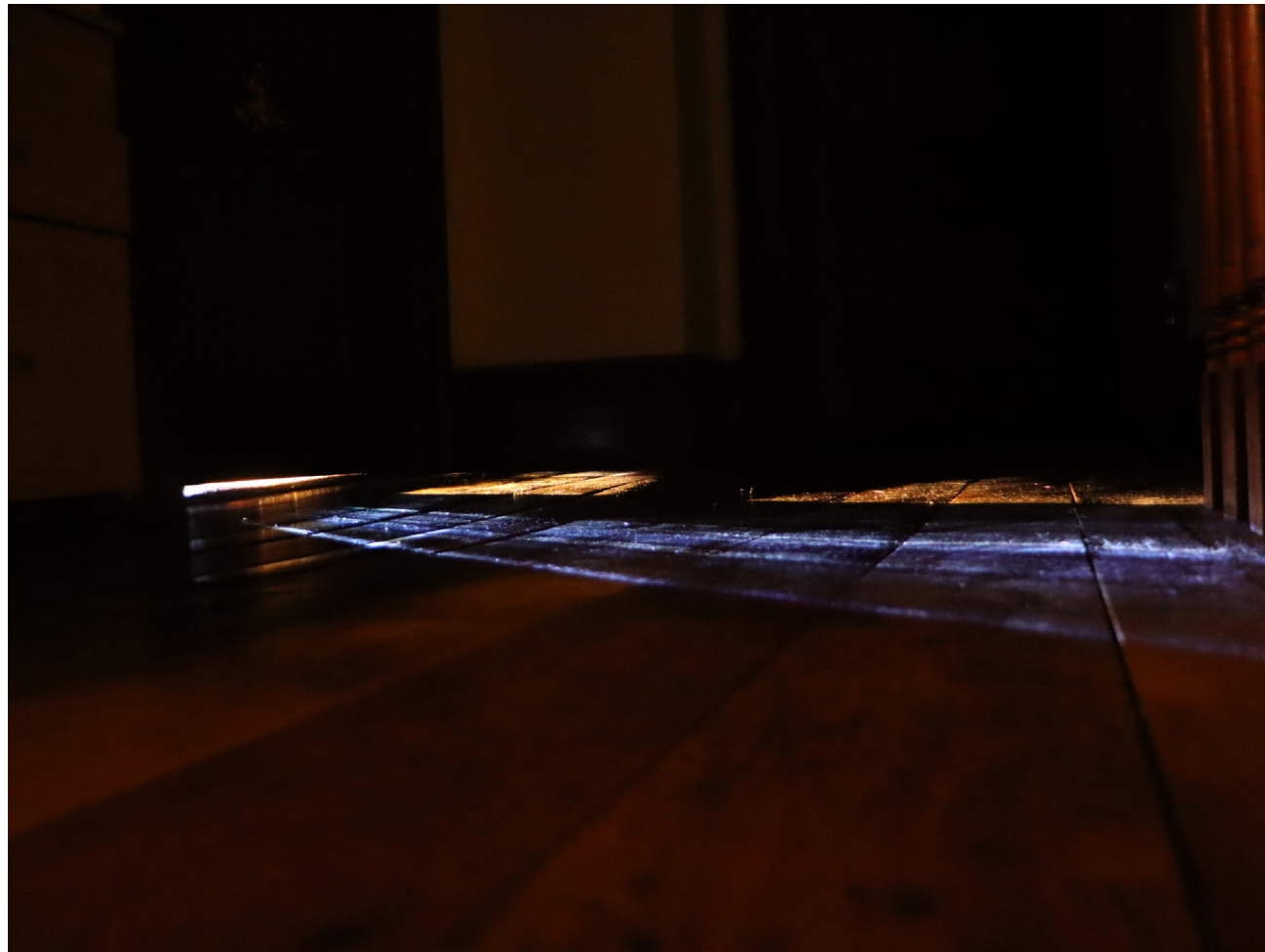


Fig. 44-46.



Fig. 47-49.

There were several iterations of how the rock video interacted with the apocalypse narrative, a vertical layering, a horizontal stratification, and a fade into rock.



*View documentation
here*

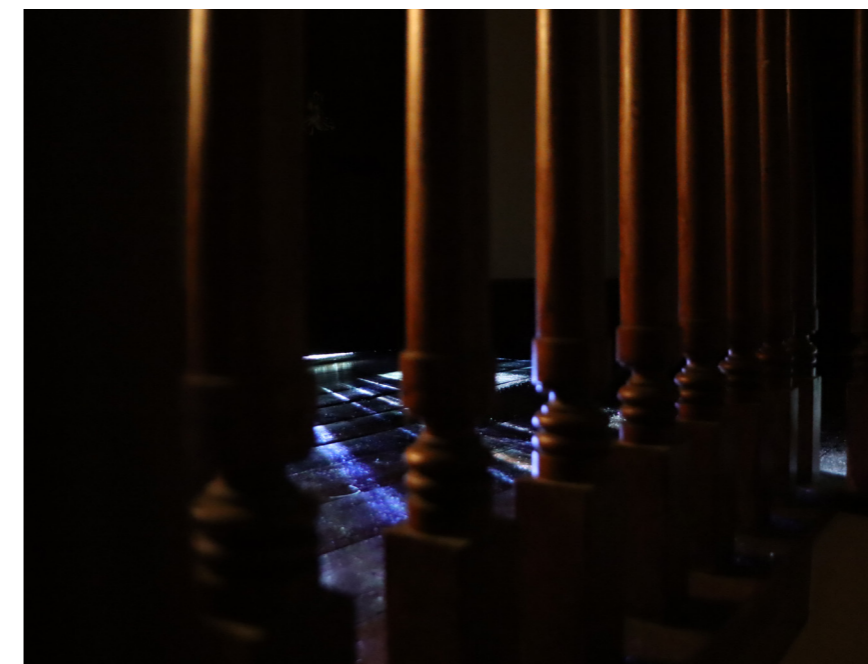
Projection Through Gaps

Taking the apocalypse overload and rock overlaid videos, I brought it into physical space. Using a projector, I sought architectural crevices within my home. The apocalypse narrative becomes part of my every day – in the same breath the slow moving rock also becomes part of the floor and walls. It is scenographic, orientating a space into a different reality.





Fig. 53.



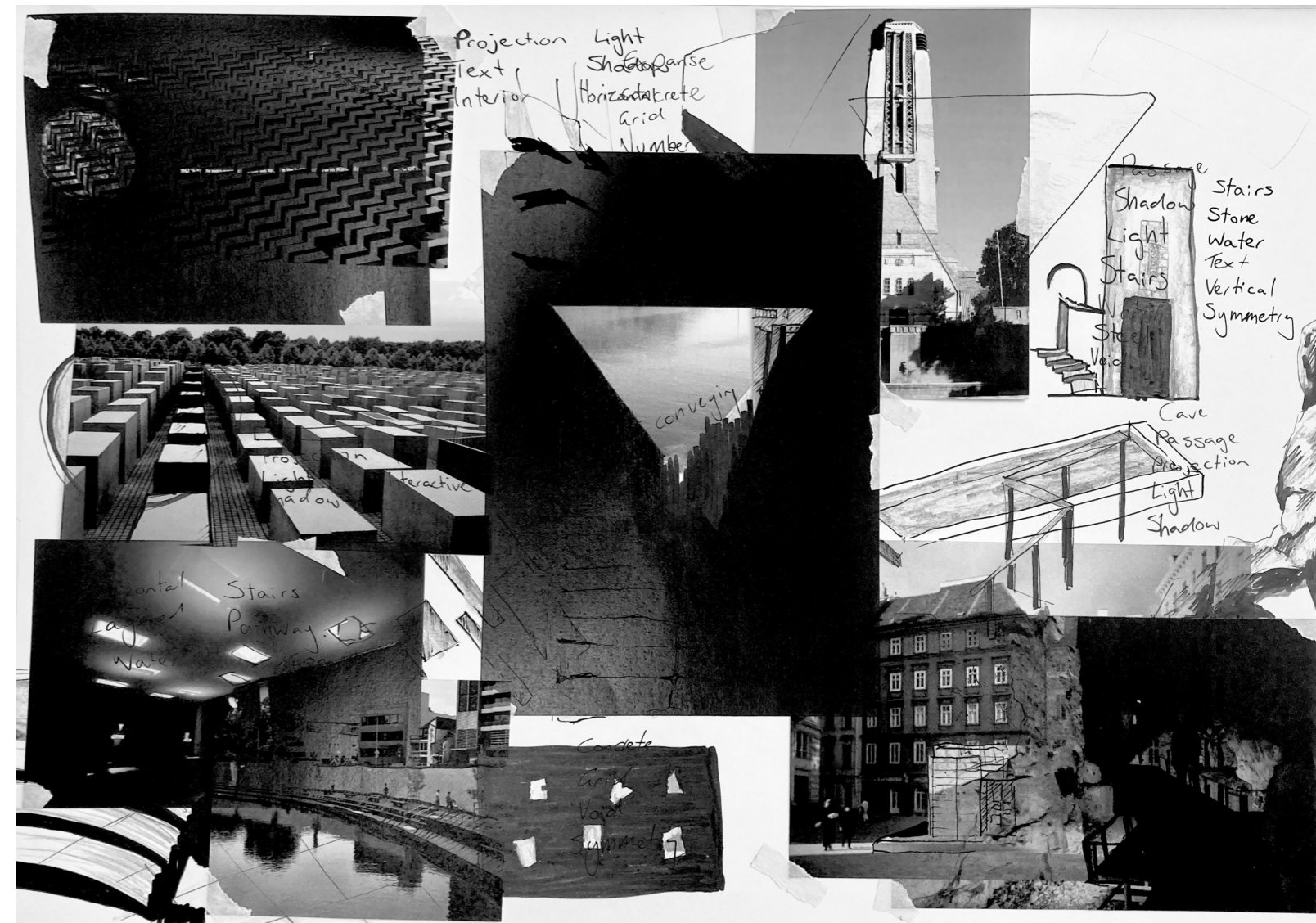
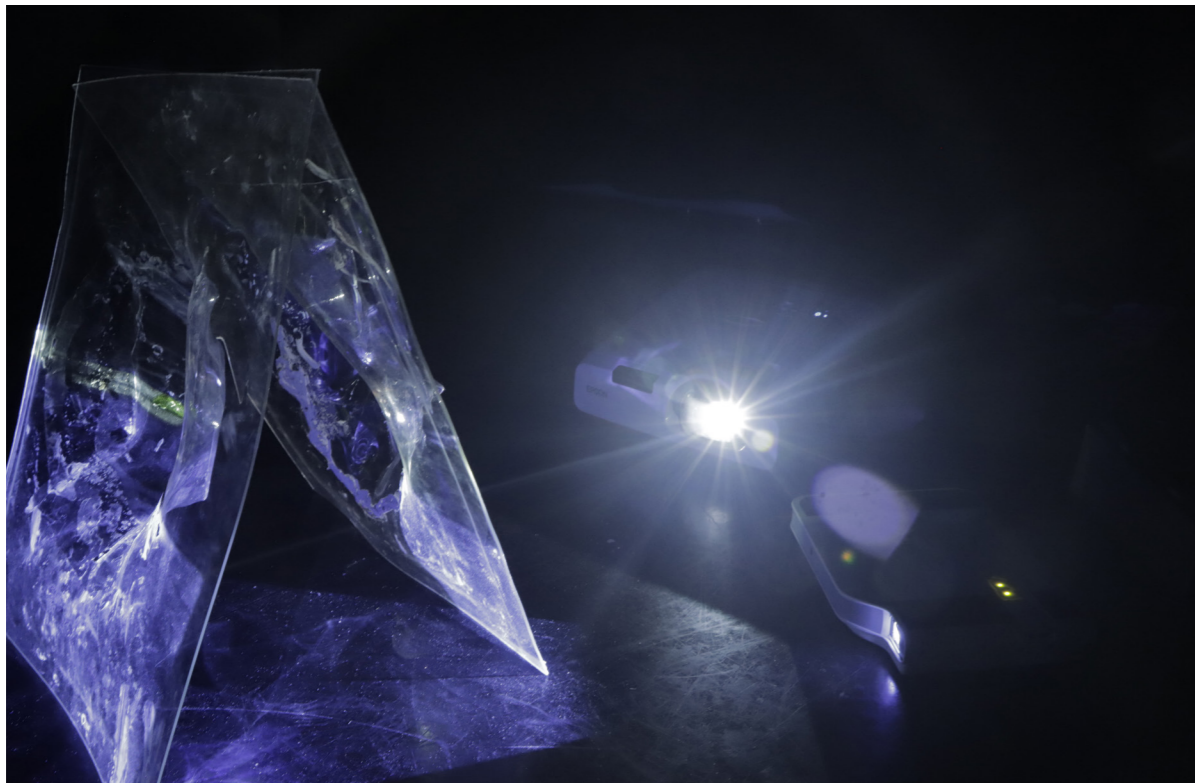
Doorways and the cracks under them became a particular interest. Like an entrance to a cave, a doorway is a liminal space, and when observing this space, there is a sense of unease. What is through it? It is a crossing point, one where a choice is made to see, and experience more.

This experimentation led towards thinking more about voids and the spectral quality of them.

Fig. 54, 55.

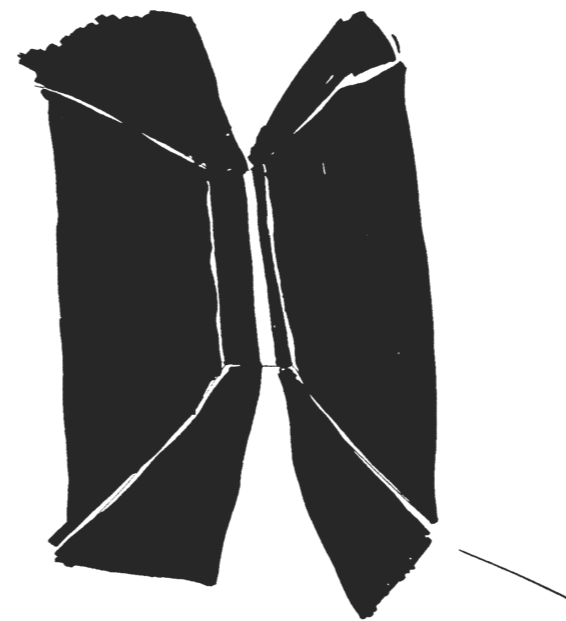
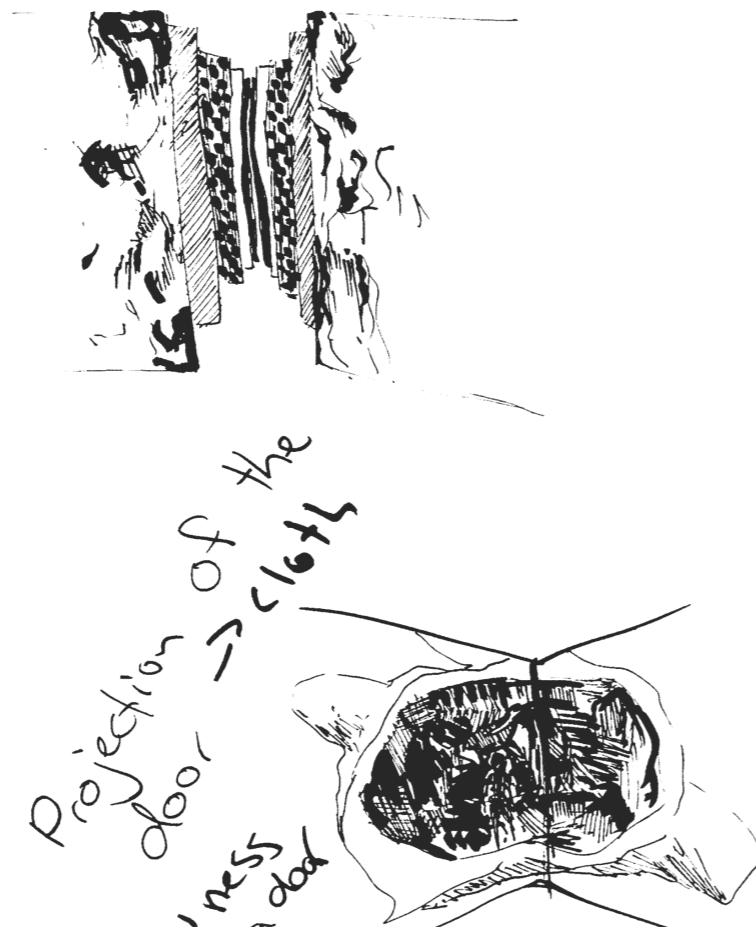
Cinema Voids, Memorial Voids

What of the architecture of the cinema? It also holds voids and crevices, ones that are possibly filled with more spectres than other spaces. The cinema is also a transition space, like a doorway and like a cave. It is a space where people go to experience a different sense of time. Walking through a foyer, down a hallway, into an open tiered space of watching.



What is being watched? I wondered what would happen if rather than watching the screen, the audience is turned to watch the source of the projection – into the gap in the wall where light emerges.

While a cinema is for experiencing different times, a memorial is for mourning. Memorials are spaces of reflection, of quietness, and of memory. Both are transitory, both are spectral, and both are purpose-built architecture.

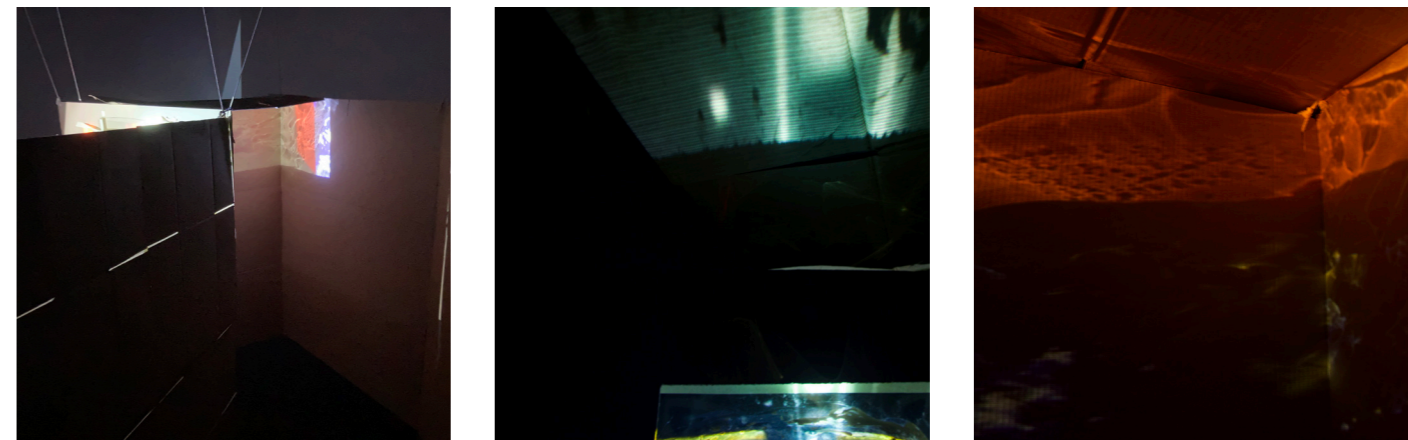
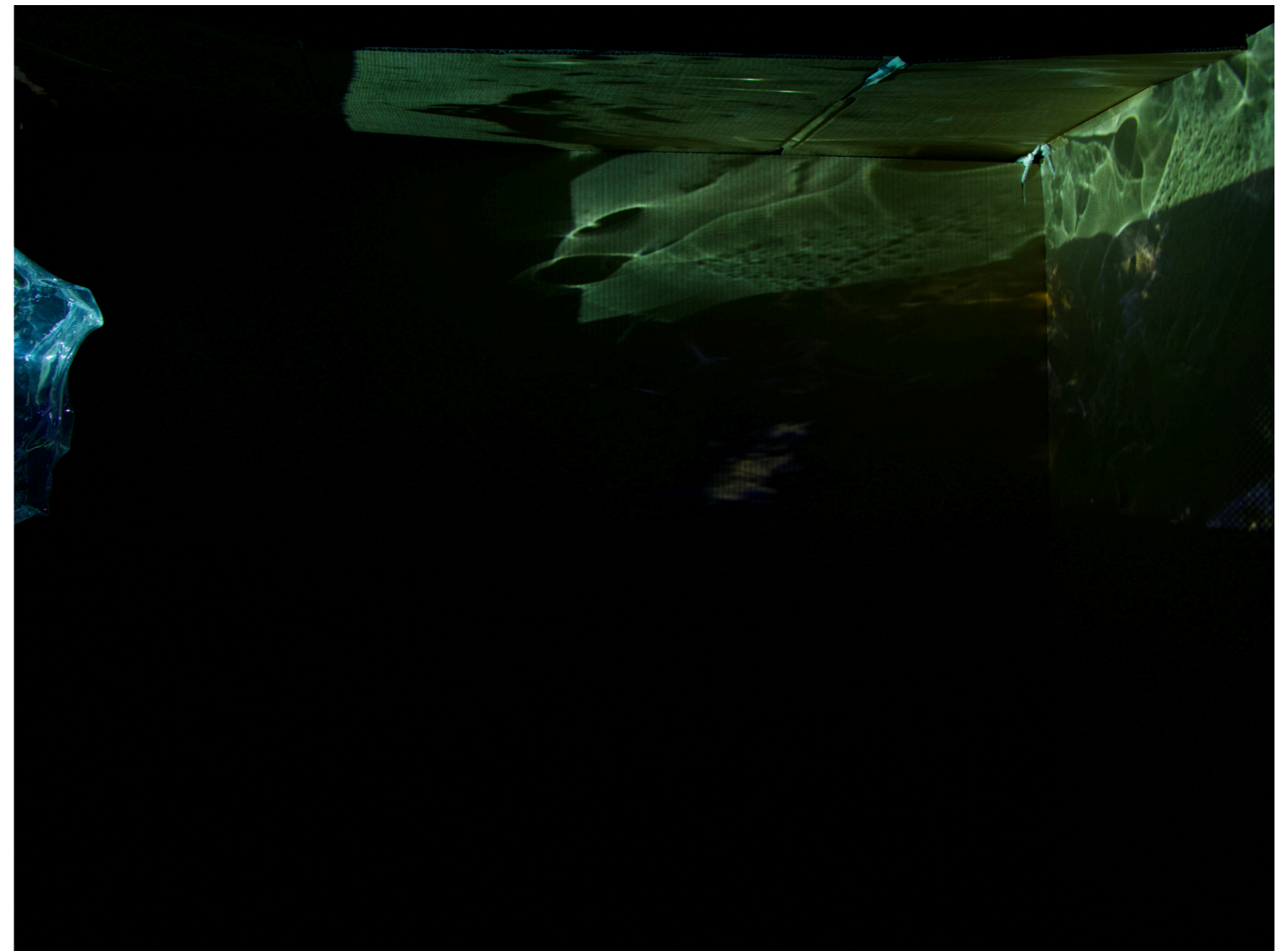
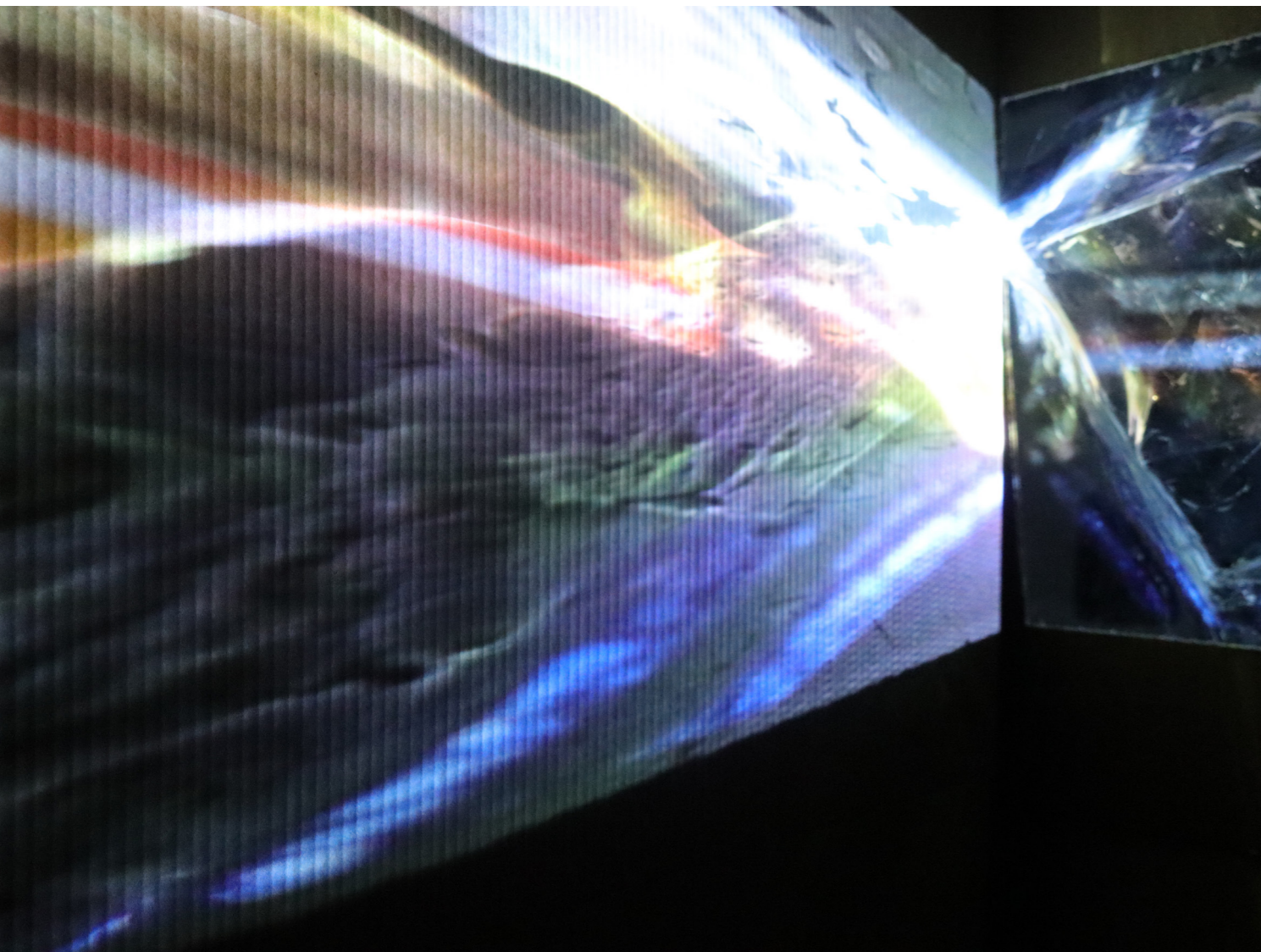
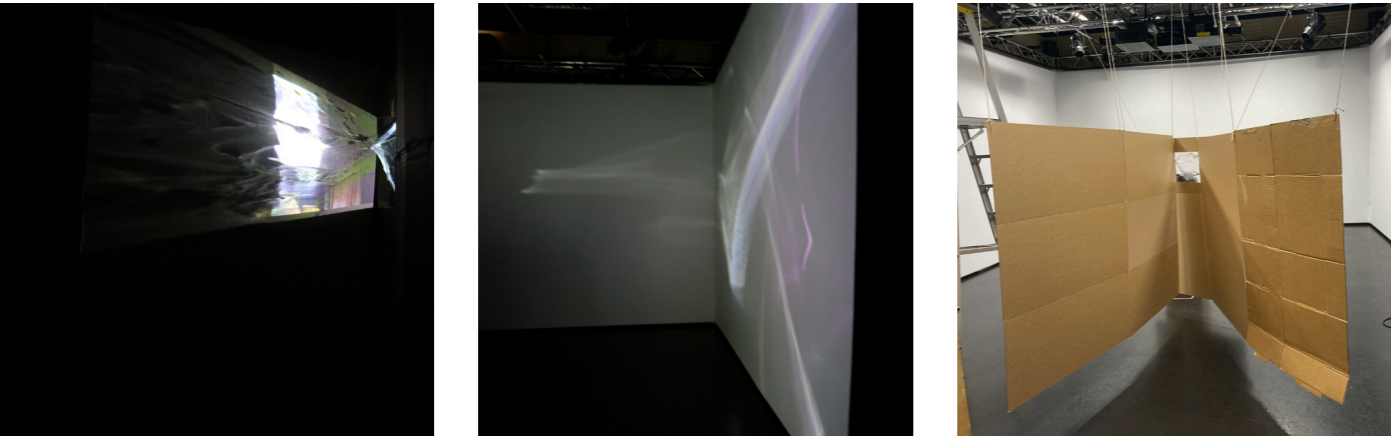


Taking concepts from caves, cinemas and memorials, I formed five differing experiences using cardboard, a projector, my previous collaged films, and a couple of pieces of warped plastic.

Fig. 56-59.

1 : A Narrowing Passage

The first of these experimental cinema caves was a narrowing hallway that approaches the light of the projection. This created a translation of the film playing directly onto the viewer, the light moving upon bodies. In making this, I discovered the light refracted off the warped plastic 'lens' and onto the surrounding walls; the spectral contents of the light reaching further.



2 : A Corner

The next experience was a hallway leading into a corner; the video being projected into the intersection between two walls. You are an observer until you stand in the light, then you become part of the projected apocalypse. A choice to be removed or not. To observe from the outside is to see only the warped light, rather than actual images.

Left: Fig. 60-63.

Fig. 64-67.

3 : A Layered Compression

This experience used a layering of walls, the projection shining through a gap, but broken onto the edges. It is a layering of time, a layering of physical space, and a layering of hidden images. Weaving in and around, viewers are layered within.

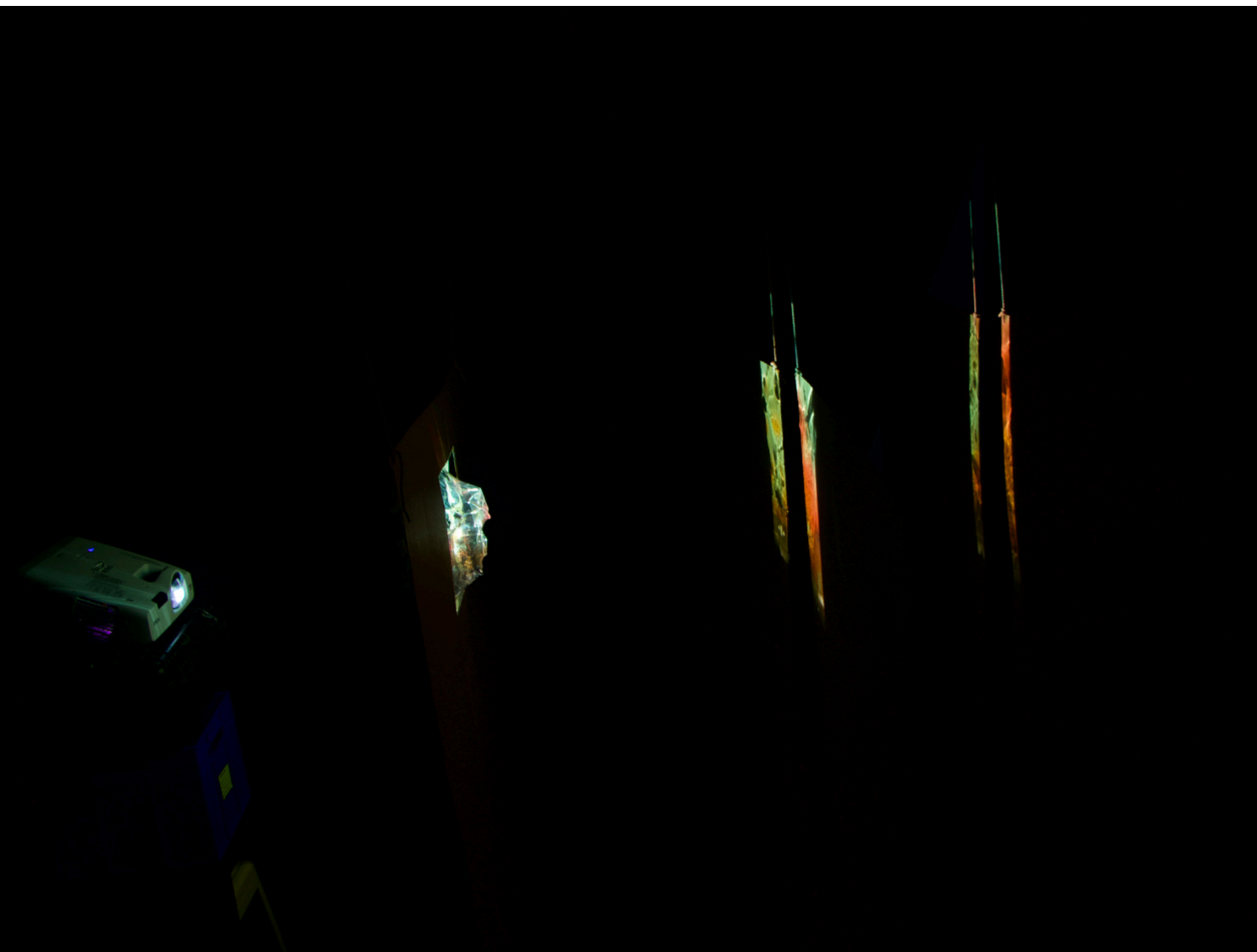


Fig. 68-71.

4 : An Inwards Outwards Bend

Gaining more complexity in form, this cinema cave is bent around an internal wall. It is a pathway, in one end and out the other. Heading towards the projection, then facing away from it. The light from the projector dances along these cardboard walls, highlighting its corrugation and its temporariness.

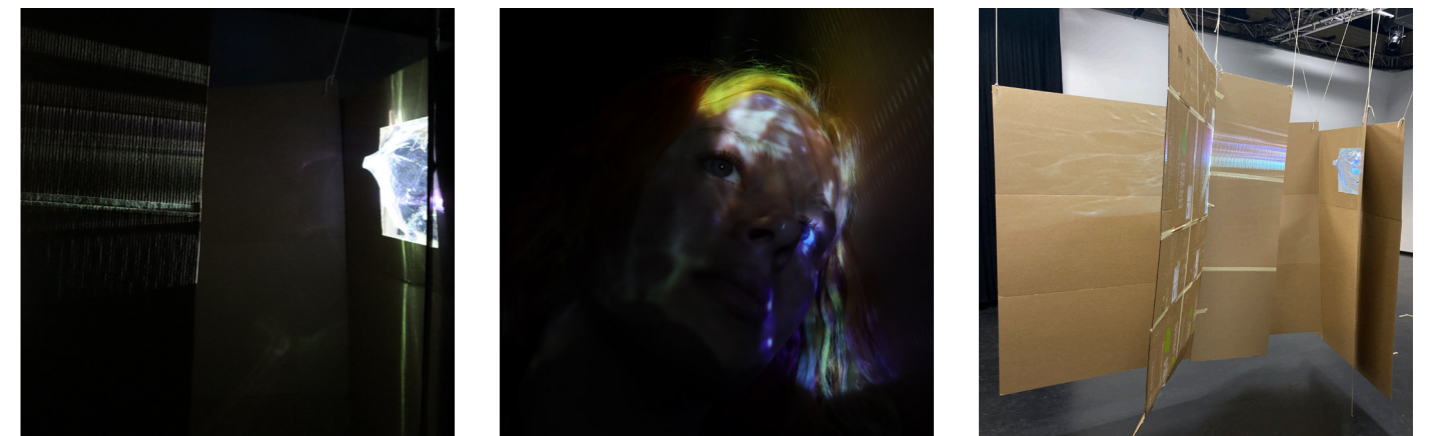
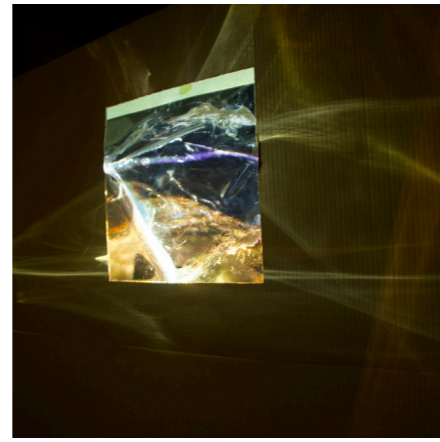
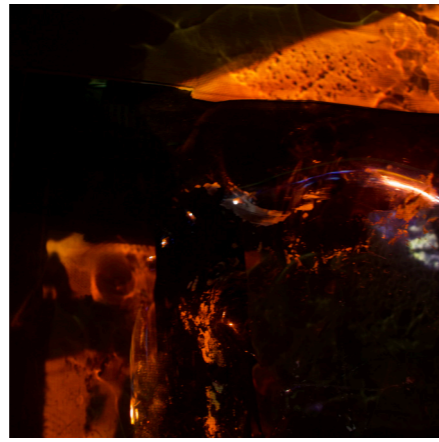
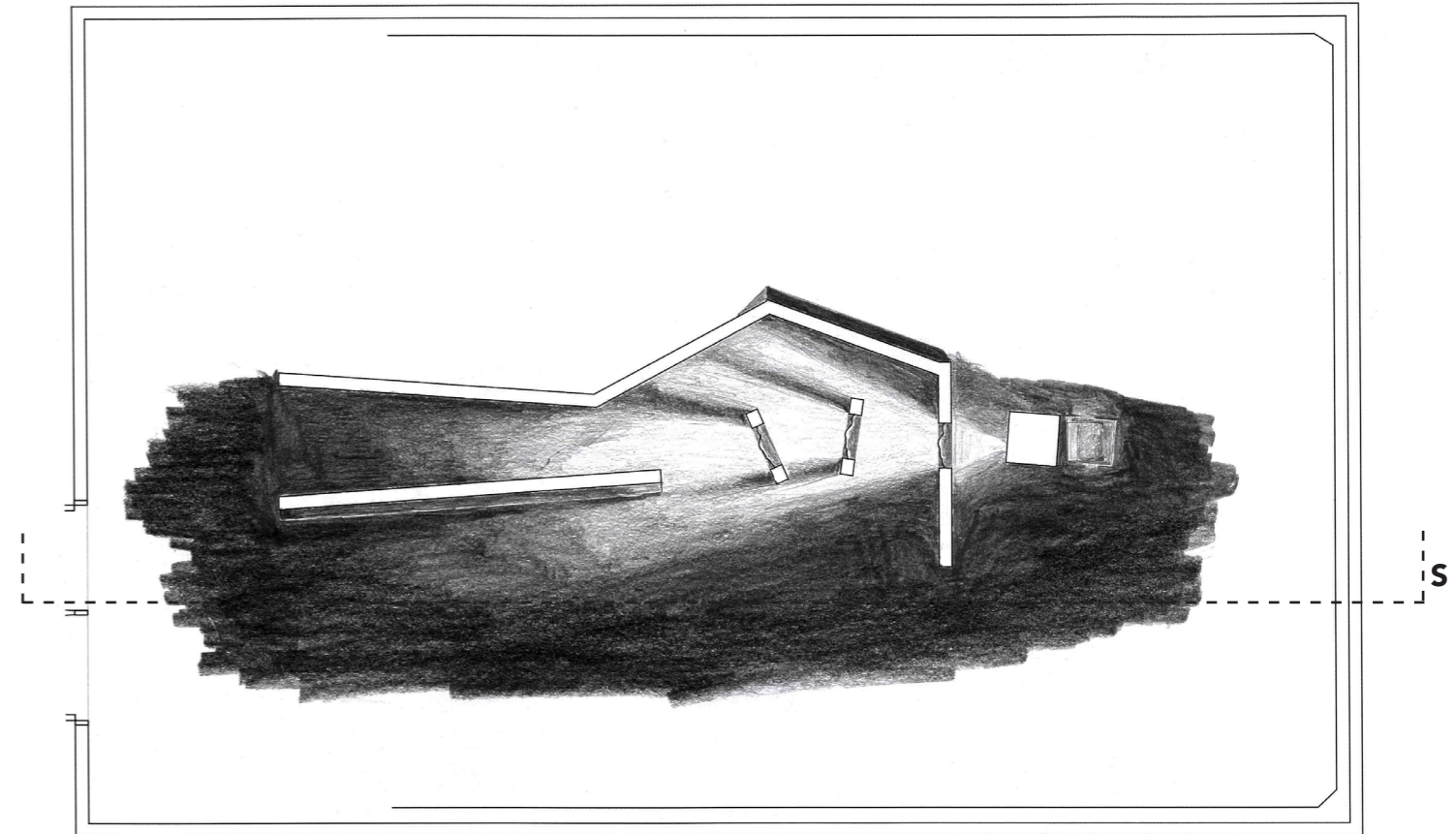
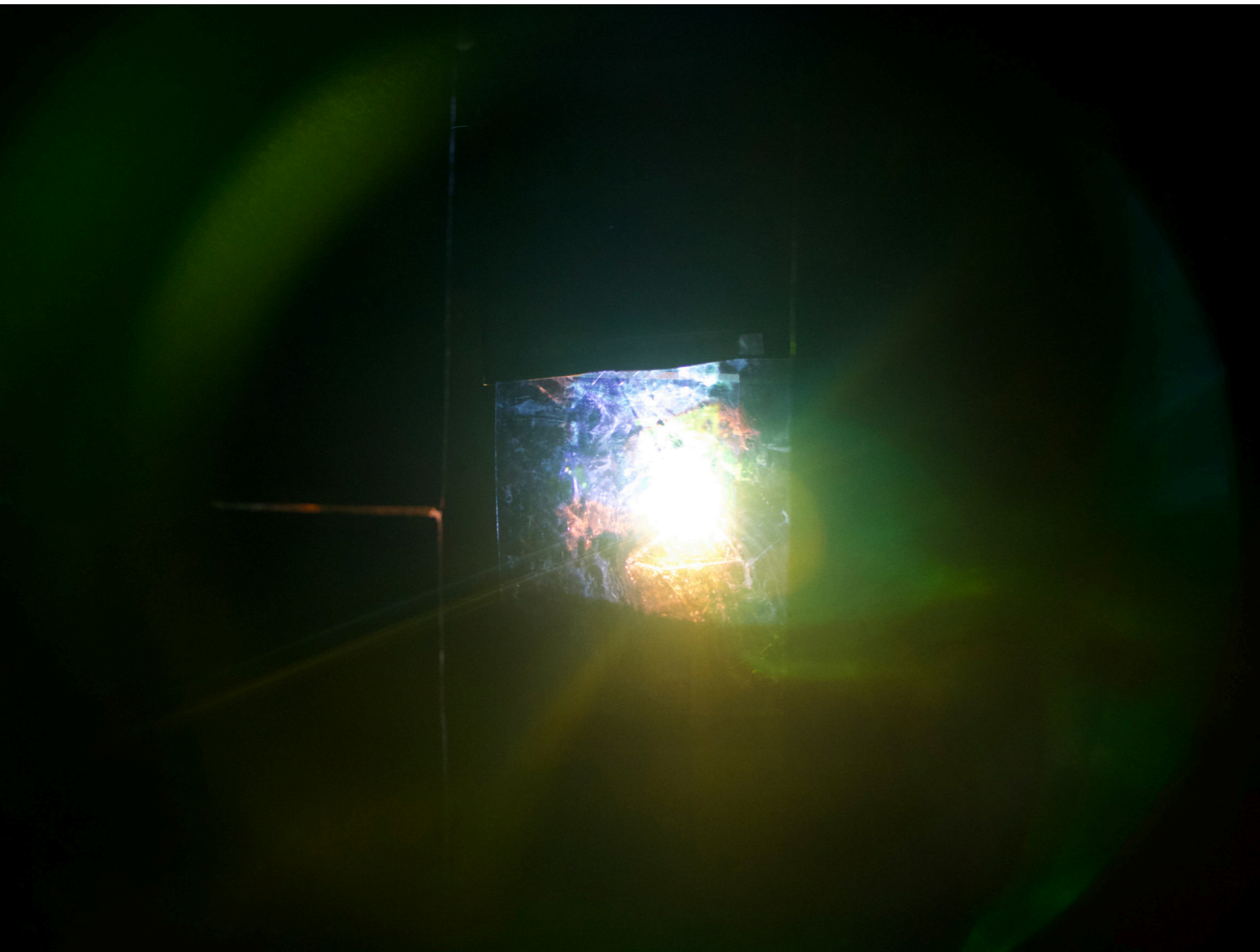


Fig. 72-75.

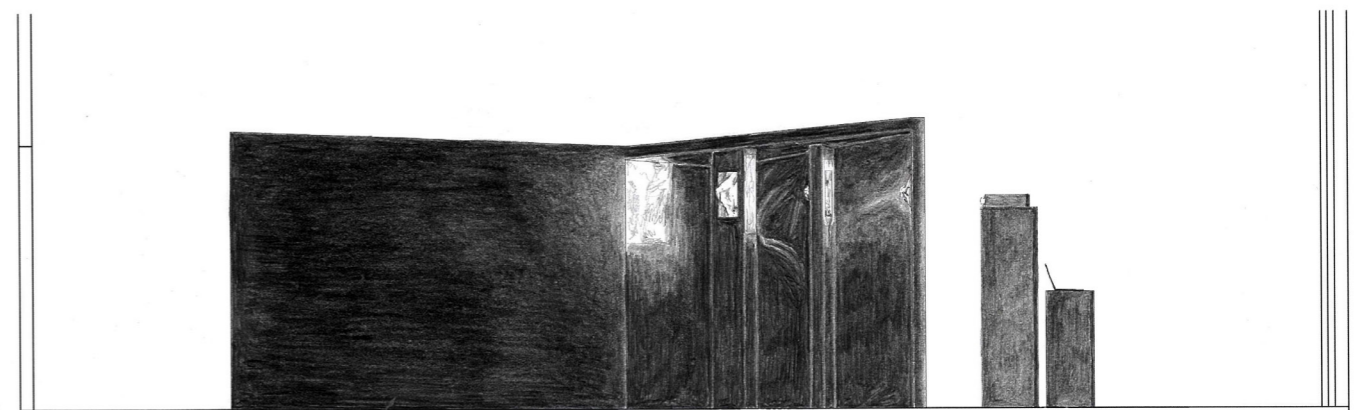


Fusing into a Prototype

This series of experiences allowed me to form an idea of what was working to communicate a cave cinema for mourning, and what was not. The next prototype combined multiple elements: a narrowing hallway entrance, a layering of lenses, an enclosed space, and an opening to step away and reveal the whole apparatus. A 'second moment' of seeing.



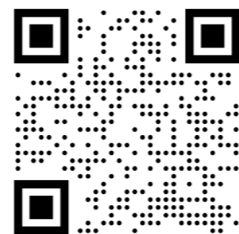
Plan view



Section view

5 : A Cave of Projection

The last of this series of experiences was an enclosed space, with two lenses refracting and reflecting the projection. It is a designated space for viewing, like a cinema, and surrounds the viewer in moving light; a space for emotional reflection, and a space for slowing down.



[View documentation here](#)

Fig. 76-79.

Fig. 80, 81.

Cardboard Construction

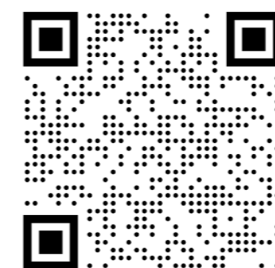
I decided to continue with cardboard as a medium. I used papier mâché techniques to laminate and shape the walls; this references Quesne's scene props and a long history of scenographers using papier mâché to construct scenes. The cardboard is a representation of walls, of both the cinema and of a cave, and is made to stage the cave cinema as an 'interior'.

The cardboard is three layers of found boxes, laminated together with a flour mixture. These pieces are cut to shape to form the walls.

The cave construction isn't perfect, feeling more akin to rock than everyday architectural structures. A layer of cardboard is placed along the top of the cardboard walls, confining the space.



Fig. 82, 83.



View film here

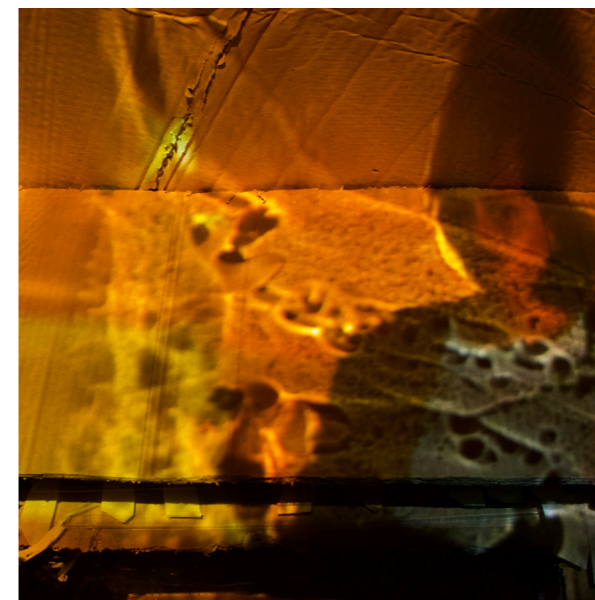
Collaging Apocalypse Mourning

For this prototype, I also pieced together a new collage of apocalypse films and series. This collaged film focuses on moments of loss and mourning within these films (few and far between for such disastrous circumstances). The samples of separate films blend together, fading in and out. The sound is also overlaid, violin and piano featuring heavily.

Fig. 84-87.

Protoype: The Cave Cinema

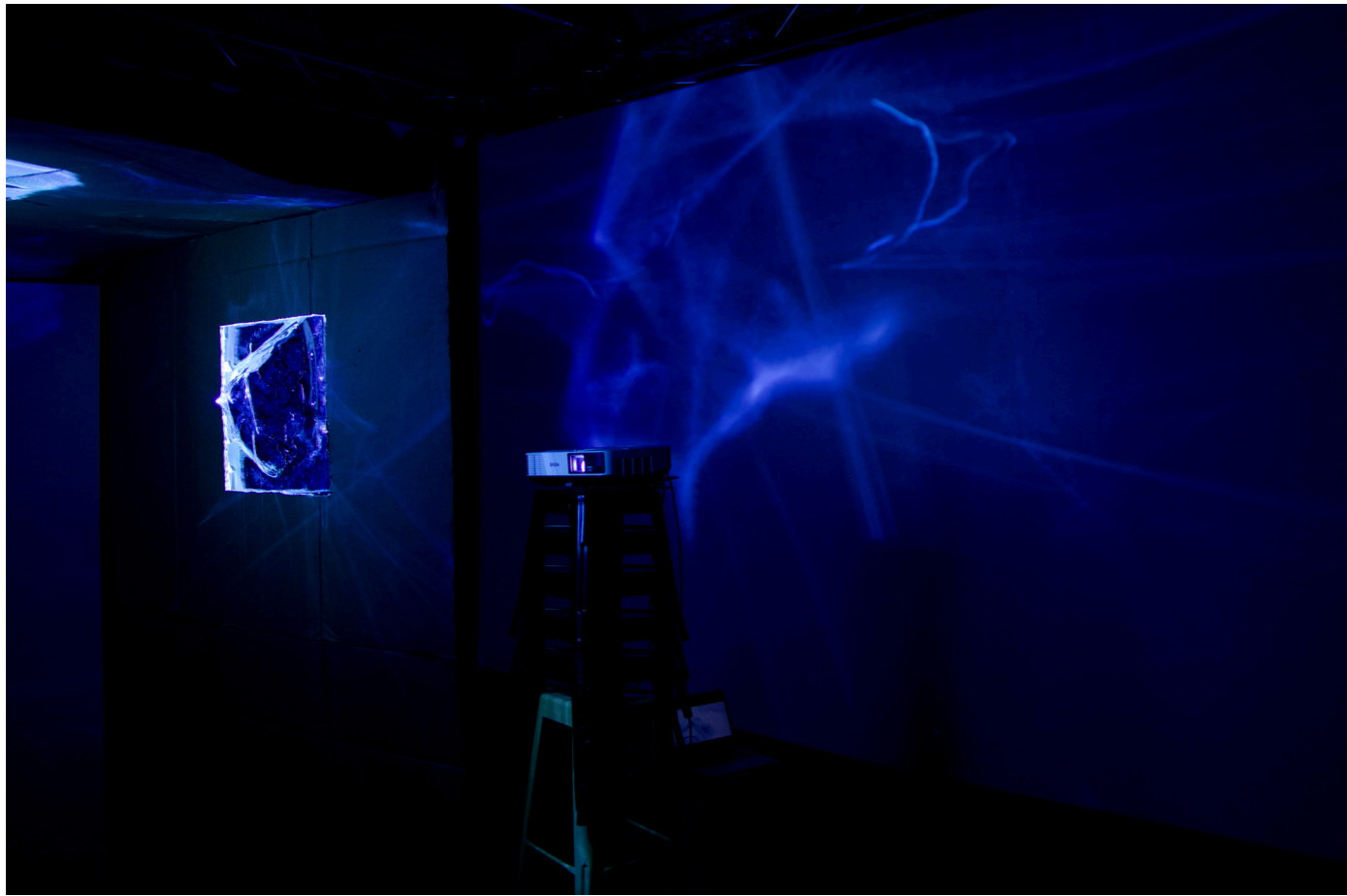
The complete prototype is dark. The projector the only source of light, yet the lenses refract it around the space. Walking down the entrance hallway, the quality of sound changes, feeling more internal, closer. The lenses feel deep in their layering and in their breaking down of images. The walls of the cave cinema are illuminated every so often with flickers of light.



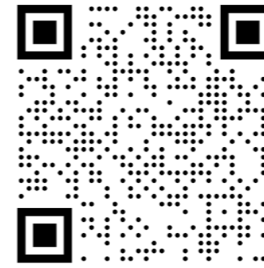
The soft sound of violin, or piano, or sobbing is heard further in the room. Walking through the lenses, clearer images from the projection are cast on the walls of the lenses. The film is revealed.

Fig. 88.

Fig. 89, 90.



As you walk out of the cave and turn around, the whole apparatus is revealed. A cross section of mourning in apocalypse. The back wall of the room flickering with refracted spectres of grief and disaster. The light reaches everything, the apocalypse reaches everything.



*View documentation
here*

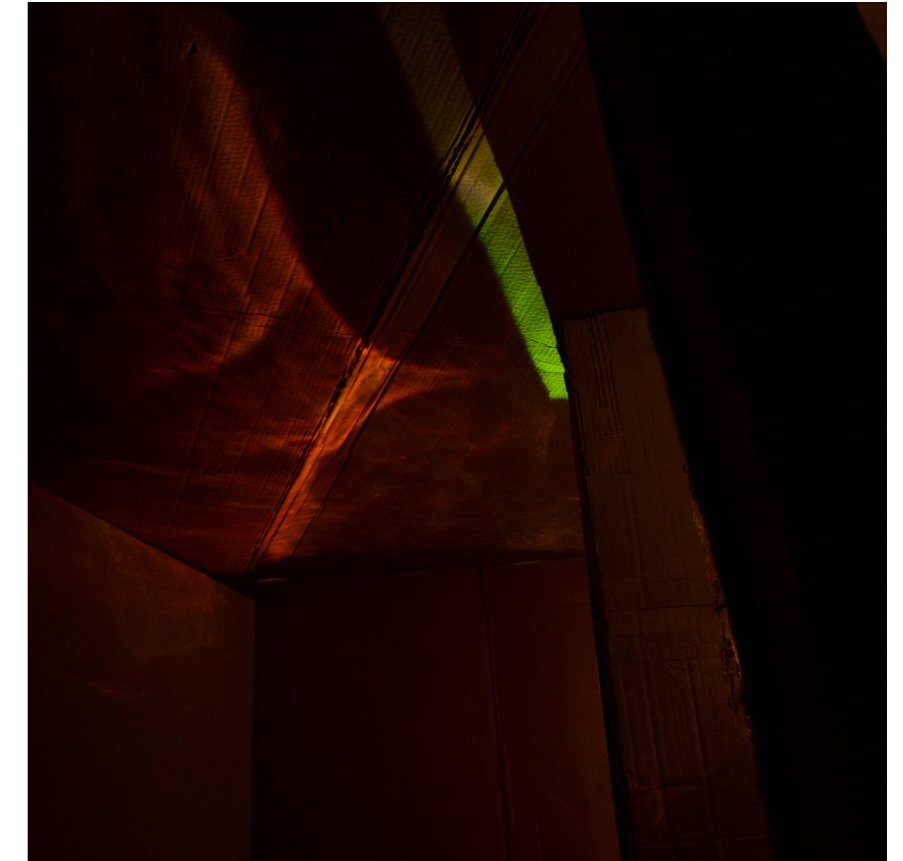


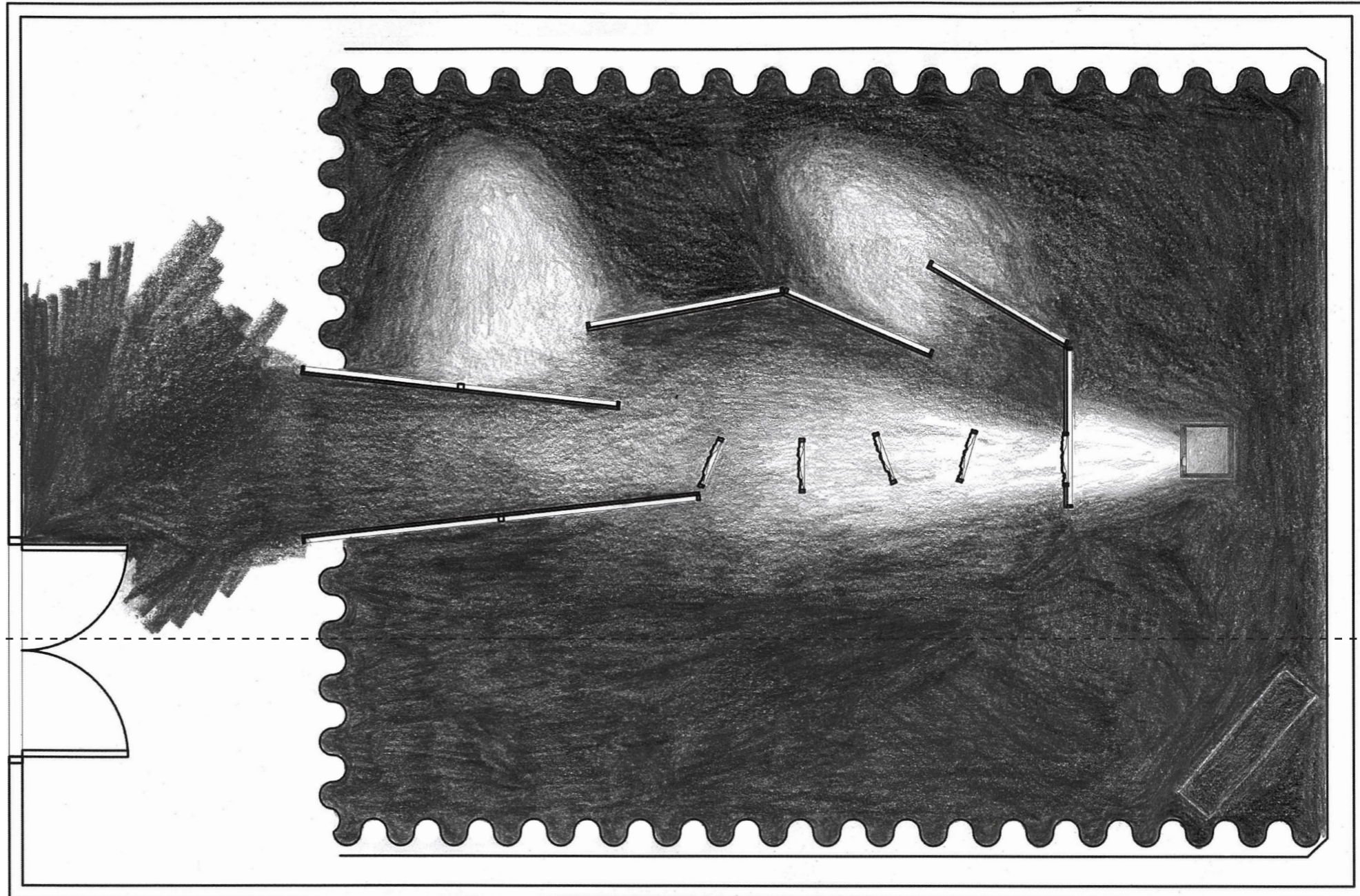
Fig. 91-94.

Refined Design

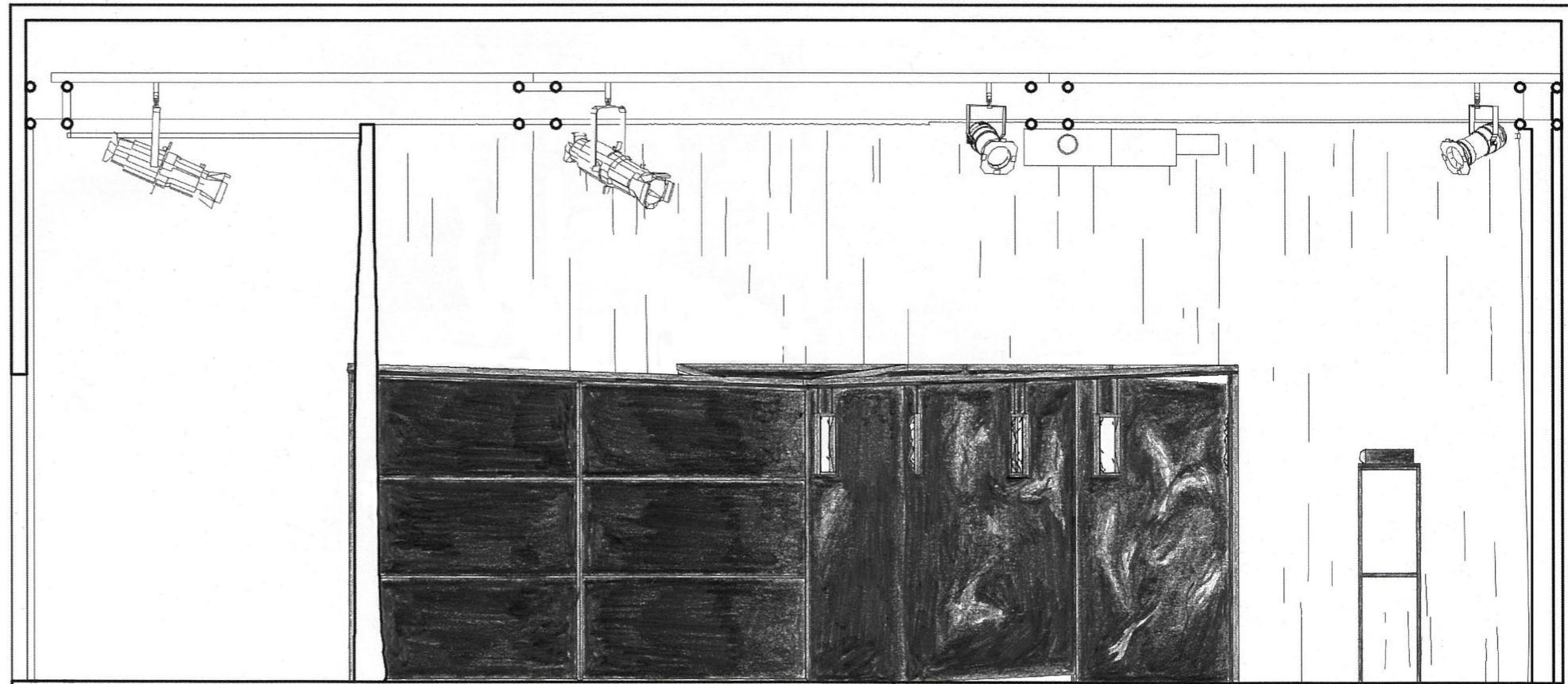
The prototype cave cinema started to reflect the key components of mourning climate apocalypse, yet it had not quite reached an atmosphere that invited mourning. After a presentation and feedback, I refined the design further.

The cave cinema stretches, with the back walls broken and shifted to create gaps. These crevices are a further attempt to reveal – creating areas to see through the cave towards a dark curtain. Crevices are also opened along the edges of the walls. It is not a 'perfect' architecture, rather, it is more akin to a cave. I removed the walls where the interior lenses previously sat, and included more. The lenses instead hang from the ceiling with frames surrounding them. They are more like film slides, or picture frames. Casings of memories and realities. It was also mentioned in my feedback that standing and walking through the installation doesn't always allow for a complete moment of pause. So I incorporated seating in the corner of the room; this will be an area for a longer period of stillness and mourning.

Plan view



Section view



Cave Cinema Structure

Making the cave cinema structure was a huge effort. All the walls and ceiling pieces required 2-3 layers of cardboard, each piece also having papier mâché stripped cardboard along its front for a dappled texture. To have the needed strength and structure, the cardboard needed wooden frames attached; these were also required for attaching each piece together to form the cave cinema. I also created braces for every wall piece to weigh them down. To keep the continuity of the installation, I made a projector stand from the same wood and cardboard. New lenses were created using a heat gun. These lenses were almost 'watery' in nature, creating a softer, more reflective feel.

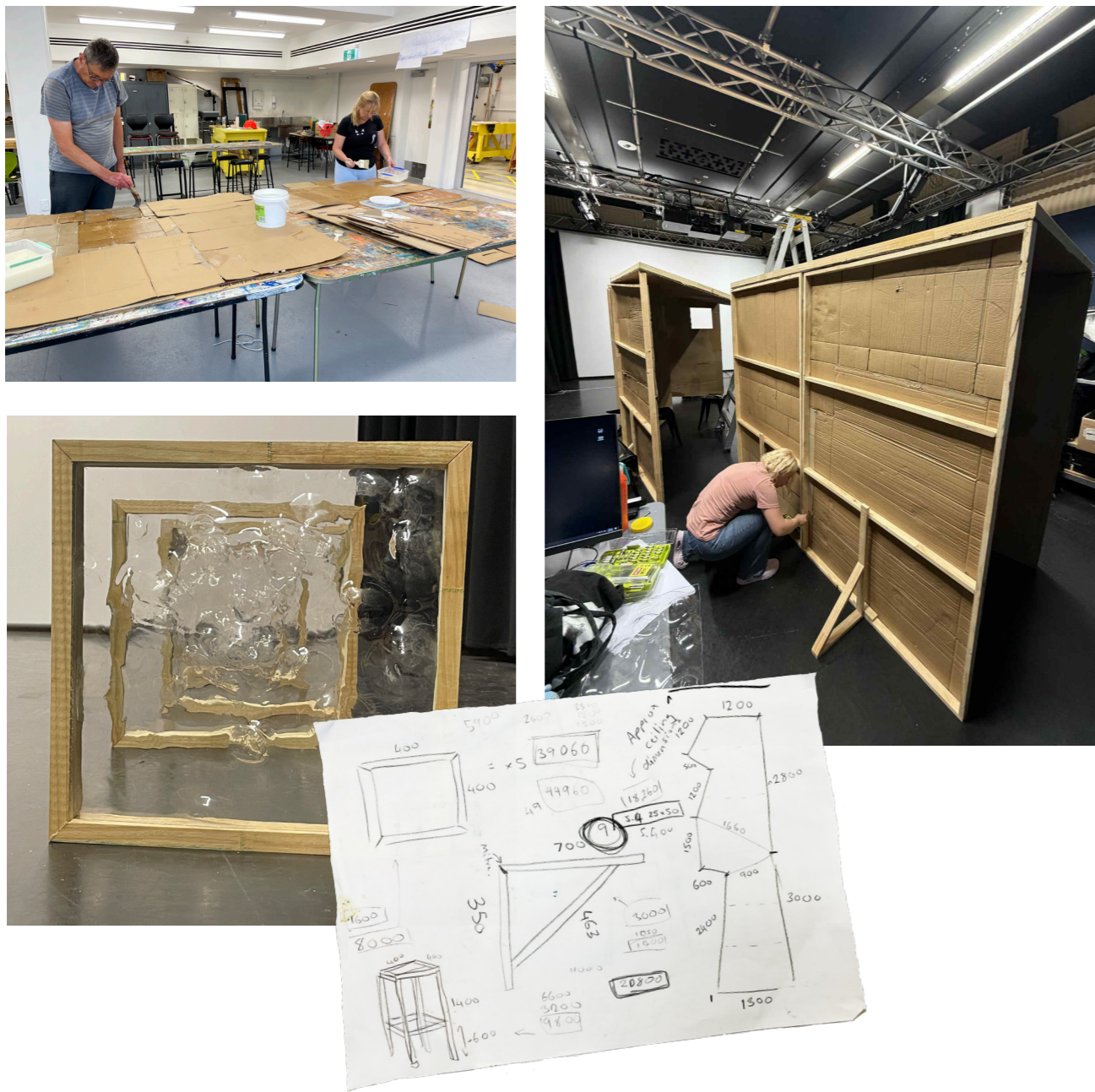
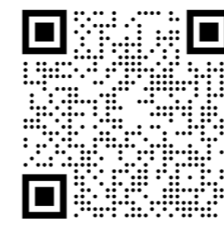


Fig. 97-100.



View films here

Collaging Multirealities

I spent time considering the video element of the installation. Previous video explorations lacked depth in their creation, missing the multirealities and slowness in time/narrative. I gathered more footage from films and documentaries for this last moment of iterations.



Fig. 101-104.

This video collage zooms into the eyes of people in apocalypse films. Eyes are incredibly emotive, and in watching someone's eyes you are reflected back (Elsaesser and Hagener). I did not find this to be a strong exploration, as it actually started to lose context of what is being mourned.

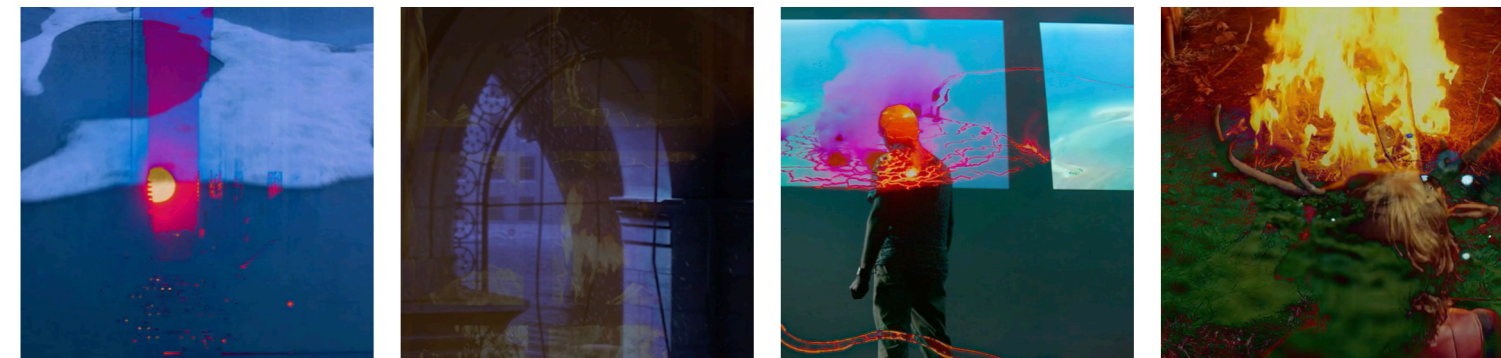


Fig. 105-108.

This video collage looked into the overlapping multiplicity of apocalypse and disaster. It layered films and documentaries together, becoming a singular image yet being more than one narrative. I found this to be an interesting way to reflect intersecting apocalypses, with the vivid colours being intense crossover points.



Fig. 109-112.

This video collage took heavily from slow cinema techniques to form a narrative. Still using multiple sources, the video starts with vast landscapes and heads towards a more subdued, fiery apocalypse. This held strong elements in its subtle narrative approach.



Final Design

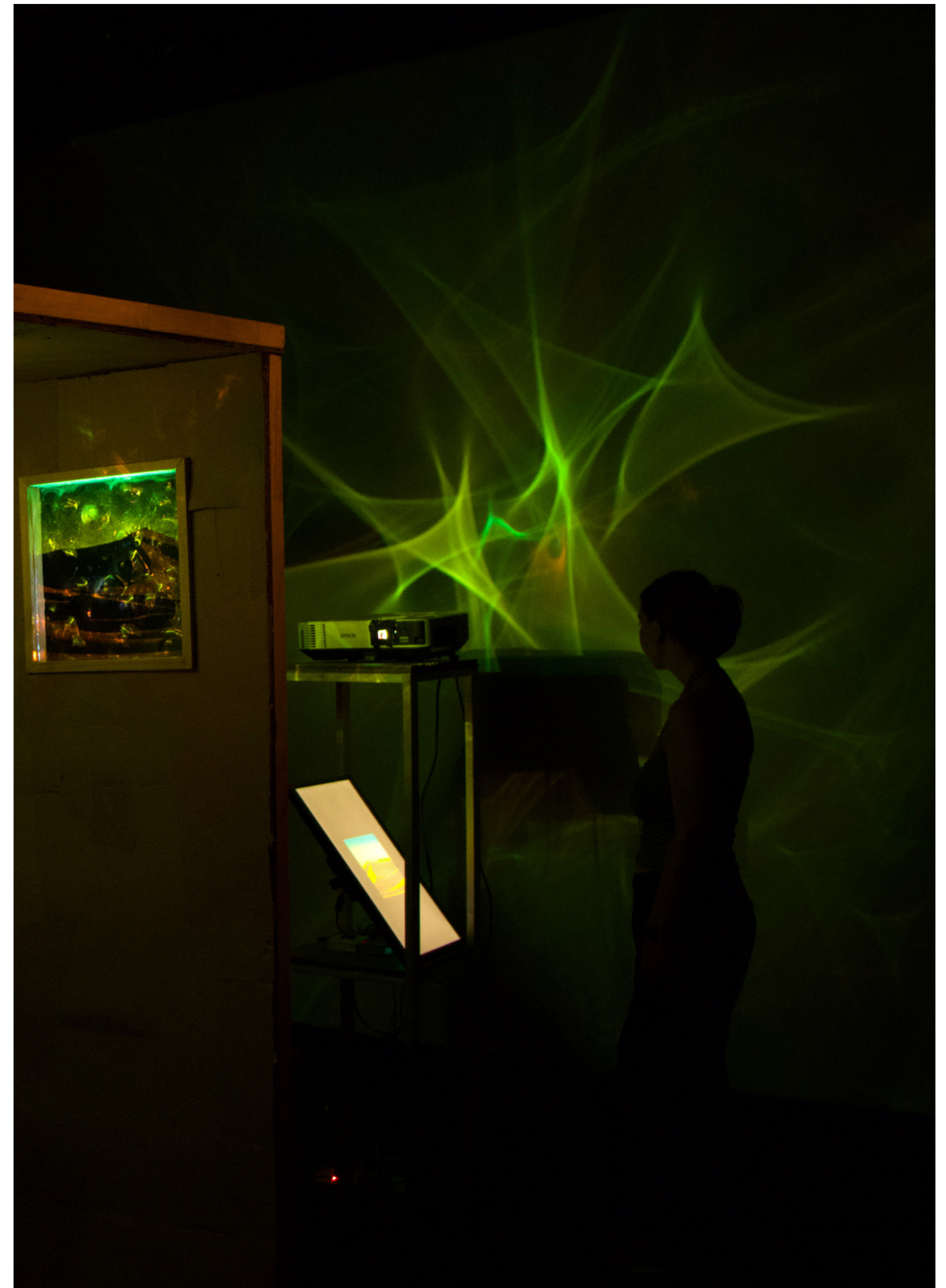
[C]inema is a magnificent mourning, a magnified work of mourning. And it is ready to let itself be imprinted by all the memories in mourning[...]

Jacques Derrida (de Baecque et al. 28)

Refracting Spectres forms a cave cinema of spectral apocalyptic projection. The cave cinema flows from a narrowing passage into flickering light, dispersed by a series of lenses. The 'cave' is illuminated in indistinct images, as tendrils connect and disappear. The enclosed space presses around the viewers, bringing a sense of awareness of the body in space. Walking through the row of suspended lenses, the projection dances upon the faces of viewers. Ghostly beings touching the living. The back wall of the room is a reflection of light. It feels alive in its movement, pulsing with the projected apocalypses.



Fig. 114-116.





Turning around, the cave cinema apparatus is pulled apart. The whole scene laid out and cut open to reveal its construction. The walls are cardboard stage flats, layered, pieced together, and held up by wooden frames for strength. It is held up by bracing, and sandbagged down. The projector balances upon a seemingly fragile stand; its images are clearer now, glimpses of faces and landscapes shift on the wall and lenses. The constructed cave is bare, it does not hide its marks of creation. Underneath the projector the projected video is played on a monitor, the clarity of image stark against the refracted projection light. Sitting down along the edge of the room, there is a moment to pause. The video projection continues to play. What is being projected? It requires a deeper look.

Fig. 117.

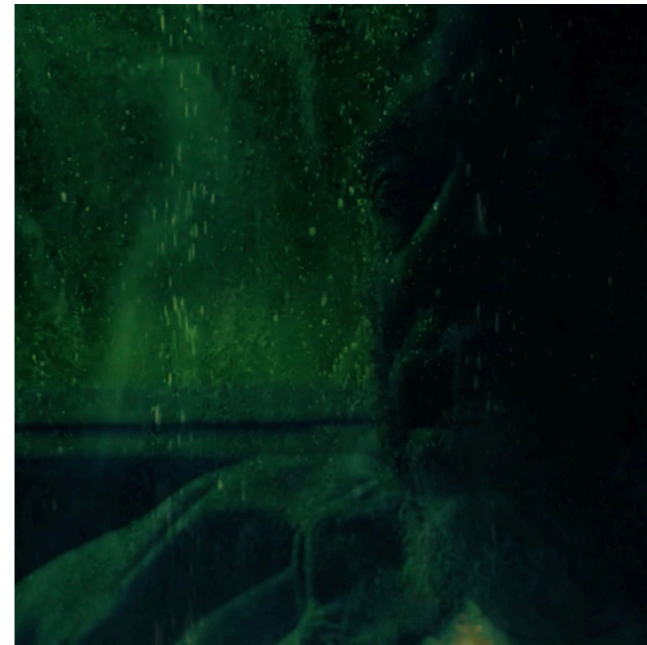
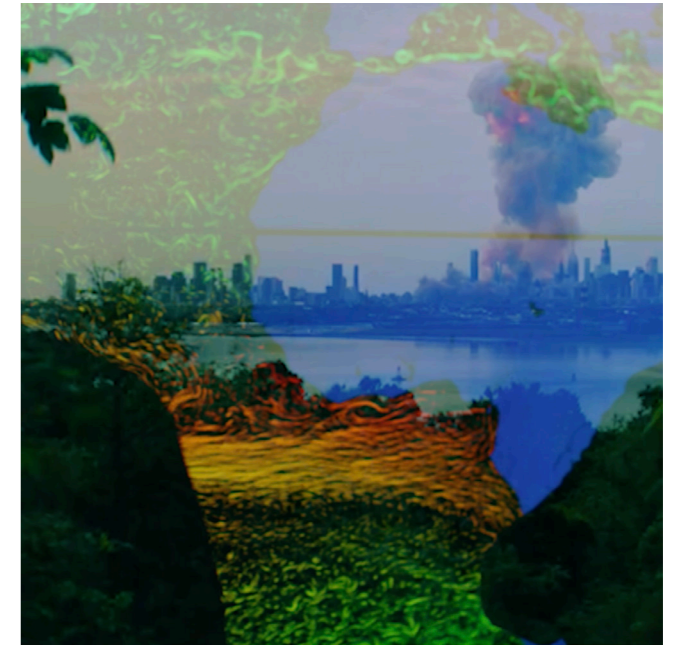
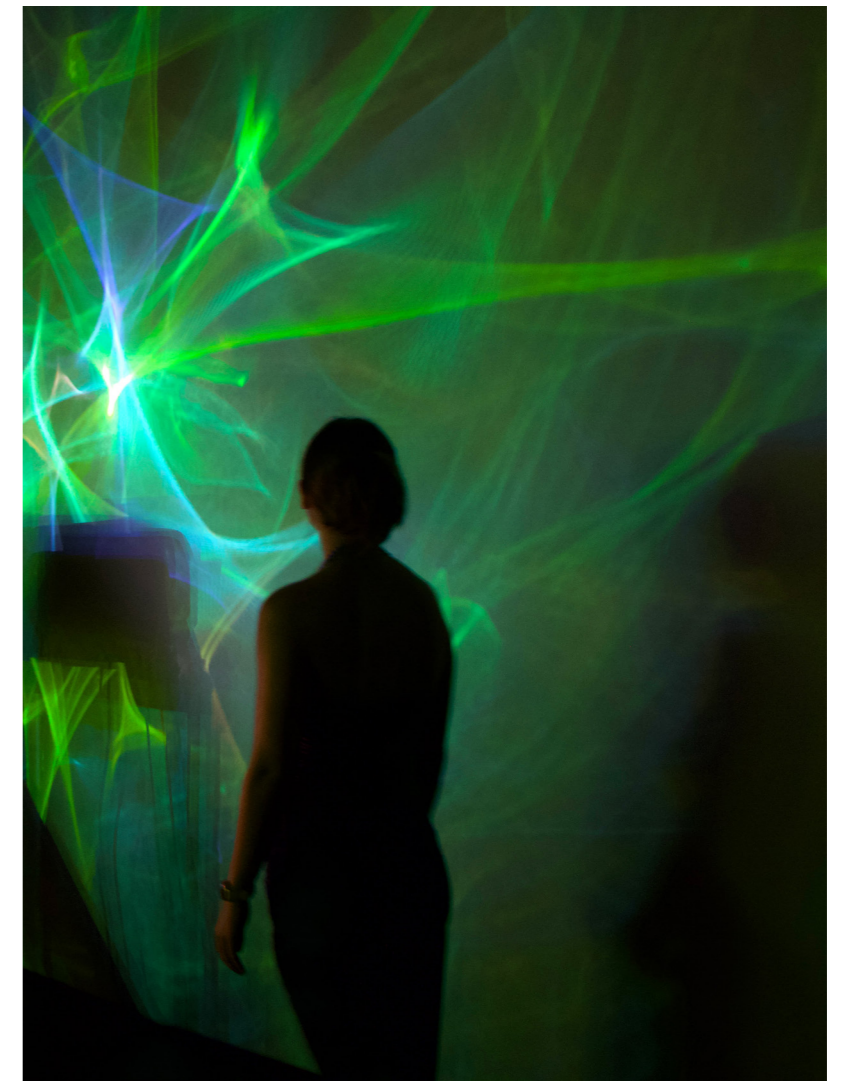


Fig. 118-125.

The projected video is a collage of multiple films and documentaries. The realities overlap and then refract through and off the lenses, creating new realities from one source. It is a collection of both fictional and real narratives that form understandings of climate disaster and apocalypse. *Refracting Spectres*, at one level, is a memorial – a holder of memories.



[View film here](#)



View documentation
here

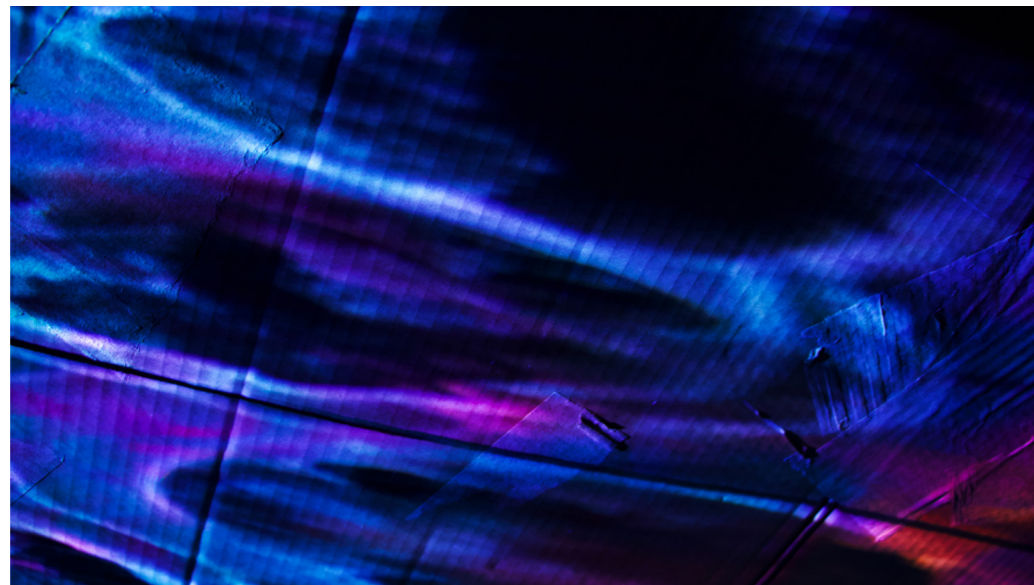


Fig. 126-128.

Inside this room with a cave cinema apparatus, the surrounding atmosphere is quiet. The usual noise of apocalypse films is absent. Instead, the silence allows a moment to think. It invites the viewer to mourn. It invites a slower pace to process disaster without hiding away from it.

Conclusion

[A] means not to an end, but only to future means.

Isabelle Stengers (Osbourne 152)

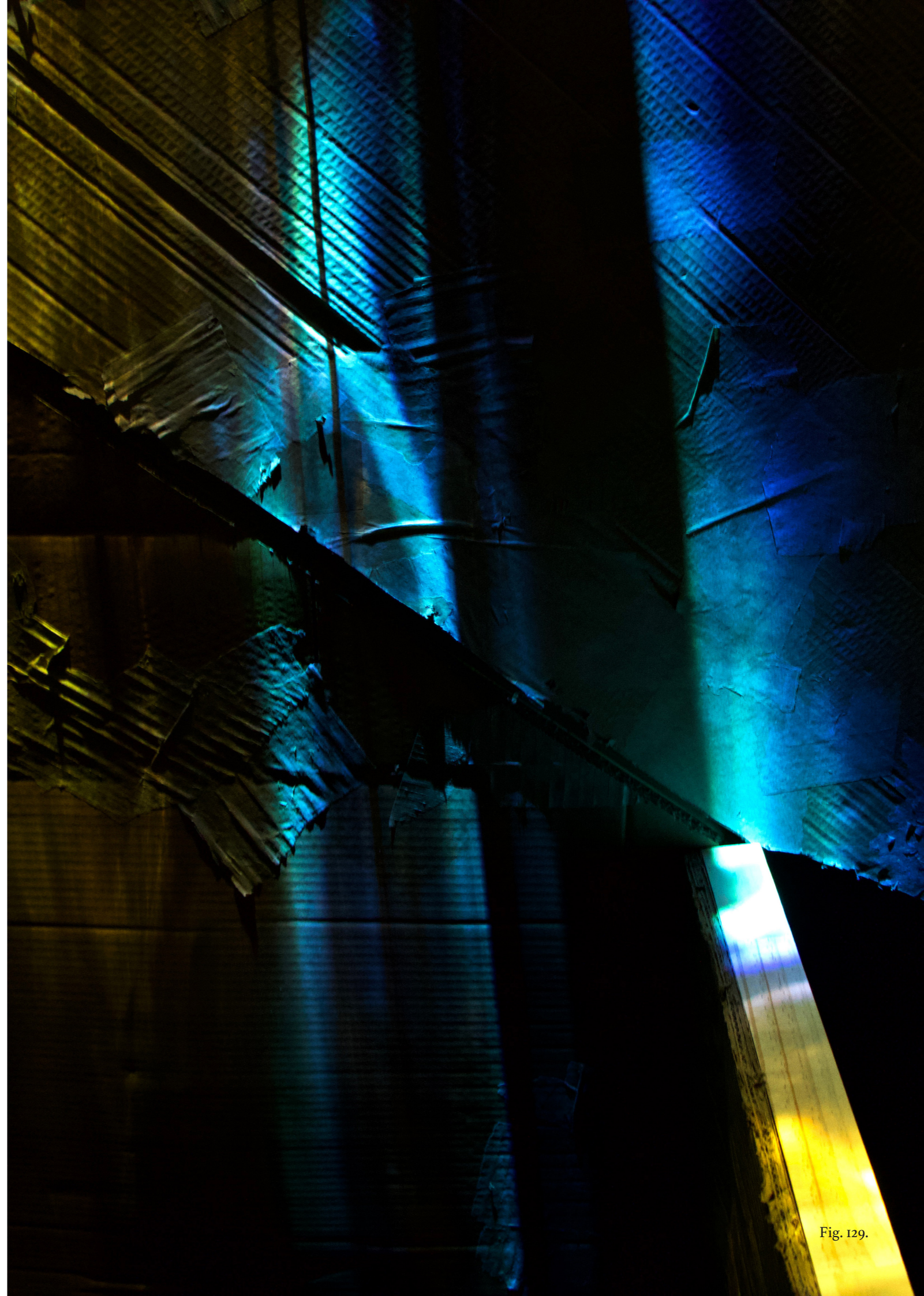


Fig. 129.

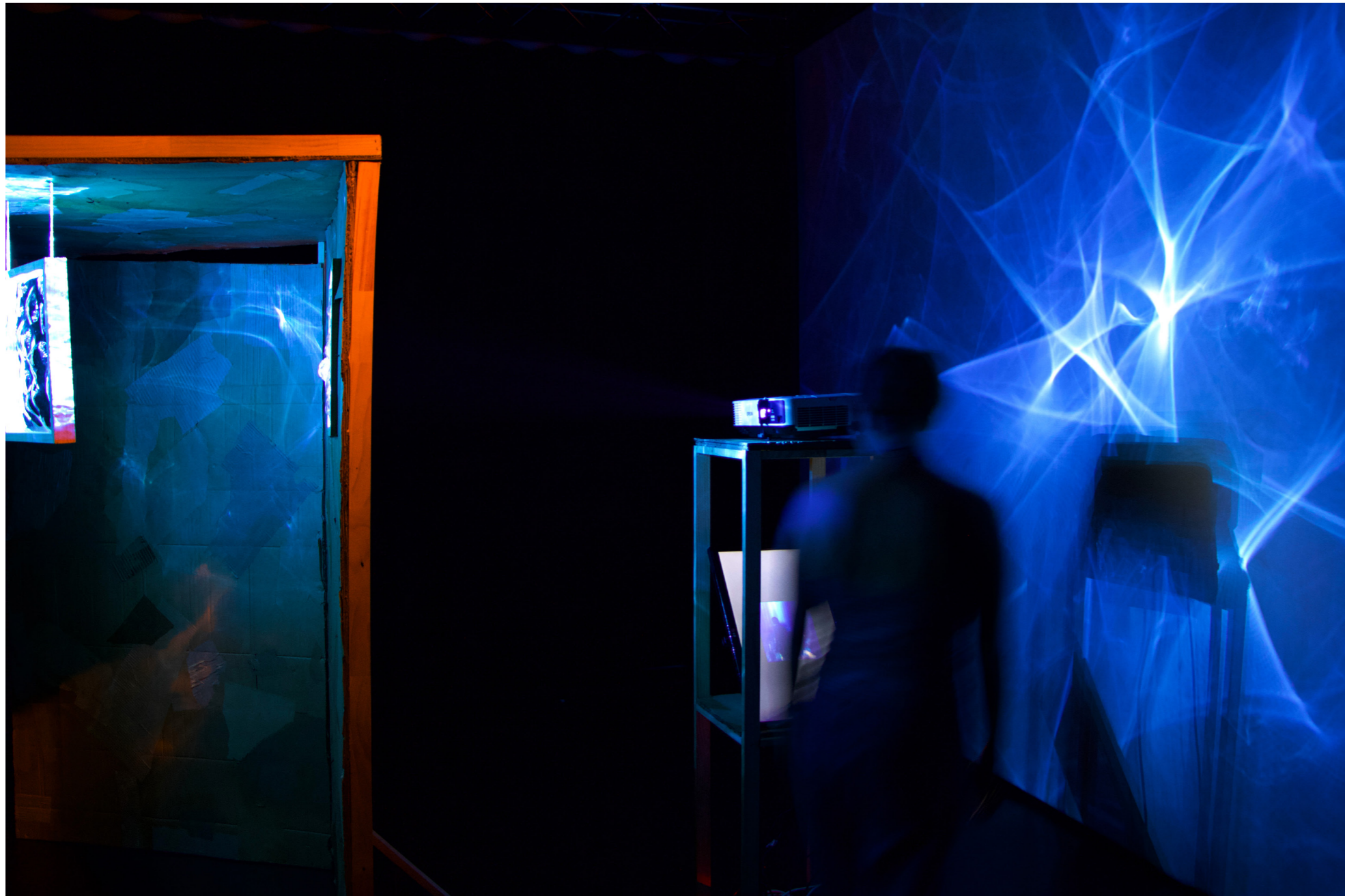


Fig. 130.

The finalised sceno-cinema-installation, *Refracting Spectres*, is a quiet contemplation of climate grief within a fast-paced present. It is a revealing and stripping away of what realities are presented to us through film media, as well as a physical encounter with the spectrality of the images. Informed by Plato's cave, memorials, and deep time, the installation considers memories and perception. It attempts to interweave immense apocalypse, and how we respond to it, with a sense of slowing down.

One interesting outcome of this research was the combining of scenography, cinema, and installation, into sceno-cinema-installation. The intention behind it was to reach a practice that isn't set in its scope, as the design draws on elements from each practice. *Refracting Spectres* is scenographic in its use of narrative, material, and staging. Papier mâché constructs an imitation of a wall, or a cave, and the use of rigged lighting upon the 'cave cinema' frames the experience as being staged. The design is also of cinema – using duration, set, and other film techniques. The video collage that is projected blends multiple realities together into an interpretation of slow-cinema films. It uses long duration shots of landscapes with people interacting within in various scenes. The cinema is also the physical construction. It is a place to experience a different sort of time, a place to be enraptured by the emotions played out on the screen. *Refracting Spectres* is also an installation. It is an immersive space, built to be walked through, interacting with the audience.

The final design is presented within the Space Lab at Massey University. It was not a completely ideal space, as I would have preferred the hallway entrance to be right against an opening door. Looking forward, I would love to continue to refine *Refracting Spectres*, and present it in a black box gallery space. This Masters research project has allowed me to explore themes important to me, but has also opened my thoughts as to how this sceno-cinema-installation can be a space for others as well.

Towards the end of this project I realised that what I was creating was less of a broad invitation to mourn, but rather an invitation to join me in mourning. *Refracting Spectres* is an attempt at processing my own thoughts about this ongoing apocalypse. Its physical formation became what would bring me into a space of introspection. My hope is that it also prompts the audience to reflect on climate grief and its paralysing effects.

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Fig. 14. Rivers, Ben. *Look Then Below*. 2019, <https://www.benrivers.com/lookthenbelow>. Film still.

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Fig. 17. Cardiff, Janet and George Bures Miller. *The Paradise Institute*. 2001, <https://cardiffmiller.com/installations/the-paradise-institute/>. Photograph.

Fig. 18. Tsai, Ming-Liang. "Goodbye, Dragon Inn [Official Trailer]" *Youtube*, Uploaded by Metrograph, 11 Dec 2021, https://www.youtube.com/watch?v=vCRpC_LOe_U.

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The Maze Runner. Directed by Wes Ball, 20th Century Fox, 2014.

The Maze Runner: The Death Cure. Directed by Wes Ball, 20th Century Fox, 2018.

The Maze Runner: The Scorch Trials. Directed by Wes Ball, 20th Century Fox, 2015.

WALL-E. Directed by Andrew Stanton, Walt Disney Studios, 2008.

Links to Videos

pg. 54. <https://youtu.be/d5dlk50js1Q>

pg. 57. https://youtu.be/1V_uZagMniQ

pg. 66. <https://youtu.be/hQ00CokiHxw>

pg. 69. <https://youtu.be/VUaTLlp8v-Y>

pg. 73 <https://youtu.be/RKdFR5hsThU>

pg. 77. <https://youtu.be/LYli5NJifsc>

pg. 84. <https://youtu.be/e35Bva6PMQE>

pg. 86. <https://youtu.be/Uobt4vpGBf8>

