

Expanded Animation and Memory

Zahra Rezaei Salarnia

MPhil

2023

Expanded Animation and Memory

Zahra Rezaei Salarnia

A thesis submitted to
Auckland University of Technology
in partial fulfilment of the requirements for the degree of
Master of Philosophy

2023

School of Art & Design

[Digital Design]

ABSTRACT

The research discusses the embodiment of my childhood memories through *expanded animation*'s materiality, temporality, and space. It seeks alternative approaches for the production and representation of animation, to provoke multisensory perception of my subjective recollections. The project's heuristic methods synthesise theoretical, practical, and embodied knowledge via reflective practices. The theories of memory, time, drawing, animation, and multisensory perception, and the artistic practices of William Kentridge, Yuri Norstein, and Emy Kravitz guided the production of a multi-channel hybrid installation, *No. 28*. Made of hand-drawn animations, *No. 28* materialises the nature of my memories in charcoal drawings, the animation's rhythm, and the installation space, provoking atmospheric and sensory experiences.

Table of Contents

Abstract.....	3
List of Figures.....	6
Attestation of Authorship.....	7
Acknowledgements.....	8
Intellectual Property Rights	9
Introduction.....	10
Positioning Statement	11
1 Chapter 1: Contextual Review	12
1.1 Animation and Memory	12
1.2 Understanding Memory	13
1.3 Time and Memory.....	16
1.4 Understanding Drawing.....	18
1.5 Multi-channel Installation.....	20
1.6 Multisensory Perception	24
1.6.1 Sense of Touch.....	24
1.6.2 Visceral Response	25
1.6.3 Kinaesthetic Perception.....	26
1.6.4 Sound and Sense Memory.....	27
1.7 Case Studies.....	28
1.7.1 William Kentridge.....	28
1.7.2 Yuri Norstein	29
1.7.3 Amy Kravitz.....	30
2 Chapter 2: Research Design.....	32
2.1 Methodologies	32
2.1.1 Practice-as-Research	32
2.1.2 Heuristic Inquiry	33
2.2 Methods	34
2.2.1 Self-Inquiry	34
2.2.2 Self-Dialogue	39
2.2.3 Drawing From Memory	40
2.2.4 Writing From Memory.....	41
2.2.5 Contextual Review	41
2.2.6 Experimentation.....	44
2.2.7 Reflective Practice	45
3 Chapter 3: Documentation of Process.....	46
3.1 Development of the Idea.....	46
3.2 Early Experimentation	49

3.3	Development of Animation Technique.....	53
3.4	Development of Drawing Style	55
3.5	Digital Editing and Visual Rhythm.....	57
3.6	Making of Animated Drawings	58
3.7	The Installation Choreography	60
3.8	Preliminary Projection Tests.....	64
3.9	Making of Final Installation.....	71
3.10	Sound Design	75
3.10.1	Sound Effects	76
3.10.2	Voice-over.....	76
3.10.3	Sound from Archives	76
	Conclusion	78
	References.....	80

LIST OF FIGURES

Figure 1.1. Here the drawing process causes metamorphosis. One pose transforms into the next by adding and removing charcoal marks.	13
Figure 1.2. The drawing of my involuntary memory of my mom, evoked by sun rays passing through my window.	15
Figure 1.3. Another memory of my mom.	16
Figure 1.4. The residue of charcoal marks depicts the coexistence of the past and the present.	17
Figure 1.5. My memory of my grandpa resurfaced through the activity of drawing.	20
Figure 1.6. Scene 1, The Snowy Alley.	23
Figure 1.7. Scene 2, The Classroom.	23
Figure 1.8. Scene 3, The Birthday.	24
Figure 1.9. Scene 4, The War.	24
Figure 2.1. My research design.	35
Figure 2.2. Self-inquiry questionnaire, page 1.	36
Figure 2.3. Self-inquiry questionnaire, page 2.	37
Figure 2.4. Self-inquiry questionnaire, page 3.	38
Figure 2.5. Pages from my analogue journal.	39
Figure 2.6. Screenshot of my digital journal.	40
Figure 2.7. Drawing sketches from memory.	42
Figure 2.8. Drawing sketches from memory.	43
Figure 2.9. Writing from memory.	44
Figure 3.1. Drawing with ink on paper.	47
Figure 3.2. Animating with oil on canvas.	48
Figure 3.3. Animating with charcoal on paper.	49
Figure 3.4. Scenes from My Bedroom.	51
Figure 3.5. Scenes from Mom's Afternoons.	52
Figure 3.6. The Crow. Drawing process as a method for transforming one key pose into the next.	54
Figure 3.7. The opening sequence of The Crow.	55
Figure 3.8. Transitional poses were drawn incompletely.	56
Figure 3.9. Overlapping in-between poses with the key ones.	57
Figure 3.10. Animation set up.	59
Figure 3.11. Installation choreography.	62
Figure 3.12. Note. Reza Shah Statue 1979 Revolution. From Wikimedia Commons.	63
Figure 3.13. The projection tests at home.	65
Figure 3.14. Compositing the different parts of recollection in Adobe After Effects.	66
Figure 3.15. Compositing the different parts of recollection in Adobe After Effects.	67
Figure 3.16. Juxtaposing the memory fragments using Adobe After Effects.	68
Figure 3.17. More memories retrieved.	69
Figure 3.18. More memories retrieved.	70
Figure 3.19. Virtual installation setup in Adobe After Effects and Nuke.	71
Figure 3.20. Three-screens installation set up.	73
Figure 3.21. Twelve-screens installation setup.	74
Figure 3.22. Audio editing in DaVinci Resolve.	75

ATTESTATION OF AUTHORSHIP

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

Zahra Rezaei Salarnia

25th September 2022

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my supervisors, Miriam Harris and Gregory Bennett, for their advice and support throughout my research. Thank you for your guidance, encouragement, and patience. I would also like to express my deepest appreciation to my parents and family for their unconditional kindness and support.

INTELLECTUAL PROPERTY RIGHTS

The author/designer asserts the intellectual and moral copyright of the creative work *No. 28* (2022), contained in this thesis. All rights of the owner of the recorded work are reserved. The film contained in all its formats is protected by copyright and use of the recording is restricted. Any manner of exhibition and any broadcast, public performance, diffusion, copying, resetting, hiring or editing, constitutes an infringement of copyright unless previous written consent of the copyright owner thereto has been obtained.

Zahra Rezaei Salarnia

25th September 2022

INTRODUCTION

This thesis investigates the theories of animation, memory, time, drawing, and multisensory perception to create an embodiment of my childhood memories in the form of a hand-drawn animation installation. My experimental and reflective approaches aim to discover animation techniques to bring my past experiences into the present and trigger the audience's sense memory for sensory and kinaesthetic engagement with the installation's choreography. The research seeks answers to the following question: *How can personal memory be embodied through the materiality, temporality, and space of expanded animation?* This practice-as-research project is supported by heuristic inquiry methods, which facilitated the production of a multi-channel animation installation, functioning as my memory space, called *No. 28*. The installation is named after the number of the house in which I grew up.

In **Chapter One**, after overviewing animation as a medium for the communication of memories, I refer to philosophical theories about memory by Henri Bergson and Marcel Proust to describe the evocation of my embodied memories during the project. Then, I contextualise the association between time and memory based on Gilles Deleuze's philosophy of time. There is also an in-depth discussion about the evocation of memories through a multisensory drawing process that is supported by drawing theories. Additionally, I investigate phenomenological film theories to analyse the multisensory perception of the *No. 28* installation. Lastly, I discuss the influence of artists William Kentridge, Yuri Norstein, and Amy Kravitz on the development of my project.

Chapter Two discusses the methodologies and methods designed for creating *No. 28*. I elaborate on the mixed approaches that synthesise heuristic inquiry and the practice-as-research model to support the production and evaluation of different types of knowledge. Additionally, I describe how methods support the methodology and the project development.

Chapter Three is a substantial and comprehensive discussion about the conceptual and technical development of the project, from the early experimentation to completion. It demonstrates my experiments and the critical reflections and discoveries I acquired during the project.

To conclude, I review *No. 28* in light of the research question. I analyse how it embodies my memories and creates multisensory experiences.

POSITIONING STATEMENT

After two decades of living abroad, my childhood memories are the only way to connect to the town and the people I left behind. I often find myself reminiscing about the sights, sounds, and smells of the place I grew up in as if it were yesterday. However, as I age, they are fading away gradually with me. Also, gentrification has transformed my hometown into an unfamiliar place for me. For the above reasons, I initiated this practice as a research project to revive and preserve my childhood memories. Through a series of experimentations informed by theories and critical reflections, I explored alternative approaches for making and presenting animation to embody the nature of my memories. However, the project went beyond just the recovery of autobiographical memories and became a self-discovery process. Drawing authentically from my memories and juxtaposing them without a conventional narrative structure unfolded new aspects of my past life. The contrast between the pictures of memory events vividly revealed that my peaceful life in the small town was constantly interrupted by television audio-visuals of the political affairs of post-revolutionary Iran. By transforming my tacit memories into a tangible form of hand-drawn animation, I witnessed the duality and contradiction presented in my childhood life that I did not know before.

1 CHAPTER 1: CONTEXTUAL REVIEW

1.1 ANIMATION AND MEMORY

Memory is a creative work, an embodied act that requires a medium through which it can be communicated and transmitted ([Plate & Smelik, 2013](#)). Art, artistic practices, and popular culture are “technologies of cultural memory” through which memories are constructed, shared, and transmitted ([Plate & Smelik, 2009](#); [Sturken, 1997](#)). Animation is one of the technologies of memory. Unlike photography and film, animation is not limited to the representations of reality that are captured by a camera. Instead, it is a total frame-by-frame creation that offers flexibility and freedom for mediating memory content ([van Gageldonk et al., 2020](#)).

Accordingly, artists have employed a variety of animation techniques and materials for the communication of memory. For example, Stacey Steers in *Phantom Canyon* ([2006](#)) utilises the collage animation technique because it resembles the function of memory, a montage of fragmented and random recollections of past events ([van Gageldonk, 2020, p. 48](#)). In *Liebling* ([2013](#)), the polish artist Izabela Plucinska embodies amnesia through the transformative and haptic quality of clay material in stop motion animation technique ([Munteán, 2020](#)). Caroline Leaf in *The Street* ([1976](#)) enacts the transformative process of remembering through the metamorphic quality of paint-on-glass ([Miller, 2020, p. 87](#)). Similarly, Michele Cournoyer in *The Hat* ([1999](#)) utilises metamorphosis to depict the evocation of traumatic memories. The transformation of the dancer’s body, fluctuating between the memory of abuse and the dancing stage, embodies the fusion of past and present boundaries as memories erupt into her present body ([Richards, 2020, p. 154](#)). *The Hat* embodies the non-linear and fragmentary attributes of memory through the animation technique and the materiality of ink drawing.

From these examples, we can see that the fragmented, non-linear, timeless, and dynamic attributes of memory are well-suited to the animation techniques, especially metamorphosis. Paul Wells ([1998](#)) describes metamorphosis as a distinct feature of the animation process, creating the seamless transition between scenes through the transformation of visual elements. By interrupting chronological time and the structure of visual space, metamorphosis stimulates a sense of instability and blurs the gap between memory and reality, past and present, here and there ([p. 69](#)).

Therefore, I found metamorphosis a suitable technique to depict the transformative nature of my memories. The metamorphosis in the final animation is created by showing the process of one drawing changing into the next by adding and removing charcoal marks. In my animation technique, metamorphosis happens between poses instead of scenes, resulting in flickering, broken, and incomplete imagery like my memory image (Figure 1.1).

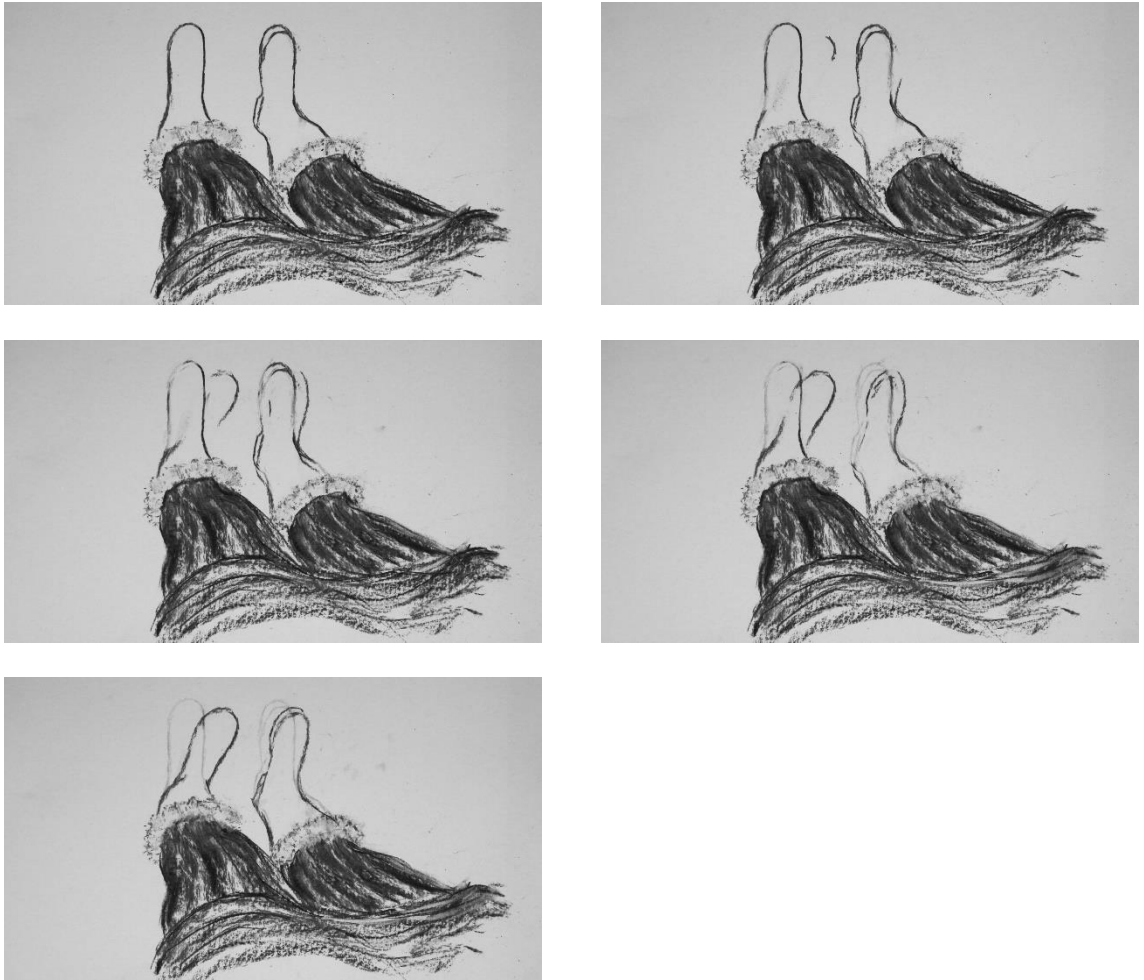


Figure 1.1. Here the drawing process causes metamorphosis. One pose transforms into the next by adding and removing charcoal marks.

1.2 UNDERSTANDING MEMORY

The French philosopher, Henri Bergson, in his book *Matter and Memory* ([1911](#)), classifies memory into the two categories of *habit* and *pure memory*. The former is a spontaneous habitual body movement acquired by repetitive practices and stored in our body, such as walking, speaking, drawing, etc. The latter is an independent recollection of the past as a memory-image

that timelessly inhabits our unconscious and is not repeatable. According to Bergson, they are distinct but simultaneously coexist within the body.

Bergson's pure memory, like Proust's *voluntary memory* or *remembrance*, is hidden in the unconscious for voluntary evocation ([Marks & Polan, 2000, p. 64](#)). Unlike Bergson's pure memory, Proustian voluntary memory is not only the experiences of the past through conscious recollection of image memory but also the sensory experience of living the past again ([Deleuze, 1988, p. 126](#)). Additionally, Proust proposes *involuntary memory* or *reminiscence* as a voluntary memory opponent, which is the spontaneous evocation of memories by sensory stimuli in the present; it is not accessible by will but, rather, requires a sensory shock such as the smell of madeleine soaked in a tea ([Marks & Polan, 2000, p. 64](#)). A Proustian reminiscence is a *sensational temporal becoming* in which the past experiences manifest in the present through the senses.

I engaged with habitual, pure, or voluntary, and involuntary memory during my research practice. Firstly, the movement and gesture of the hand in the drawing activity evoked my habitual memory of drawing skills that were gained through repetitive practice and stored in the motor mechanism of my body.

Then, I recalled my voluntary or pure memory. For the evocation of pure memories, Bergson notes "we must be able to withdraw ourselves from the action of the moment" to stretch the past into the present ([Bergson, 1911, p. 94](#)). Therefore, I intentionally positioned myself at a particular location in the past and navigated the trajectory of the unfolding memory. When we separate ourselves from the present to be in the past, memory is gradually embodied in the psyche ([Deleuze, 1988, p. 57](#)). Simultaneously, I translated those conscious remembrances into writing signs and drawing marks. My experience was that the evocation process started as a mental effort to go back into a particular time and space in the past. However, it proceeded from a recollection-image to a sensational experience of touching, walking, seeing, smelling, etc. Therefore, I would suggest that Bergson's pure memory and Proust's voluntary memory are complementary in the process of remembering, as both participated in the excavation of my memories.

Additionally, natural phenomena, such as the sun's rays, and the sound of the wind and snow, evoke my involuntary memories. As a result, one afternoon, the sun's rays that were passing through the window reminded me of the memory of my mom taking a nap (Figure 1.2). This

recollection unfolded other memories of her (Figure 1.3). Also, my encounter with objects such as crows, cats, flies, and trees take me back to my childhood environment. For example, walking by the trees at the park opposite my house took me under the walnut tree in front of my childhood home. By seeing, smelling, and touching the present trees, regardless of type, I again lived the past sensation of the walnut tree in the present. My perception became imbued with the flow of memories in which the past and present conflate. The eruption of involuntary memory can be understood according to phenomenological theories: as we are synesthetic beings whose senses are interconnected, one sensory experience will evoke memories in other sensory organs. I will further elaborate on these concepts in the [multisensory perception](#) section of this chapter.



Figure 1.2. The drawing of my involuntary memory of my mom, evoked by sun rays passing through my window.



Figure 1.3. Another memory of my mom.

1.3 TIME AND MEMORY

Memory is the eruption of the past into the present moment. During recollection, past experiences are mixed with current reality, blurring our perception of before and now, there and here. The temporal experience of memory is analogous to Gilles Deleuze's theory of the coexistence of the past and the present ([Deleuze, 1988, p. 59](#)). Deleuze defines the present moment as a midst: not the beginnings of the future nor the end of the past, "rather it is pure becoming, always outside itself" ([p. 55](#)). According to him, "duration is essentially memory" ([p. 51](#)). It is the psychological experience of becoming, having continuity and discontinuity as its fundamental features ([p. 37](#)). Indeed, the experience of time in memory agrees with Deleuze's time philosophy. The scholar Victoria Grace Walden, in her essay "Animation and Memory" ([2018](#)), describes memory as a sensory experience of the past constructed in the present, which is not fixed and complete, and frequently evolves and develops. It is imprecise, ambiguous, and chaotic. Therefore, memory is the flux of past events randomly entering the present, creating the experience of an in-between space where the past and the present cohabit. Also, during recollection, time and space expand and break the chronological order of the physical world. The author and professor of film studies

Annette Kuhn, explains that in “memory text,” tracking time is almost impossible because time is not linear. Therefore, events are not following consecutive, logical structures. They may randomly repeat, appear, disappear, merge, and transform into one another ([Kuhn, 2010](#)). Perhaps this is due to the ambivalent nature of time in memory. The Australian philosopher, Elizabeth Grosz in her book *Becomings: Explorations in Time, Memory, and Futures* ([1999](#)), characterises time as linear and intertwined, "wholistic" and "fragmentary." Consequently, the ambivalence in time results in the coexistence of the past and the present in which every moment is becoming ([pp. 17-18](#)). Additionally, she emphasises that becoming necessitates unbecoming. ([Grosz, 2005, pp. 10-11](#)). While remembering, we transform nonlinearly between the experience of past and present time and space. As a result, each second is a psychological process of becoming during a recollection of the past.

Understanding memory in conjunction with Deleuze’s theory of time guided the development of my hand-drawn animation technique. I tried to embody the coexistence of past and present in memory through the materiality and process of charcoal drawings. In *No. 28*, the residue of charcoal marks is visible in hand-drawn animations, resembling the memory space in which past and present coexist (Figure 1.4). I will elaborate on my animation technique in more detail in [Chapter Three](#).

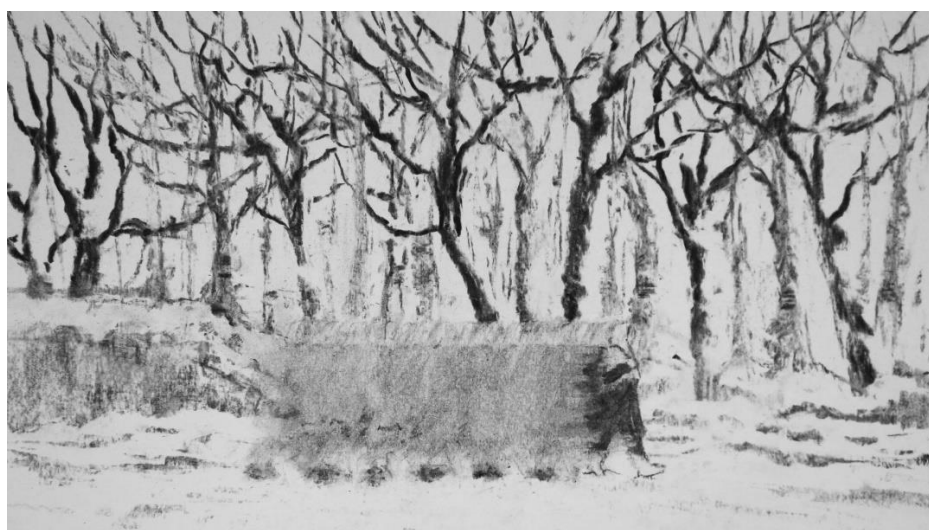


Figure 1.4. The residue of charcoal marks depicts the coexistence of the past and the present.

1.4 UNDERSTANDING DRAWING

Analogue drawing was the main animation technique for *No. 28*. Drawing, as described by the English painter and sculptor Avis Newman, is an embodied physical activity in which the transmission of thought depends on hands, eyes, and mental space ([De Zegher, 2003, p. 81](#)). The manual process of drawing helped me to retrieve my memories throughout the project. London-based New Zealand artist, Jane Grisewood investigates the evocation of memory through drawing based on Bergson and Deleuze's theories of time and memory. In her research project *Marking Time* ([2010](#)), she demonstrates that in drawing activity, the past inhabits the present as habitual, pure, voluntary, and involuntary memory. Similarly, in *No. 28*, I experienced the evocation of different types of memories through my drawing activity, as previously explained in the "understanding memory" section.

In addition, for Grisewood, drawing is a process of becoming in which the artist and artwork bodies are in the flux of time and transformation. She asserts that the repetitive physical movements in drawing eliminate the perception of linear time, creating an in-between space where memory resides: "Becoming is open-ended, continuing through creativity, repetition, and renewal. Not a beginning or end, but a middle where memory resides and where everything unfolds" ([2010, p. 122](#)). In the same way, during the drawing process of *No. 28*, the repetitive movement and gesture of my hand, throwing marks away from my body on paper, created immersive experiences and evoked my memory. It was a spontaneous experience of the past coming to the present moment and then translating into the drawing marks. I was moving between memory and the drawing activity, adding or erasing marks from the drawing. Consequently, my body and the drawing's body were constantly changing and in the process of becoming. Likewise, Jean Fisher, in her essay "On Drawing" ([2003](#)), explains that the rhythm of gestural marking liberates us from consciousness and opens the flow of sensation, "'I' is no longer there ... I am becoming-paper, becoming-ink, becoming-brush ... the drawing is becoming thought" ([p. 220](#)). Similarly, Michael Newman, in his essay "The Marks, Traces, and Gestures of Drawing" ([2003](#)), describes drawing as a process of becoming, as "blot becoming mark, mark becoming line, line becoming contour, contour becoming image, the image becoming sign" ([p. 100](#)). Therefore, the

drawing process conforms to Deleuze's time in which the past and the present coexist, and each instance of time is an experience of becoming. Above all, the physical activity of inscribing and drawing opens a pathway for psyche events and the eruption of memory (Figure 1.5).

Furthermore, psychological theories indicate that both conscious and embodied memories can be evoked by gestural and physical activity, leading to sensory experiences and expression. According to the movement therapist Elaine Siegal, body movement elicits early feelings and memories because our experiences are stored in our muscle system ([Ramm, 2005](#)). Similarly, phenomenological theories emphasise that we experience and perceive the world through our body, and our perceptions and feelings are stored in our sensory organs ([Marks & Polan, 2000](#); [Merleau-Ponty, 2012](#)). Therefore, there is a possibility that gestural drawing and mark-making provoke the conscious and subconscious memories that are stored in our senses.

Beside the movement of my hand, eyes, and body, the sound of the pen and charcoal on the paper enhanced the immersive experience of drawing. As a result, the multisensory drawing process created immersive experiences and in-between spaces where I could access the tacit dimension of myself. Joseph Beuys describes drawing as the first visible form of invisible thought, a creative process of sense discovery in which the sense of touch, hearing, and sight collaborate to transform tacit mental concepts into a tangible form ([Rose, 1993](#)). As a result, in the physical and mental act of drawing, different types of sensory perception overlap the thinking process. Indeed, the inner thoughts and experiences are subject to change through sensory perceptions during the process of drawing. Matisse said, "it is not a matter of drawing a tree I see. I have an object in front of me that produces an effect on my mind, not only as a tree, but in relation to all sorts of other feelings. I shan't get rid of my emotion by exactly copying the tree" ([as cited in Fisher, 2003, p. 217](#)). Accordingly, I looked inward to myself to capture the quality and experience of memory instead of the accurate pictures of past events. The drawing activity was key to capturing the essence of memory and movement of gesture in the *No. 28* animated drawings.



Figure 1.5. My memory of my grandpa resurfaced through the activity of drawing.

1.5 MULTI-CHANNEL INSTALLATION

The term *expanded animation* refers to animated artworks displayed as an installation in museums and art galleries. Therefore, understanding moving image installation was significant for the production of my animation installation.

Anne-Marie Duquet ([2000](#)) describes video installation as a scenography of moving images whereby the architecture becomes part of the image, transforming a flat visual space into a three-dimensional one. It is a hybrid art form in which theatre and cinema converge on the museum wall and the screen of the film: “the collision of museographic architexture with filmic texture” ([Bruno, 2007, as cited in Rutherford, 2014b, p. 89](#)). However, staging animated videos in a museum or gallery does not simply make them installation art. The British filmmaker, Nicky Hamlyn, explains that the time-based works in the gallery that immerse the viewer into the “illusionistic space of the film,” eliminating physical exploration of space, are not installation art. They are films, as they do not provoke physical engagement with their display environment ([Hosea, 2018, p. 259](#)). Therefore, to reduce optical gaze and evoke kinaesthetic responses instead of a single channel, I designed a multi-channel installation setup for *No. 28* by placing three

screens and projectors around the space. The installation artist, Rose Bond, in her essay “Poetics and Public Space: an Investigation into Animated Installation” ([2011](#)), explains how duplication of screens breaks fixed perspectives and creates multiple points of view that are equally significant for the perception of the installation. Also, it eliminates the linear and sequential order of narrative and creates “multiform plots” in which events can be mixed, repeated, or substituted ([Weibel, 2003, p. 117](#)). Possibly, it is challenging to understand the *No. 28* installation from one fixed position. The meaning is revealed only when the viewers walk through the space and create their own stories by connecting the projected memory scenes together. With the back-and-forth movement between screens, their concepts blend into each other, leading to the germination of subjective interpretation and sensory perception.

Despite the viewer being mobile and not constrained into a fixed position and premeditated linear narrative, in *No. 28*, I still influenced the trajectory of the viewer's eyes and physical movement between the screens by the choreography and arrangement of the audio-visual elements.

According to Bond ([2011](#)) in multi-channel installation, the "mobile spectator" consciously selects between seeing and missing, moving, or staying, according to the size and arrangement of screens. Likewise, Edwin Carels, in his essay “Spaces of Wonder: Animation and Museology” ([2013](#)), refers to the fundamental process of animation, the creation of movement through *keyframes*¹ and *in-betweens*², and describes how, like animators, installation artists can set the keyframes by arranging installation elements such as screens, objects, sound, etc., and leaving the in-between frames for the viewer to fill in themselves as they move between the keyframes. Additionally, the experience of viewing animation in a gallery space is distinct from a movie theatre. In a cinema, despite the eyes’ movement, the viewing position is fixed, and the order of the sequences is set by the artist. On the contrary, in a museum viewers have total mental and physical freedom. They are animators and editors who freely select their displays or keyframes, move between them for drawing the in-betweens and control the order and duration of viewing

¹ In conventional animation, *keyframes* are the main frames containing the core actions of the animation and are essential for storytelling.

² The *in-betweens* are additional drawings between keyframes, creating a smooth transition.

([Carels, 2013, p. 296](#)). Therefore, the experience of *No. 28* depends on my installation choreography and the viewers' way of engaging with it.

To further understand the construction of meaning by a viewer in a multi-channel installation, I refer to Scott McCloud's notion of *closure* and Sergei Eisenstein's *intellectual montage*. In his book, *Understanding Comics: The Invisible Art* ([2008](#)), Scott McCloud employs the term closure to address the human mental ability to perceive the whole meaning from observing segments, by referring to learned experiences ([p. 63](#)). This brain ability enables comic art readers to fill the gap between panels based on their experiences and construct the meaning and story. Perhaps, like comic strips, the gap between screens in multi-channel installations such as *No. 28* stimulates viewer memories, opening unlimited possibilities for imagination and meaning-making. By looking at parts of my memory images projected on the wall, the viewers must refer to their memories and past life experiences to construct their own narrative from memory flashbacks.

Additionally, Sergei Eisenstein's intellectual montage is insightful for understanding the formation of the meaning from the interplay between different images. In his film *October* ([1928](#)), particularly the sequence of gods, he juxtaposes a series of distinct divine imageries consecutively to create a "cine-discourse" about God. Conceptual similarities between images emphasise the universality of God. However, similarities are not the only factor in creating a connection between pictures. The juxtaposition of the developed and familiar Christ, church, and statue against the primitive and unfamiliar Nivkh idol creates new meaning through dissimilarities, and deconstructs the celestial notion of God into "a block of wood." Indeed, intellectual montage incorporates two forms. One is an *associative form* that produces conceptual meaning through similar aspects of imageries. The other is a transformative and *dissociative form* in which the dissimilarity of images suspends the literal meaning and provokes speculation ([Arsenjuk, 2018, pp. 176-178](#)).

Accordingly, I utilised Eisenstein's intellectual montage method within and between the scenes to provoke specific experiences and meaning. In the *No. 28* spatial montage, the mobile viewer is free to move around and orchestrate a personal montage. However, my arrangement of screens may lead them to particular ideas and emotions. Firstly, the similar visual elements in the three

videos of each memory scene create the associative form of intellectual montage. For example, in scene one, the trees, walking, and the snow are common elements in all three videos. Therefore, they are perceived as a different angle of the same memory from the similarity of the pictorial elements, stimulating the atmospheric and emotional experience of the memory (Figure 1.6). Additionally, the interplay between four scenes from different memories establishes the non-associative form of intellectual montage. The dissimilarity of pictorial elements between the scenes suspends the literal concept and provokes speculation. For example, the installation starts with *The Snowy Alley* (Figure 1.6), followed by *The Classroom* scene (Figure 1.7), communicating an innocent childhood life in a remote, peaceful environment. On the contrary, *The Birthday* scene (Figure 1.8), depicting Khomeini and revolutionaries' hands, followed by images of soldiers, boots, and TV flashes in *The War* scene (Figure 1.9), provokes fears and uncertainty. Consequently, the calming atmosphere of the installation gradually transforms into a disturbing experience. The contrast between imageries reveals the hidden concept of images, the collision of my harmonious domestic childhood environment with the epic political events. The choreography of *No. 28* evolved through a series of experimentations and reflections, which will be discussed in further detail later in [Chapter Three](#).

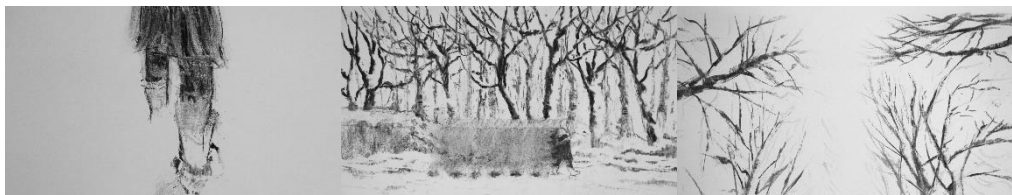


Figure 1.6. Scene 1, *The Snowy Alley*.



Figure 1.7. Scene 2, *The Classroom*.



Figure 1.8. Scene 3, *The Birthday*.

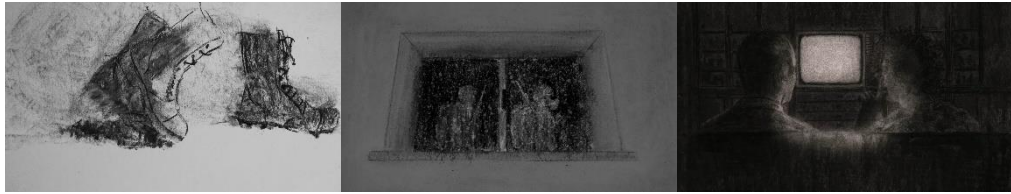


Figure 1.9. Scene 4, *The War*.

1.6 MULTISENSORY PERCEPTION

The multisensory and embodied experience of moving images has been discussed comprehensively by scholars such as Laura Marks, Jennifer Barker, Anne Rutherford, and Vivian Sobchack. It is almost undeniable that the film's materiality stimulates tactile perception and provokes corporeal and body responses in a viewer ([Rutherford, 2014a, p. 226](#)). In the following sections, I will discuss theories to investigate how visual, sonic, and spatial aspects of *No. 28*'s hybrid installation may provoke multisensory perception by stimulating haptic, visceral, and physical responses in a viewer.

1.6.1 Sense of Touch

Laura Marks, in *The Skin of The Film: Intercultural Cinema, Embodiment, and The Senses* ([2000](#)), conceptualises *haptic* and *optical visibility*. The former is the navigation of the eye on the surface texture of a film, evoking a sense of touch. The latter relates to distance and conventional perception through sight with immediate recognition of the object. Unlike the optical, the haptic vision tends to move along textures rather than focusing on illusionistic depth. However, both optical and haptic visibility are involved in our perception "in a dialectical movement from far to near, from solely optical to multisensory" ([pp. 162-163](#)). Therefore, haptic images such as the charcoal drawings of *No. 28* encourage the eyes to function as hands, moving along the surface and touching the textures. According to Marks, cinematic techniques such as close-ups, grainy

textures, extrema exposure, and layering, produce semi-abstract and haptic images and prevent an immediate identification of objects, luring the viewer into closer and more sensory engagement with the materiality of the image ([p. 172](#)). Indeed, the surface texture of the film triggers a tactile mode of perception through haptic images. Similarly, in *No. 28*, the development of drawing, in which figures gradually form from abstract lines, textures, and marks, produces semi-abstract imageries that delay immediate identification with figures and provoke haptic visuality. Therefore, viewers must refer to their sense's memory, past experiences, and imagination to complete the whole picture ([p. 163](#)). Their eyes move between haptic and optical, surface and depth, and close and distance perception, creating the ambiguous experience of in-between spaces.

1.6.2 Visceral Response

Jenifer Barker, in *The Tactile Eye: Touch and The Cinematic Experience* ([2009](#)), explains that cinema evokes visceral responses in a viewer because the rhythm and motion in human and film bodies are alike. The illusion of movement in film and animation is produced by a series of still images. Similarly, our body rhythm is made up of intermittent and separate motions, although registered as continuous in our conscious ([p. 128](#)). Therefore, discontinuity and interruption in the temporal rhythm of the film body resonates deeply with the viewers' viscera and draws their attention to their internal body rhythm. Any apparatus failure in the film body reminds the viewer of the fragmentary and fragile nature of their physical body, provoking both pleasurable and discomfoting sensory experiences ([pp. 134-135](#)). Similarly, in *No. 28*, the nonlinear montage of complete and incomplete, detailed and minimalist, figurative and abstract drawings foregrounds the intervals between the frames and interrupts the continuity of movement. Also, the continuity of animation breaks where I had accidentally moved the paper, hit the camera, or left finger marks on the drawings. As a result, the temporal rhythm of my stop-motion animation is fragile and kinetic, which may stir up viewers' visceral responses. Along those lines, the animation studies scholar, Miriam Harris ([2020](#)) employs psychoanalytic theories to investigate the production of affect in Robert Breer's films. She elaborates that kinetic rhythm and gestural drawings are the elements of prelinguistic time, hidden in our subconscious, ready to be evoked by temporal

rhythm, visceral marks, and the sound of the film, provoking our emotional and visceral responses and interactions with Breer's films ([p. 108](#)). Perhaps the kinetic rhythm of the expressive drawings in *No. 28* may reactivate viewers' memory of their physical movement and rhythm in the developmental stage, creating visceral and kinaesthetic responses. Also, the experimental filmmaker Martin Arnold describes the movement and rhythm of imagery extending beyond the screen to the spectator's body. He created this sensory and corporeal impression in his film *Pièce Touchée* ([1989](#)), through imageries that repeatedly move backward and forward and constantly break the linearity of time and space ([Arnold & MacDonald, 1994, p. 5](#)). Therefore, I interrupted the linearity and stability of time and space in the animated drawings to embody my vanishing memory image, which may provoke unsettling feelings.

1.6.3 Kinaesthetic Perception

As previously discussed, the understanding of multi-channel installation depends on a viewer's physical movement between the screens. Additionally, kinaesthetic responses are evoked as the viewer's eyes navigate the texture quality of images inside the screen. Rutherford ([2014b](#)) elaborates how the haptic quality of the hybrid installation creates kinaesthetic responses and provokes an immersive experience. She describes William Kentridge's Cockatoo island installation, *I Am Not Me, The Horse Is Not Mine* ([2008](#)), as "a collage of spaces" in which architectural elements of the installation site such as the door handles, the wall texture, and the colour penetrated the projected animations and became an integral part of them, creating additional coating and textural density ([p. 85](#)). As a result, the montage of both the architecture and the film creates ambiguity as the viewer's gaze moves between the two spaces, between the actual site material and the flat texture of images, stimulating kinaesthetic and physical engagement ([p. 91](#)). Therefore, it is possible that *No. 28*, as a hybrid multi-channel installation, evokes the viewers' kinaesthetic responses. It is made of charcoal drawings that have been photographed by a camera and projected on the gallery wall, making the gaze shift between the flat surface of the charcoal drawings and the spatial depth of the wall's colour and texture. Along those lines, Robin Curtis ([2008](#)) explains that the oscillation between spaces—in this case, the real gallery space and the virtual cinematic space—provokes a sense of displacement and

immersive engagement ([as cited in Rutherford, 2014b, p. 98](#)). Similarly, in *No. 28*, the boundary between real and virtual space is not distinguishable, evoking a sense of unknown hybrid space and creating an immersive viewing experience. Additionally, the viewers must move their bodies and heads between the projected animations to draw a connection between them and create their own story.

1.6.4 Sound and Sense Memory

The aim of the sound design in *No. 28* was to re-create the multisensory experiences of my childhood memories for the viewers. Therefore, I added sound effects to enhance the atmospheric and sensory viewing experiences. Merleau-Ponty, in *Phenomenology of Perception* ([2012](#)), notes that “synesthetic perception is the rule” as we perceive the world through our whole body, and sensory perception through one organ is transferred to the other sensory organs. Also, Laura Marks ([2000](#)) refers to Deleuze's theory of optical image to describe the way in which cinema audio and visuals evoke other senses through the viewer's identification with the film event, resulting from interconnected sense memory ([pp. 212-213](#)). Besides our perception being multisensory, our senses are the medium of memory, and the perceived experiences through the sensory organs are permanently registered and stored within the senses. Therefore, the recollection of one sense memory evokes other sensory experiences. As Marks explains, “All sense perceptions allow for, and indeed require, the mediation of memory” ([pp. 201-202](#)). Accordingly, in *No. 28*, the sound of wind with footsteps, the pen hitting the floor, and the writing on the paper recreates a sonic ambience of my childhood environment and excavates the viewer's auditory memory of similar experiences. Consequently, the evocation of their sonic memories may arouse other sense memories, such as smell, temperature, texture, and taste. Perhaps, the viewers identify with my childhood environment through acoustic clues and experience my life in that place. They may feel the temperature of winter, the smell of trees, and the texture of paper and snow by conjuring to their sense memories of similar lived experiences.

Additionally, I created a voice-over to embody my memory space and stimulate sensory responses. Roland Barthes, in his essay “Grain of the Voice” ([1988](#)), describes the corporeal and guttural quality of the sound as the grain, which “is the body in the voice as it sings” ([p. 188](#)). He

classifies a singing voice into a binary of *pheno-song* and *geno-song*. The former is a style of singing for expression and representation, in which the sound comes from the lungs, lacking the materiality of the singing apparatus. In contrast, the latter includes the corporeal traces of the singer's body in a singing voice. The concept and meaning grow from the materiality of the sound of organs participating in the singing or speaking process ([p. 182](#)). Accordingly, in *No. 28*, I tried to embody my internal sound of mind through the materiality of my voice. By removing my natural voice tone, the sound of mouth, lips, and tongue is audible in the whispery voice-over. Perhaps, similar to the contemporary geno-song singer, Bjork, whose singing pierces through the listeners' bodies and affects them corporeally ([Szekely, 2006](#)), the grain of my voice-over may resonate deeply with the viewer and create bodily responses; this is similar to my experience of watching *Tale of Tales* when the sound of a little wolf's mouth eating a potato made mine water.

1.7 CASE STUDIES

1.7.1 William Kentridge

William Kentridge's installation, *Drawings for Projection* ([1989–2020](#)), constitutes a series of animated films made of charcoal drawings for projection in a gallery space. His animation technique influenced my project mainly because I found it suitable for the embodiment of memory. In his animated films, the motion is created by adding, smudging, and erasing charcoal marks from a single drawing and recording its changes over time with the camera, contrary to *cel animation*³ but resembling *stop motion*⁴. Consequently, the layers of erased charcoal are visible in the final film, preserving the layers of time like a palimpsest ([Krauss, 2000](#)). For me, the residue of charcoal in his drawing resembles the fading of past experiences stored in memory, waiting for voluntary or involuntary recollection, like the childhood memories that exist in my mind but are blurry and inaccurate. Additionally, in his animated drawings, new forms are born through the destruction of the previous ones over the top of the erased marks. I think his drawing is like

³ *Cel animation* is a traditional animation technique in which each movement is drawn on a separate piece of sheet.

⁴ *Stop motion* is an animation technique that creates movement by manipulating physical objects and materials.

memory space in which the past and the present coexist. All these observations of his work in relation to memory guided me through the development of my animation techniques. I decided, instead of frame-by-frame animation, to draw all the movement of each animation on a single page using charcoal, in order to keep the traces of previous drawings. This way I could embody the nature of memory through the materiality of the drawing, capturing the quality of my memory with charcoal through its shadow-like traces and mutability.

Also, his work is subject to the contingency caused by bodily engagement with the process and the materiality of the drawing ([Krcma, 2010](#)). Without a premeditated storyboard, his physical engagement with the process leads to the spontaneous flow of thought; this is a kind of automatism that he calls *fortuna*. He explains that this “activity is essential for me. It is only when physically engaged on a drawing that ideas start to emerge. There is a combination between drawing and seeing, between making and assessing, that provokes a part of my mind that otherwise is closed off” ([Kentridge, 2017, p. 31](#)). Similarly, the contingency and physicality of the drawing process were pivotal for the growth of ideas and thoughts during my project. It was through the manual activity of drawing that I retrieved my memories. Also, I discovered my drawing style and animation technique because of a contingency in the analogue drawing process.

1.7.2 Yuri Norstein

One of the best animations of all time concerning the matter of memory is *Tale of Tales* ([1979](#)), made by Russian filmmaker Yuri Norstein. This film widened my perspective on animation in general. Its nonlinear narrative structure taught me to communicate my memories without direct storytelling to enhance viewer participation in the film world and stimulate the viewer’s senses and memories. The film consists of the artist's childhood memories, which are assembled nonlinearly and lack an overt and linear narrative. The non-sequential assemblage of fragmented events from memories, with different temporal, spatial, and narrative qualities, resembles the nature of memory and the structure of poetry. Norstein used poetic devices such as free/poetic association and metaphor to create visual lyrical plots, a *visual poetry* ([Gurevich, 2019, p. 148](#)). Like Eisenstein’s montage, poetic association is the development of meaning through discrete imageries. It is not direct storytelling but a visual dialogue that challenges conventional perception

([Wells, 1998, p. 93](#)). Consequently, watching the film, the discrete scenes barely relate to each other at first. However, their meanings unfold gradually throughout the film, depending on the viewers' imagination and experiences. The ambiguity of the film engaged me more with the audio-visual elements. I was not looking for a story but rather an impression and a feeling of the film by referring to my own experiences. From my perspective, the juxtaposition of simple life experiences with the unsettling scenes of war, soldiers, highways, shiny cars, and departing trains demonstrated dichotomies in the artist's childhood life. Watching the film, I witnessed the warmth and ordinary life in a small town constantly interrupted by industrial change, war, and post-war events, depicting the duality and contradictions in Norstein's childhood. The contrast between the visual and audio elements enhanced the perception of two different feelings throughout the film—peaceful and unsettling. The film evoked my empathy with the artist, as my childhood was almost the same. During my project, I noticed the influence of post-revolutionary Iranian politics on my childhood life. Therefore, I tried to show the binary present in my early life experiences in *No. 28*, using similar audio-visual strategies to those of *Tale of Tales*.

Additionally, *Tale of Tales*' poetic structure influenced the *No. 28* installation scenography. Each screen shows a different episode of my memory, suspending the chronological development of events and their immediate interpretation. Consequently, the meaning unfolds over time by drawing associations between discrete pictures, leading to endless speculation of a thought and to an emotional recognition.

1.7.3 Amy Kravitz

The rhythm of my animation was created through digital montage and editing and the use of semi-abstract drawings, and it was influenced by Amy Kravitz's filmmaking techniques. Her abstract animations are mysterious and dreamlike. The aesthetic sensations of *River Lethe* ([1985](#)), *Trap* ([1988](#)), and *Roost* ([1998](#)) are the result of her spontaneous approaches to process and the materiality of drawing. Without having a storyboard, the thoughts flow through her exploratory engagement with drawing and experimentation with the quality of the materials. The abstract images of her films seem familiar. For example, *River Lethe* ([1985](#)) is a choreography of vague visuals resembling ocean waves, river flow, tree branches and trunk texture, and landscape.

Kravitz describes: “I don’t really draw what I see though, I internalise the physical sensation of seeing and draw that” ([Rostron, 2013](#)). Therefore, she excavates her embodied experiences through the physical act of drawing and expresses her internalised sensation of the world through visceral mark-making. As a result, her drawings are made from gestural marks and expressive forms as she captures the essence of natural elements through tone, line, and movement, creating images that oscillate between abstraction and figuration. Learning about her embodied drawing process made me move away from accurate drawings to capture the quality of memory and the essence of gesture in motion. I created semi-abstract pictures made from expressive charcoal marks and lines that sit between figuration and abstraction.

Additionally, I discovered in her film, *Roost* ([1998](#)), that motion could be created by juxtaposing different hand drawings using digital editing tools. This is different from conventional frame-by-frame animation. The animation rhythm is sometimes kinetic and at other times smooth. For me, the smooth fusion of drawings was comforting, resembling the flux of memories and the subconscious. The flickering, fast-paced drawings were like memory flashbacks, evoking unsettling visceral feelings. Kravitz's animated drawings influenced my animation. I altered the rhythm of the drawn animation in the digital editing stage to embody the flickering and nonlinear nature of memory.

2 CHAPTER 2: RESEARCH DESIGN

2.1 METHODOLOGIES

My practice-as-research is designed according to different types of knowledge and supported by heuristic inquiry methods. I combined the phases of heuristic inquiry with Robin Nelson's practice-as-research model. My research project evolved through a back-and-forth movement between different types of knowledge. The reciprocal relation between them was at play throughout my project, facilitating reflective and intuitive practice.

2.1.1 Practice-as-Research

Practice-as-research is the research method in which the practice is significant for acquiring new knowledge ([Nelson, 2013, p. 8](#)). There are two distinct types of knowledge that a human carries. One is tacit, located in the semi-conscious and unconscious. The other is explicit, measurable, objective, and visible to everybody else. Most knowledge is a coexistence of both ([p. 38](#)). Robin Nelson's practice-as-research model facilitates the collaboration of different types of knowledge and the marriage of artistic practice with a theoretical framework. The study of theories accompanied by critical reflection for discovery and new insight from an artistic practice is pivotal for his model ([p. 40](#)). The model incorporates three types of knowledge: *Know-how*, *Know-what*, and *Know-that*.

Know-how refers to the procedural knowledge and skillsets gradually gained through doing and practice ([p. 41](#)). For example, the animation and VFX technical skills I gained during my education and work in the industry are related to this category of knowledge. Also, Know-how refers to the tacit and embodied knowledge essential for initiating a heuristic inquiry. Tacit knowing or embodied knowing is about a personal sensory experience of phenomena. In a heuristic approach, researcher's senses are epistemological tools for gathering and evaluating information ([Sultan, 2019, p. 88](#)). My research engages with tacit and embodied feelings, experiences, and memories throughout the research process via the initial engagement, drawing and writing from memories, and reflective practice methods.

Know-what is not a mode of knowledge; instead, it is a critical reflection on a production in which tacit and embodied experience and knowledge become implicit, leading to new insights. A researcher must pause and stand back from making to reflect critically on the process and the development of work ([Nelson, 2013, p. 44](#)). Therefore, a reflective practice method was utilised for critical reflection on my project.

Know-that is academic knowledge acquired from contextual studies such as articles, journals, books, etc. ([p. 45](#)). The contextual review and case study methods were employed to establish the theoretical framework of my practice.

2.1.2 Heuristic Inquiry

Heuristic inquiry is a phenomenological research method developed by the American psychologist, Clark Moustakas, for understanding human experiences. It is an internal investigation of the self for understanding the nature of subjective human experiences and the development of investigatory methods for analysing them ([Moustakas, 1990, p. 9](#)). Therefore, it was a perfect framework for my research, as I wanted to investigate my experiences in the past by excavating my memories through the intuitive production of hand-drawn animation.

Additionally, a heuristic framework requires the direct and personal experiences of a researcher with a research area and question. Often, heuristic researchers seek answers to personal and autobiographic questions “through exploratory open-ended inquiry, self-directed search, and immersion in active experience” ([Moustakas, 1990, p. 15](#)). As a result, a researcher’s sensory perception and individual evaluation are crucial for discovering new insights. Similarly, in my research project, the discovery and production of knowledge occurred through my experimentations, reflections, and appraisal. I constantly analysed and reflected on my sensory perception and expression during practice. The heuristic methods put me in close contact with my tacit experiences. Also, by engaging with heuristic methods, researchers expand their understanding of the investigated phenomena and themselves. “Heuristic processes incorporate creative self-processes and self-discoveries” ([p. 9](#)). Engaging with my autobiographical memories through a heuristic approach revealed unknown aspects of my childhood life, which will be discussed later in the conclusion section.

2.2 METHODS

I designed the self-investigatory research methods according to the phases of heuristic inquiry: *initial engagement*, *immersion*, *incubation*, *illumination*, and *creative synthesis*, and the types of knowledge described in Robin Nelson's practice-as-research model (Figure 2.1).

Firstly, the self-inquiry method facilitated the *initial engagement* phase and clarified the research area and questions. Then, the automatic drawing and writing from memories methods created the *immersion* phase, as did the experimentation, because my research core method was an immersive process, requiring intuitive trials and appraisals. After that, the reflective practice method established the *incubation* and *illumination* phases throughout the research practice. Eventually, all the research discoveries resulted in a tangible form of hand-drawn animation installation, supporting the *creative synthesis* phase.

2.2.1 Self-Inquiry

Unlike the traditional research method, in heuristic inquiry a research question is not selected methodically but emerges through a researcher's initial engagement with deeply felt, embodied experiences. Therefore, I began by looking into myself to find a "topic of extreme interest through an autobiographical experience" ([Sultan, 2019, p. 10](#)). Exploring the autobiographical self, I noticed my childhood memories are very dominant in my present. By engaging with a self-inquiry questionnaire, I delved deeper to illuminate the significance of my childhood memories. I posed three main questions: *why do you want to make an animation about your childhood memory? Why do you care to remember your past? Why do you want to make them in tangible form?* The answers established the research topic and its significance to me (Figure 2.2–Figure 2.4).

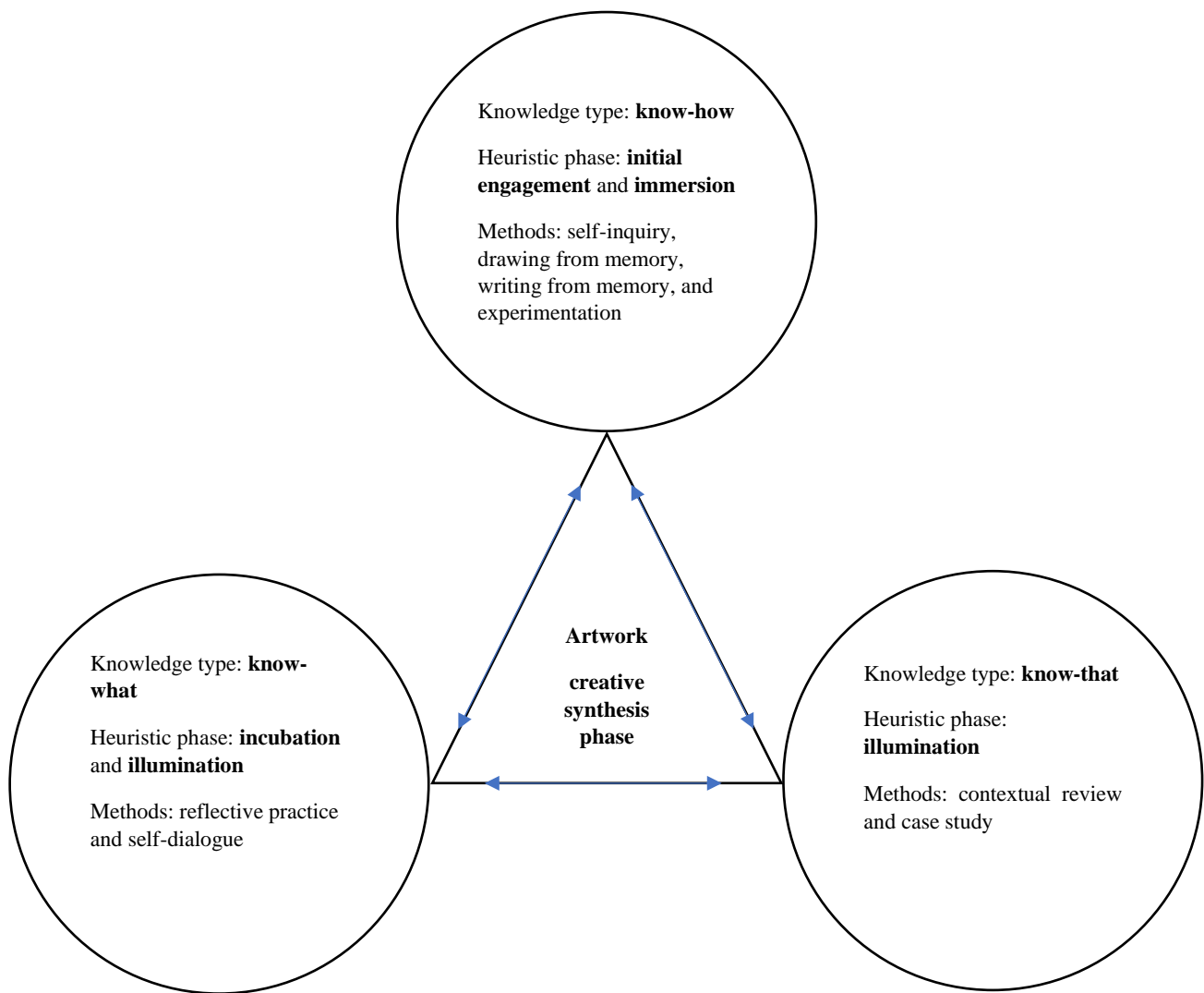


Figure 2.1. My research design.

1. why do you want to make Animation about your child hood memories?

- my childhood memories are fading because I have been away from my childhood environment for a long time.
- there are not photos of my child hood environment such as streets, mountain, lanscape, --- . Therefore ~~there~~ are not any actual references to revisit my childhood environment and town.
- my childhood town and environment have changed significantly due to construction and development project. the gardens are replaced by big summer houses and villas.

in summary because of above reasons I need to recover/discover my faded/lost memories mostly about the sites, location, scenery, environment of where I spend my childhood.

2. why recovery/discovery/rememering of childhood memories ~~is~~ important for you? why do you care to remember the past?

- I feel deeply connected to my childhood environment. Particularlly walnut tree, mountain, snow, and my father house.
- After I left the town at the ~~edge~~ age of 14, I felt homeless. I could not feel home at any other places.
- I like to know more about my life in that time.
- I like to discover why I keep going back to those memories from that specific time and location _{my childhood}.
- It was stable and peace full time of my life. after my childhood in that town, I faced alot of ups and down. sinking in to child hood memones is a way of distracting myself from disturbing present.
- Remembering is like living Thoes days again.

Figure 2.2. Self-inquiry questionnaire, page 1.

- whenever I want to think of myself and understand who I am, I connect or relate myself to my childhood object, scenery, environment, location, seasons. It seems they are building block of my identity.

3. why do you need to visualise them?

why do you need to make your childhood memories in tangible form? why do you need to see them?

- my childhood town has changed a lot because of construction projects. It does not look the same as when I was living there. Also, there are not so many photographs of the environment such as mountain, apple trees, garden, alley, even interior of my father's house. Therefore, there are not actual reference/sites from ~~that time~~ my childhood environment for me to revisit.
- being away from there for a long time, my memories of them are fading. I need ^{childhood town} tangible form to stop forgetting these days. ^{childhood} time
- my memories die with me. I need to materialise my memories. to be a record of my memories (A copy of my memories)
- I hope through the process of visualization, I recover lost memories or even discover new ones.

Figure 2.3. Self-inquiry questionnaire, page 2.

notes on question 1

My memories are fading because:

- I am away for long time (exile)
- I do not have photos of my childhood environment to revisit them for reenactment of memories (photos)
- The environment has transformed completely and it is not the same as my childhood time because of construction and development projects (development)

I need to prevent my memories from fading.

I need to recover my lost memories.

maybe I can discover new ones. recovery leads to discovery

Figure 2.4. Self-inquiry questionnaire, page 3.

2.2.2 Self-Dialogue

Sultan (2019) points out that “in heuristic inquiry, journals are necessary tools for depicting self-dialogue, engaging in self-reflection, and documenting other processes and phases”(p. 85). This is because a researcher must engage with “self-exploration and self-disclosure” about an investigated phenomenon to develop a comprehensive understanding of its different aspects (p. 85). For this reason, I used digital and analogue journals to record the progress of the project, my exploration of ideas, and my reflections on experiments. The journals contain words and drawings of my thoughts, feelings, experiences, interpretations, exploration of ideas, and notes from supervision sessions. An analogue journal is a tangible form of my inner thoughts as they emerged without modification (Figure 2.5). The digital journal is about my technical and theoretical investigation, animation tests and experimentation, reflections, and the supervisors' feedback (Figure 2.6).

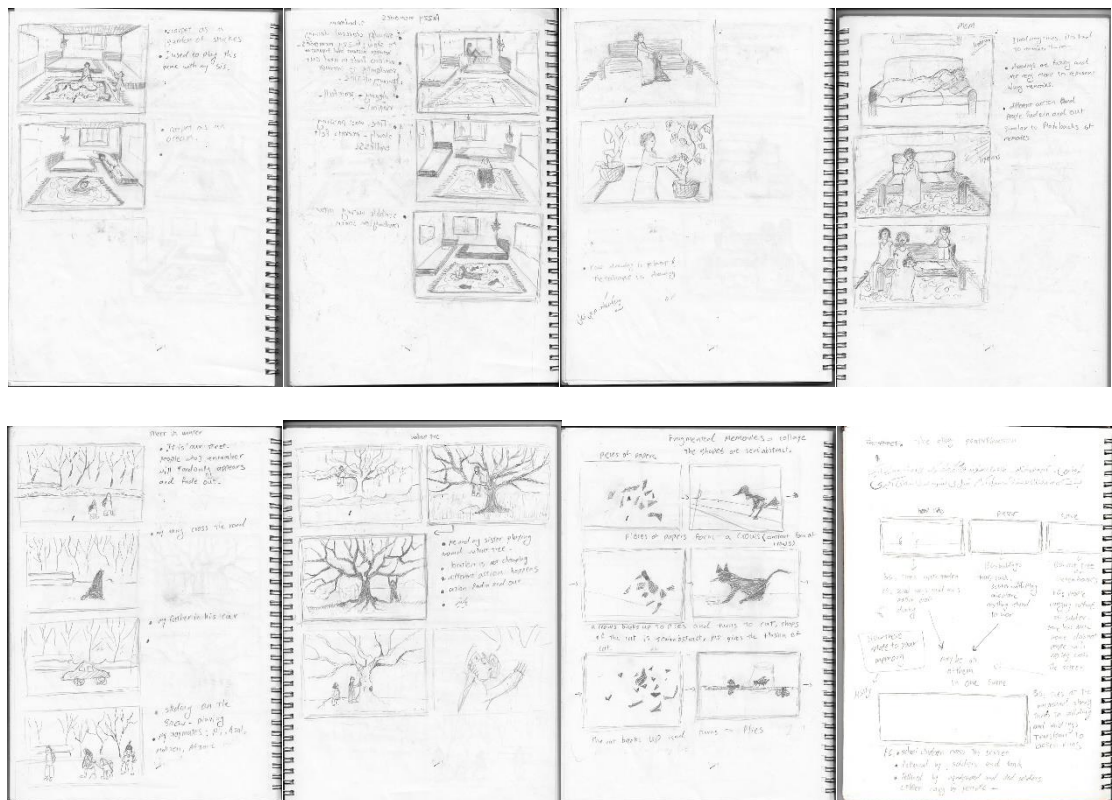


Figure 2.5. Pages from my analogue journal.

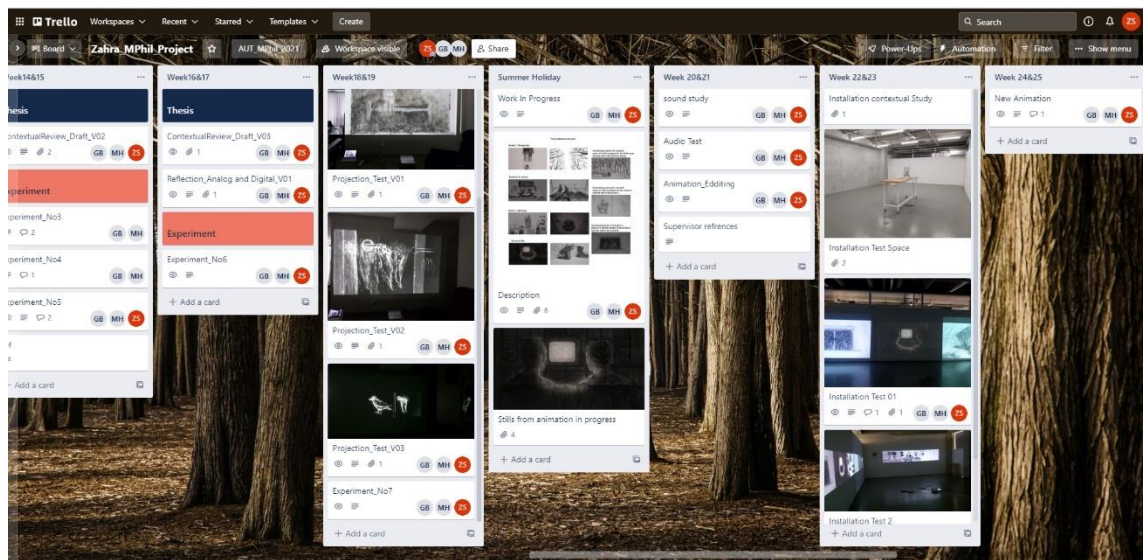


Figure 2.6. Screenshot of my digital journal.

2.2.3 Drawing From Memory

I employed the method of automatic drawing to retrieve my childhood memories. As discussed in [Chapter One](#), psychoanalytic theories indicate that physical activity evokes both conscious and embodied memory. Additionally, Henri Bergson suggests that to evoke voluntary memory, one must remove oneself from a present matter to stretch the past into the present ([Bergson, 1911, p. 94](#)). Therefore, to detach from the present, I intentionally imagined myself to be in my childhood environment and drew what I could recall. Because of the duration and physicality of drawing, more images slowly came into my consciousness and appeared on paper through my adding and removing drawing marks. Furthermore, the movement and gesture of my hand and the sound of the pencil on the paper created an immersive drawing experience connecting me to the tacit dimension of myself. Moustakas ([1990](#)) explains that “the immersion process enables the researcher to come to be on intimate terms with the question—to live it and grow in knowledge and understanding of it” ([p. 28](#)). Although automatic drawing started with voluntary recollection, the process and act of drawing evoked my involuntary memories. I could hear the autumn wind in the cedar trees and my footsteps in the snow; I could feel the cold of the winter and the warmth of my bedroom.

In summary, drawing from my memories was an immersive, multisensory experience, indicating my deep connection with natural elements in my childhood environment. Accordingly, the audio-visual content of the *No. 28* installation was developed based on these preliminary drawings from memory (Figure 2.7–Figure 2.8).

2.2.4 Writing From Memory

Time, memory, and narrative are inseparably connected. As a historical being, our present carries the burden of the past and the ambiguity of the future. To move forward we should reconnect with the past and make sense of what happened. Writing a story is one of the ways to reconnect and understand the past ([Bochner & Herrmann, 2020](#)). Therefore, I utilised self-narrative writing to reconnect with my past and understand the emotional connection with my childhood surroundings. I imagined walking through the alley we used to live in and described the experience of being in that environment. The narrative was atmospheric and nostalgic, describing my sensory experience and subjective perception of the surroundings. During the project, I regularly referred to these writings and descriptions for creating atmospheric audio and visual elements for my installation (Figure 2.9).

2.2.5 Contextual Review

The practice-as-research model ([Nelson, 2013](#)) requires studying theories and previous research. The contextual examination of scholarly articles, academic research, and books was employed before and during my research project. Consequently, the theories and my practice informed each other throughout the research project, which led to a gradual expansion of the literature review and more classification of the research area. Time, space, memory, drawing, and expanded animation theories guided my experimental practice. Furthermore, I analysed the artistic practices of William Kentridge, Yuri Norstein, and Amy Kravitz according to my understanding of investigated theories.

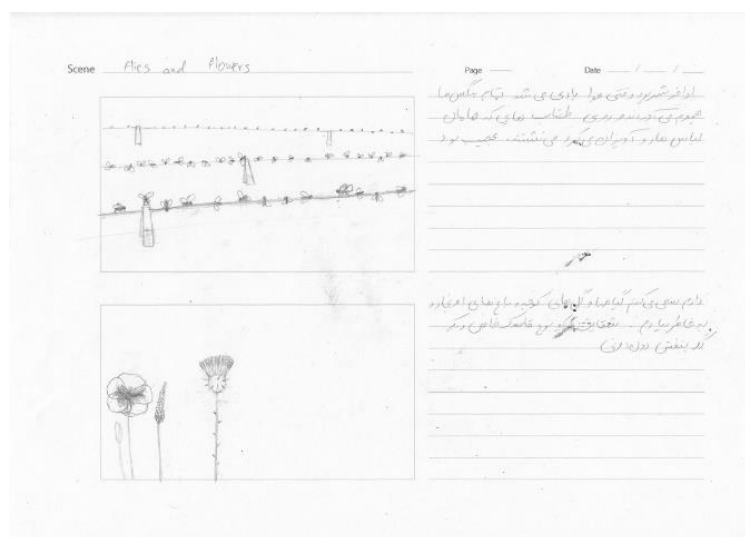
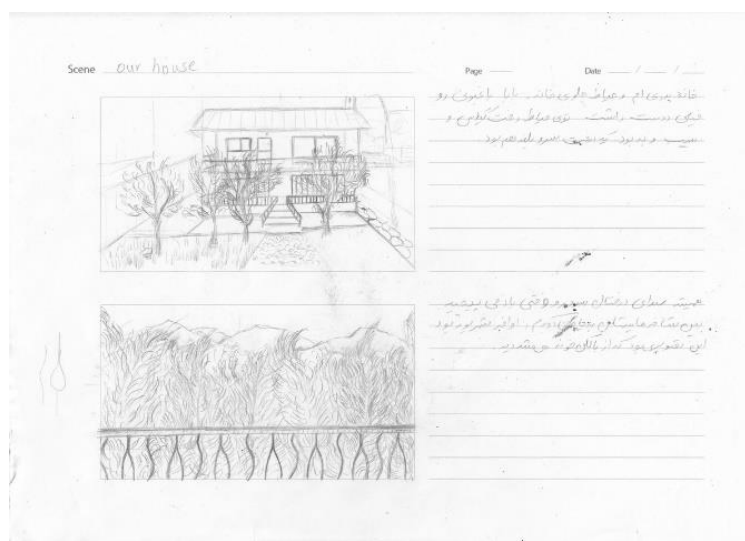
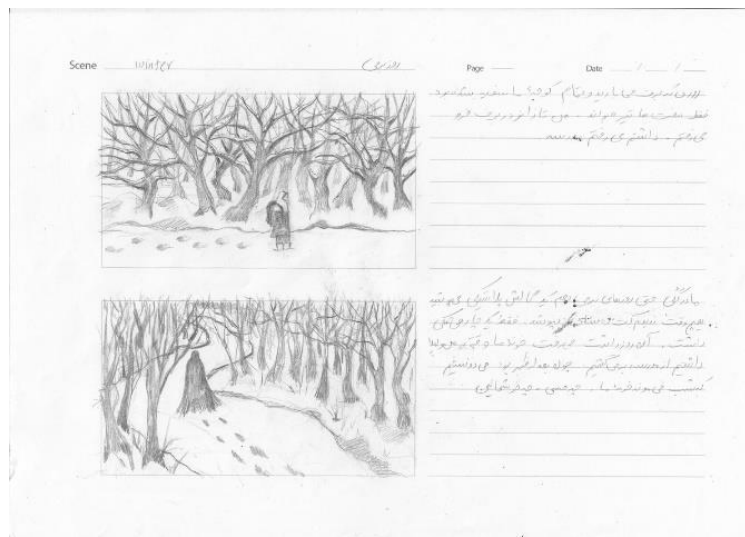


Figure 2.8. Drawing sketches from memory.

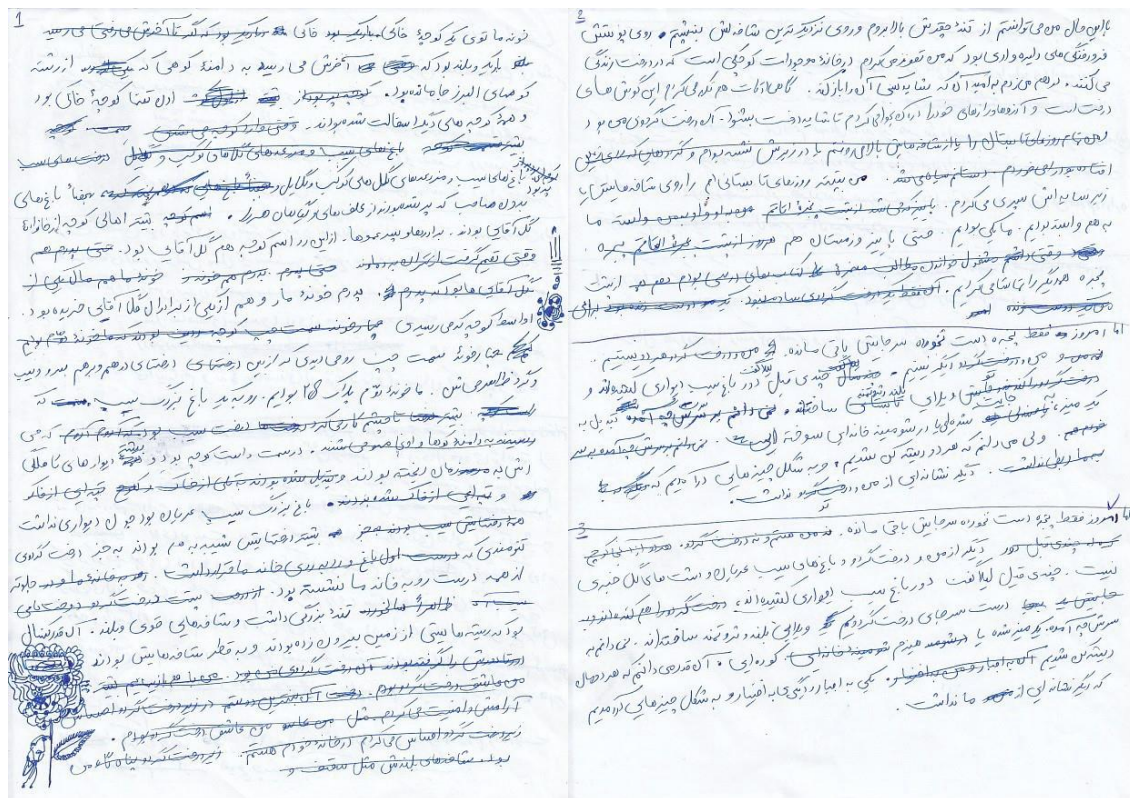


Figure 2.9. Writing from memory.

2.2.6 Experimentation

Heuristic inquiry is a “nonlinear, fluid, and flexible” and “experiential, embodied, and holistic” research method (Sultan, 2019, p. 3), suitable for discovery through exploration and experimentation. Accordingly, experimentation was a core method for the technical and conceptual development of *No. 28*. Every experiment was according to the “intelligent practice” in which practical and theoretical knowledge collaborates in the production of an artwork, leading to new insight and discovery through making (Nelson, 2013, p. 40). For instance, the early experiments were to estimate the feasibility of hand-drawn animation within the timeframe and to discover a self-mark-making style to manifest the nature of memory. The theoretical studies and analysis of William Kentridge’s *Drawing for Projection* guided these preliminary experimentations and established the animation technique for *No. 28*. Additionally, the temporal rhythm of animation was created by exploratory and process-oriented editing and montage, which was influenced by time, memory, film, and embodiment theories as well as Amy Kravitz’s filmmaking techniques. Furthermore, the installation choreography was gradually established

through a series of experimentations, considering Eisenstein's theory of *intellectual montage*, Scott McCloud's comic art concepts and Yuri Norstein's *Tale of Tales*.

In short, through a series of iterative experiments led by investigated theories, reflection on the former experiments, plus my embodied knowledge and memories, I developed an installation made of animated drawings, manifesting the embodiment of my childhood memories through its material, time, and space. More detail about the experimentations is provided in [Chapter Three](#).

2.2.7 Reflective Practice

The reflective practice method was employed to support the incubation and illumination phase of heuristic inquiry and transformation of the embodied knowledge gained through experimentation and doing (know-how) into the explicit form of knowing (know-what). Most importantly, it prevented the repetition of the same experiences. According to Schön (1994), relying on embodied knowledge and rehearsed experiences without critical evaluation may create a repetitive process, preventing practitioners from discovering new approaches and possibilities (p. 61). Therefore, the researcher must step outside of close involvement with the research question to reflect on the acquired knowledge and “to allow this knowledge to incubate,” leading to the growth of “awareness, discovery, and deeper knowledge and understanding” in the illumination phase (Sultan, 2019, p. 12).

My practice-as-research was supported by intuitive and reflexive practice. After each experiment, I evaluated the process and its outcome based on the related theories discussed in the Literature Review, my discoveries from reflection on previous experiments, and my personal feeling and knowledge. Through critical interpretation, I examined the practice in light of the research inquiry, which was to investigate methods that embody the nature of memory in animation and communicate it with viewers' senses. Based on the findings and insights from critical reflection, the new experiment was initiated for further technical and conceptual exploration, resulting in the evolution of animated drawings over time. The project process and progress are explained in further detail in [Chapter Three](#).

3 CHAPTER 3: DOCUMENTATION OF PROCESS

This chapter demonstrates, in detail, the conceptual and technical development of *No. 28*. It describes the implementation of theories into the artistic practice, the experimentations, critical reflections, and analyses of the production process.

3.1 DEVELOPMENT OF THE IDEA

The initial idea was to embody my childhood memories through an animation in which the cinematic and aesthetic elements are not simply the overt representation of past events. Instead, they materialise the nature of my reminiscences. My childhood memories as content and drawing as a primary technique established the scaffolding of the research.

Reading the book *Animation and Memory* ([2020](#)), I discovered that artists utilise different hand-made animation techniques to convey memory as subject matter. The tangible material and physical engagement through the manual process were pivotal for their work. Accordingly, I initiated a series of tests with oil colour, ink, and charcoal to discover the appropriate technique and material for the project (Figure 3.1–Figure 3.3). I found the erasable and mutable quality of charcoal could be useful as an animation technique, producing smudgy marks that align with the quality of my memory image. Also, my animation technique was inspired by William Kentridge's *Drawing for Projection* animation method. However, I modified his method to make it more suitable for the embodiment of my memory, which will be discussed later in this [chapter](#).

Besides the technical experimentations, the project further expanded by conducting a contextual study about memory, drawing, and time. I noticed that memory, as a recollection of the past in the present, and drawing, as a process of mark-making, both relate to time and duration. Therefore, I investigated Deleuze's theories of time to develop a connection between memory, time, and drawing. Deleuze's description of the coexistence of past and present identifies them with memory; during remembering, past experiences merge with our current reality. Additionally, drawing is a process of becoming as new figures emerge from the transformation of the previous ones. For this reason, it relates to Deleuze's concept of the present as becoming. I intended to embody the dynamism of my transformative memory via the becoming and unbecoming of

drawings. I wanted to portray the pictures of my memory as I perceive them—my oscillation between before and now when the past and present merge.

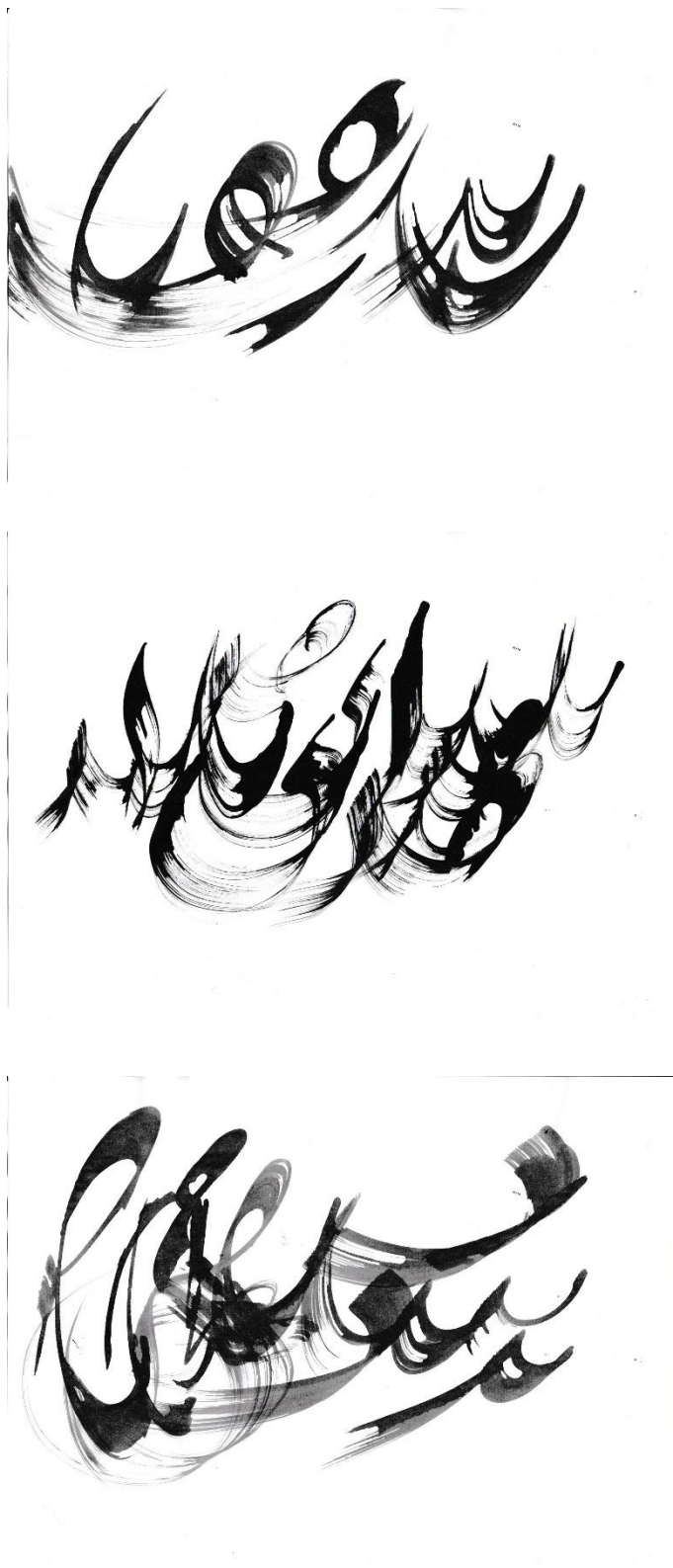


Figure 3.1. Drawing with ink on paper.



Figure 3.2. Animating with oil on canvas.



Figure 3.3. Animating with charcoal on paper.

3.2 EARLY EXPERIMENTATION

My early experimentations, such as *My Bedroom* (Figure 3.4) and *Mom's Afternoons* (Figure 3.5), were mainly about the technical investigation of materialising memory through animated charcoal drawings. Inspired by William Kentridge's *Drawings for Projection*, I created animation by recording the changes of a single drawing to preserve the residue of previous marks.

The first test was *My Bedroom*, depicting memories relating to my childhood bedroom. To animate the girl (myself), I drew the entire pose and photographed it with a camera. Then, I created the next pose on the same paper by erasing the previous one, took a picture of it with the camera, and continued these steps to complete the movement. This animation was created according to the conventions of cel animation technique, *straight ahead*,⁵ except that it was drawn on a single page.

Additionally, I used charcoal's fading quality for transitions between the memory episodes. Multiplication of the girl in one place, who fluctuates between different positions, interrupts the logical order of time and space. Accordingly, the animation embodies the nature of memory flashbacks and the fluidity of memory. It feels that random memories appear and quickly fade away. Although the entire animation was made on a single piece of paper, the traces of charcoal were not visible because of the paper quality and too much erasure of the marks. Therefore, in the next experiment, *Mom's Afternoons*, I used a paper suitable for charcoal drawing and kept the traces of erasure more evident in the final animation. Furthermore, I tried to change my drawing style from realistic to more expressive, to depict the quality of the fuzzy and murky memory. The gradual transformation of drawing, remaining traces, and fading charcoal facilitated the embodiment of memory through the materiality and process of drawing.

⁵ *Straight ahead* is an animating method in which, without prior planning, an animator draws the progression of the movement sequentially from the first pose to the last. It is distinct from *pose-to-pose* animation technique in which an animator first draws the key poses and later adds more drawings between them to create a smooth transition.



Figure 3.4. Scenes from *My Bedroom*.



Figure 3.5. Scenes from *Mom's Afternoons*.

3.3 DEVELOPMENT OF ANIMATION TECHNIQUE

The Crow (Figure 3.6) was a significant experiment as it established the main animation technique for *No. 28*. Inspired by Deleuze's philosophy, the experiment aimed to embody the co-existence of the past and present in memory through the materiality and the process of drawing. Through reflective experimentation, I discovered that the drawing process is a suitable technique for making transitions between *key* poses. Instead of creating all the poses, I skipped the *in-betweens*. As a result, one key pose transforms into the next through adding, removing, and rubbing charcoal marks. Consequently, the integration of the drawing process and the conventional animation technique led to a new form of metamorphosis more suitable for the embodiment of memories. Through the progression of a charcoal drawing, one gesture morphs into the next one, interrupting the linearity of time and visual space. As a result, in *The Crow*, the drawing is always on the verge of change. It is complete and incomplete at the same time, foregrounding the performance of drawing as a process of becoming and a record of invisible time and memory. That is even more obvious in the growing line in the opening sequence (Figure 3.7). Norman Bryson (2003) notes that “if painting presents Being, the drawn line presents Becoming. The line gives you the image together with the whole history of its becoming-image” (p. 150).

Therefore, showing the process of drawing in my final animation materialises the dynamic and transformative nature of memory, which is in constant change and evolution rather than fixed. The becoming in remembering is depicted through the becoming of the drawings. The residue of previous marks embodies the act of remembering in which the past and present exist simultaneously. It transforms the drawing space into a temporal one, just as memory preserves layers of time.



Figure 3.6. *The Crow*. Drawing process as a method for transforming one key pose into the next.



Figure 3.7. The opening sequence of *The Crow*.

3.4 DEVELOPMENT OF DRAWING STYLE

My drawings were more refined in the early experimentations (Figure 3.4 and Figure 3.5). However, they became more gestural and expressive after investigating drawing theories. Instead of creating the details of visual elements and movement in every frame, I employed expressive and visceral mark-making to record my emotional impulses during the physical act of drawing and to depict the quality of my memory image. For example, in transitional frames, I intentionally drew the poses as incomplete. They sit between representation and abstraction (Figure 3.8). Also, I overlapped in-between poses with the key ones (Figure 3.9). I discovered that juxtaposing the complete and incomplete, realistic and expressive, detailed and minimalist drawing frames created flickering fragmented imageries. These images are fragile and ready to vanish at any second, resembling my incomplete, fragmented, and unstable memory pictures.

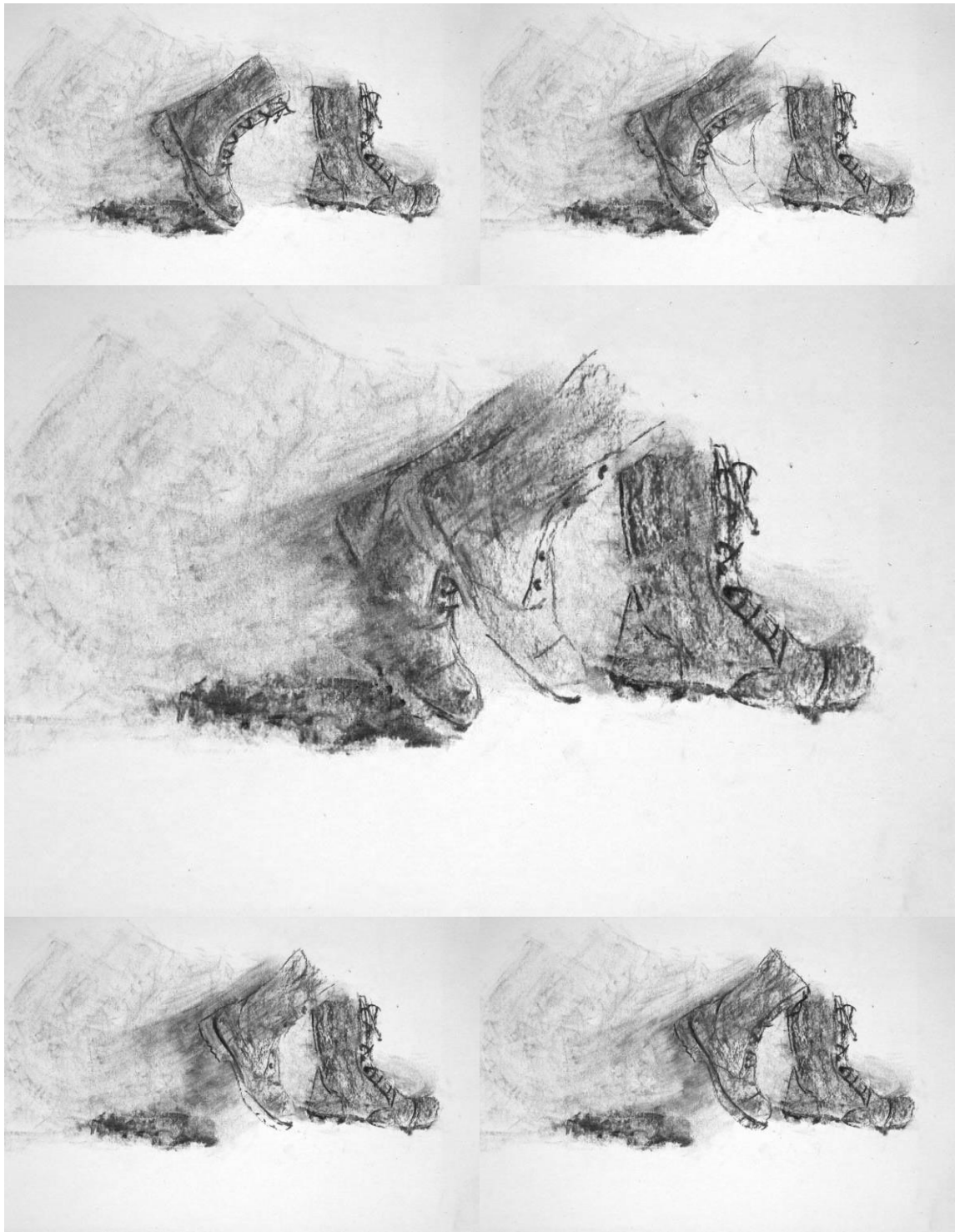


Figure 3.8. Transitional poses were drawn incompletely.

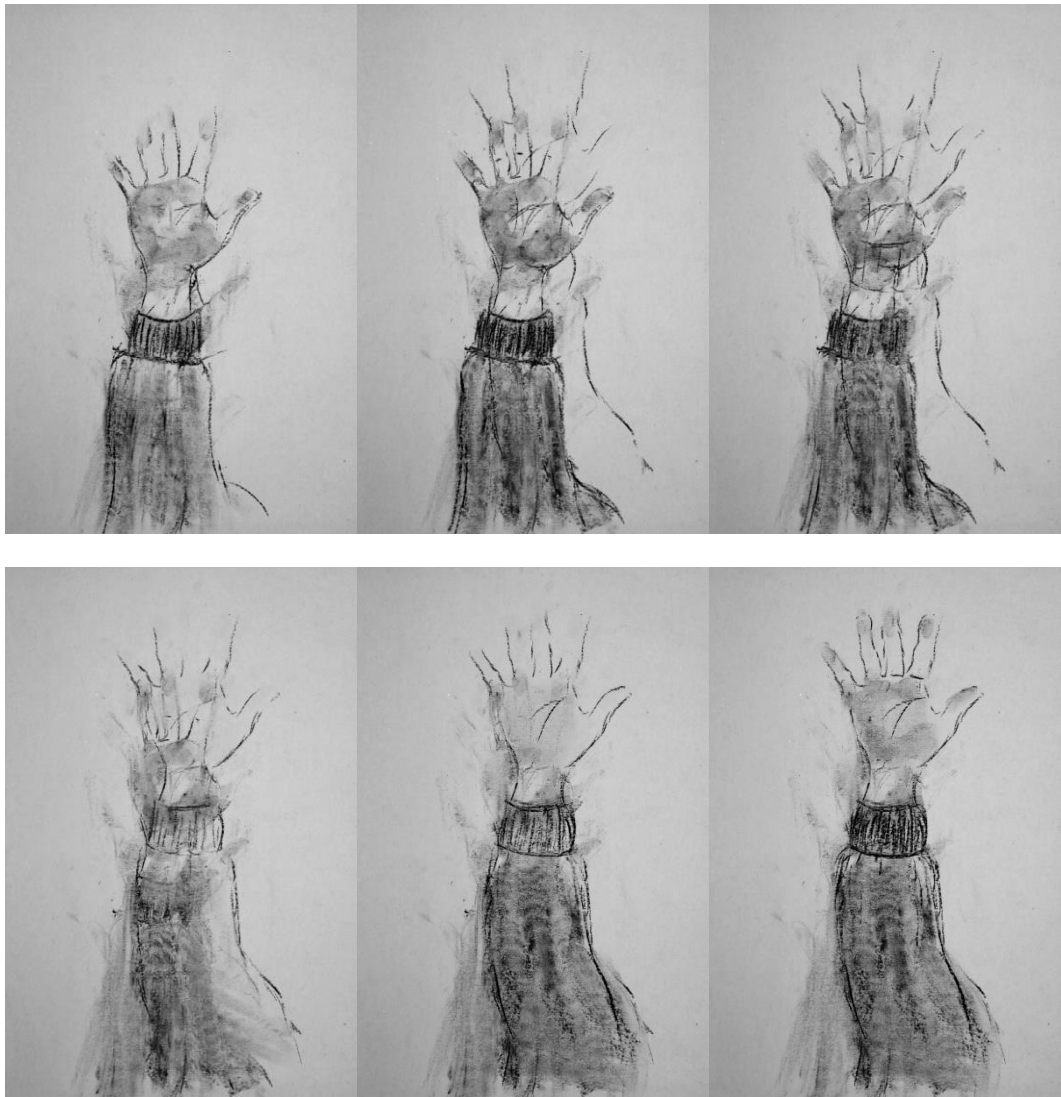


Figure 3.9. Overlapping in-between poses with the key ones.

3.5 DIGITAL EDITING AND VISUAL RHYTHM

Observing my memory, I discovered that time is repeated and suspended during the recollection. I keep remembering the same site and event of the memory that does not proceed. Instead, it repeats irregularly and oscillates forward and backward. Therefore, I interrupted the temporal linearity of animated drawings in the editing stage. To produce the animated video sequence, I imported all the hand-drawn frames captured by the camera into Adobe After Effects. I duplicated the frames, rearranged their sequential orders, and stretched or shrank their duration to embody the nature of time in my memory. Additionally, broken temporality created by the expressive broken drawings and nonlinear montage affects viewers corporeally.

3.6 MAKING OF ANIMATED DRAWINGS

To produce *No. 28*, I incorporated analogue techniques and digital technology. I made the hand-drawn animation by engaging with the physical activity of drawing with willow charcoal on 200GSM Fabriano paper. The paper was pasted on the wall or the tabletop. A Canon EOS 5D camera was perpendicularly positioned in front of the paper, with two lights on its sides. The camera was remotely connected to my computer using the EOS utility app. After each drawing modification, I walked to my PC and remotely photographed the new frame using the EOS utility app (Figure 3.10).

Additionally, I prepared reference videos and images to be visual guides before starting a drawing. Either I would film myself acting, based on memory events, or use online resources. While drawing, I would play the reference videos on my MacBook Pro. I did not follow the references precisely. Instead, I used them as a visual reference to capture the essence of gestures in motion. Furthermore, I used Adobe After Effects for editing and converting image frames to video sequences. The arrangement of animated drawings according to their original sequential order created a linear animation. To prevent the sequential transformation of gestures over linear time, I modified the duration and order of the image frames. Also, there were adjustments in their size, colour, brightness, and contrast. Above all, the editing process was purely experimental, and the outcomes were generated through a process of trial and appraisal.

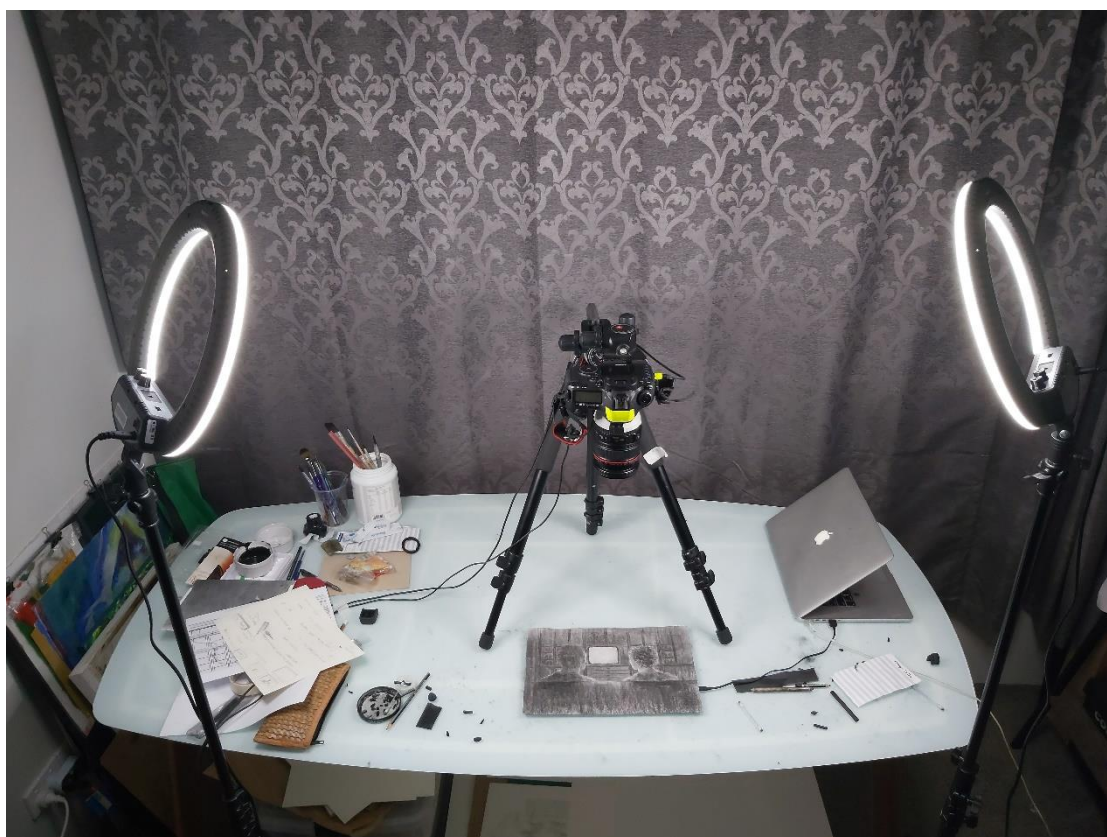


Figure 3.10. Animation set up.

3.7 THE INSTALLATION CHOREOGRAPHY

The final installation is made of four separate scenes, *The Snowy Alley*, *The Classroom*, *The Birthday*, and *The War*, depicting different memories from my childhood. Each one of the scenes contains three video channels of animated drawings, showing a distinct aspect of the same memory. In each scene, one of the three videos relates to the following scene and functions as a link between two separate memories. For example, the handwriting animation connects *The Classroom* with *The Birthday* memory (Figure 3.11). Additionally, each memory carries a particular story and meaning for me as follows:

Scene 1, *The Snowy Alley*, is the most precious memory of my childhood, defining the meaning of home, security, and peace in my identity. It shows the alley where I grew up and the scenery I encountered on the way to school. The town was near the mountains, heavily snowing in a cold winter. The installation imageries of snow, footprints, crow, trees, and a broken clay wall give the viewer an atmospheric and sensory perception of my hometown.

Scene 2, *The Classroom*, is made of fragmented memories of my school. Each screen presents a different point of view, signifying what engaged me the most during class time. Despite depicting the innocent sceneries of the classroom, the scene indirectly reveals the influence of politics on my childhood experiences. The animation showing the Persian text with a horse rider is my recollection of the first-grade lesson at elementary school. The text is simply about a man riding a horse in the rain. The text contains the keywords man, horse, and arrival. These keywords always reminded me of images on national TV during the revolution's anniversary, showing protestors dragging down the statue of the Iranian king, Reza Shah (Figure 3.12). My childhood perception was intertwined with political events and the horrifying scenery of fall and death.

Scene 3, *The Birthday*, is about my birthday memories. My birthday coincides with Iran's 1979 revolution's anniversary celebration. During ten days of celebration, the national TV was full of videos and songs of the revolution, promoting national pride. I did not

understand the calendar and dates as a child. However, seeing and hearing Iran's revolutionary images and sounds on TV, I would notice that my birthday was close, with its cake, candles, and presents. Two video channels depict my post-memory of revolution time transferred to me through media: Khomeini's arrival from exile, protestor hands covered with blood, and the Reza Shah statue brought down by protestors. Juxtaposing political imageries next to the memory of my sister poking my birthday cake, accentuates the duality in my childhood life. Born in post-revolutionary Iran, my early experiences in life were unintentionally influenced by Iran's socio-political state.

Scene 4, *The War*, shows my memories of the Iran-Iraq war. I was born during the conflict. Despite living far away from the war zones, my sonic and visual memory is full of the TV and radio war news. Marching soldiers with chemical masks and big dark boots dominate my visual memory of the war. Although they were Iranian soldiers, their terrifying outfits were carved in my mind as I could not understand the difference between Iranian and Iraqi soldiers. For me, all of them were ghosts in boots walking behind my bedroom window, interrupting my sleep.

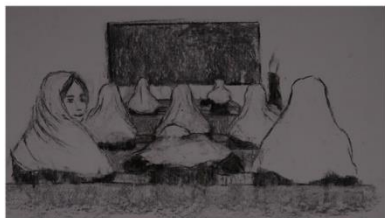
It is also important to highlight that, from the beginning of the project, my idea was to materialise the flashbacks of my memory through the installation space by projecting videos that appear and disappear randomly. However, expanded animation and multisensory perception theories significantly influenced the installation's choreography. As a result, the viewer's physical engagement and sensory experience of my memories through the installation space became the core factors for the arrangement of the screens and the sound design. The final scenography of *No. 28* was developed over a series of experimentations which will be discussed further in detail in the following section.



Scene 1: Snowy alley



Connecting scene 1 to scene 2
parts of it will be played in the scene 1
and the rest in the scene 2.



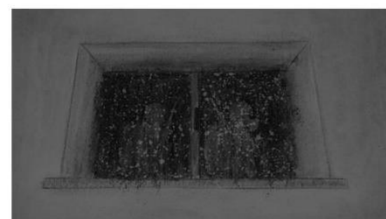
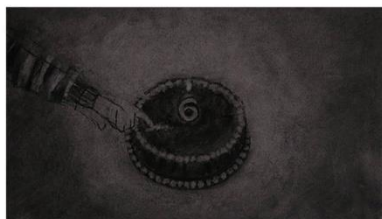
Scene 2: Classroom



Connecting scene 2 to scene 3
parts of it will be played in the scene 2
and the rest in the scene 3.



Scene 3: Birthday



Connecting scene 3 to scene 4
parts of it will be played in the scene 3
and the rest in the scene 4.



Scene 4: War



Figure 3.11. Installation choreography.



Figure 3.12. Note. Reza Shah Statue 1979 Revolution. From Wikimedia Commons.

([https://commons.wikimedia.org/wiki/File:Reza Shah Statue 1979 Revolution.jpg#metadata](https://commons.wikimedia.org/wiki/File:Reza_Shah_Statue_1979_Revolution.jpg#metadata))

3.8 PRELIMINARY PROJECTION TESTS

I used a short-distance Canon projector for the first projection test and projected the animated drawings on my home wall, as I could not access the gallery space during the Covid-19 lockdown (Figure 3.13). The hand-drawn animations were the random recollection of my childhood memories, layered and combined in Adobe After Effects (Figure 3.14 and Figure 3.15). However, after the first projection test, I decided, instead of synthesising the memory segments together, to place them side by side for the viewer to discover their meaning and connection by referring to their own sense's memory. I could not play each video on a separate wall to evaluate their interplay because I had only one projector. Therefore, I juxtaposed them in Adobe After Effects and exported a single video (Figure 3.16). The result was like a multi-channel installation of animated drawings, playing disorderly, embodied memory events that repeat with no chronological order. Also, the juxtaposition of images with no literal association opened an opportunity for developing new meanings and impressions. For example, playing the bird animation next to the hand reaching the doorknob, may imply the memory of someone who opened a window and saw a bird behind it, which is far from my memory. Although it was possible to make connections between panels, the playback of different recollections eliminated the atmospheric experience of each memory. Therefore, for better spatial and atmospheric storytelling, I studied *Understanding Comics: The Invisible Art* (2008) by Scott McCloud, who elaborates on the comic art technique, Aspect-To-Aspect, for transition between separated panels. In this technique, each panel shows different aspects of the same place or event with no temporal consistency, establishing the sense and mood of the space for the readers. Accordingly, I employed the same strategy to communicate the feeling of my childhood memories. By revisiting my previous recollections evoked by drawing and writing from memory, I retrieved more details of the same memory (Figure 3.17 and Figure 3.18). For example, my memory of *The Snowy Alley* expanded from one scene, the girl (myself) crossing the street, to two more recollections, my sister's footsteps, and the trees from my point of view. As a result, the installation expanded from single to triple screens to create an atmospheric and kinetic viewing experience.

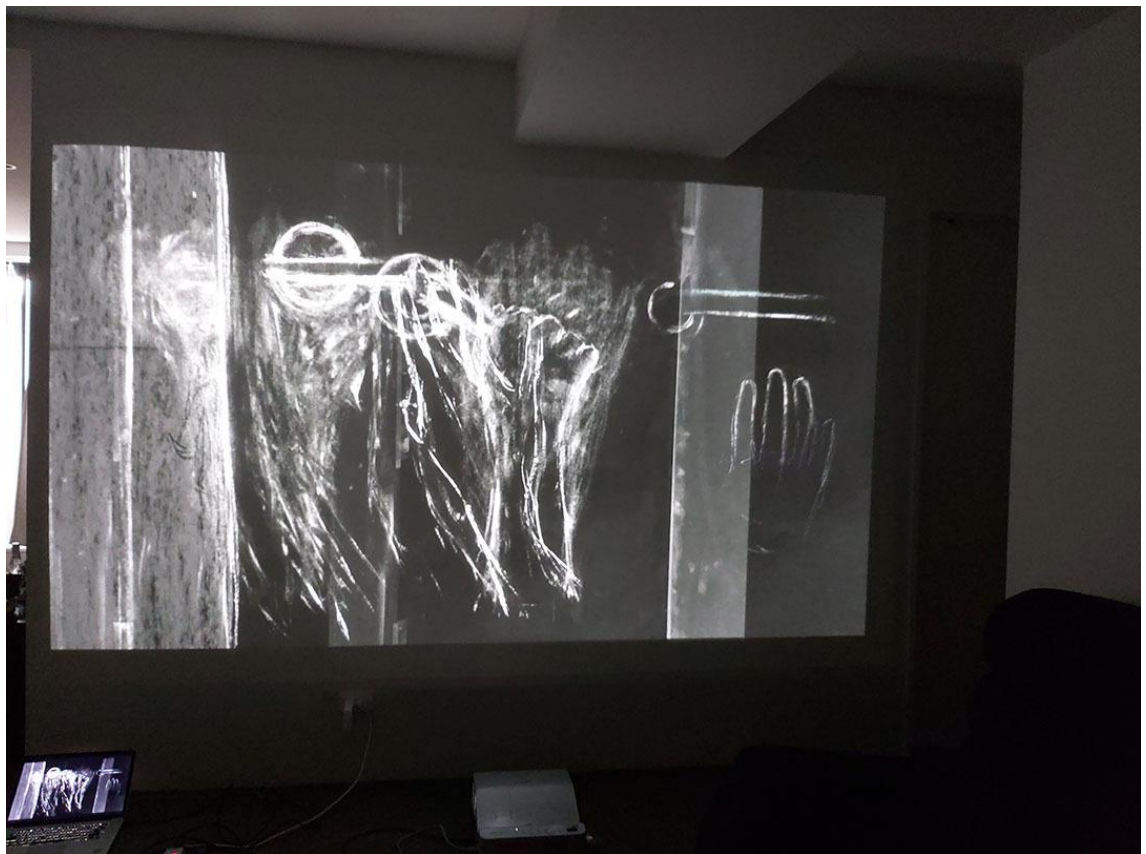


Figure 3.13. The projection tests at home.

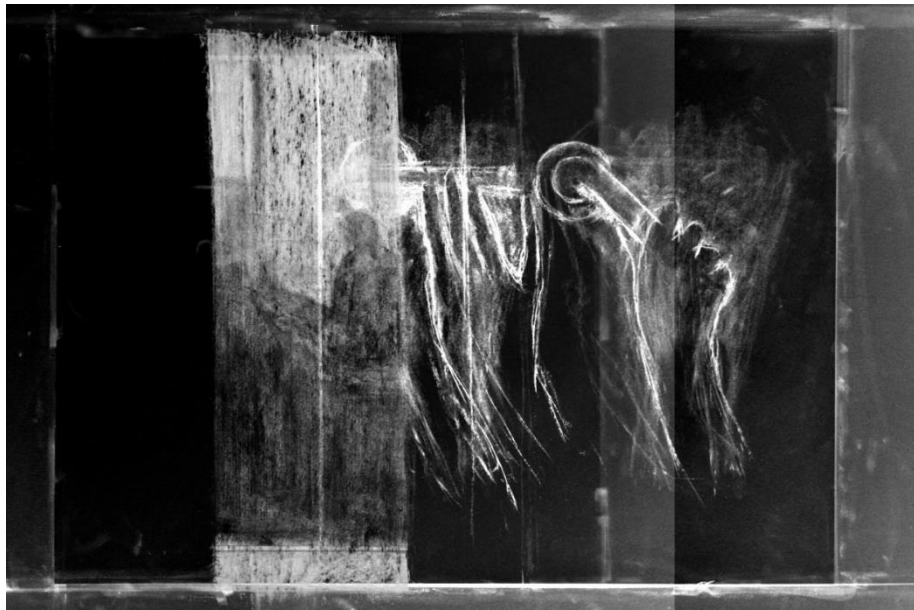


Figure 3.14. Compositing the different parts of recollection in Adobe After Effects.

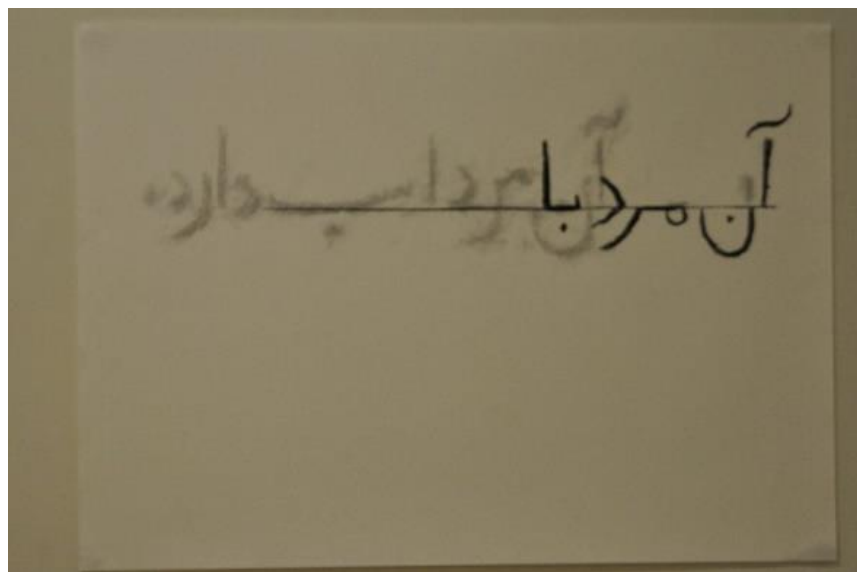
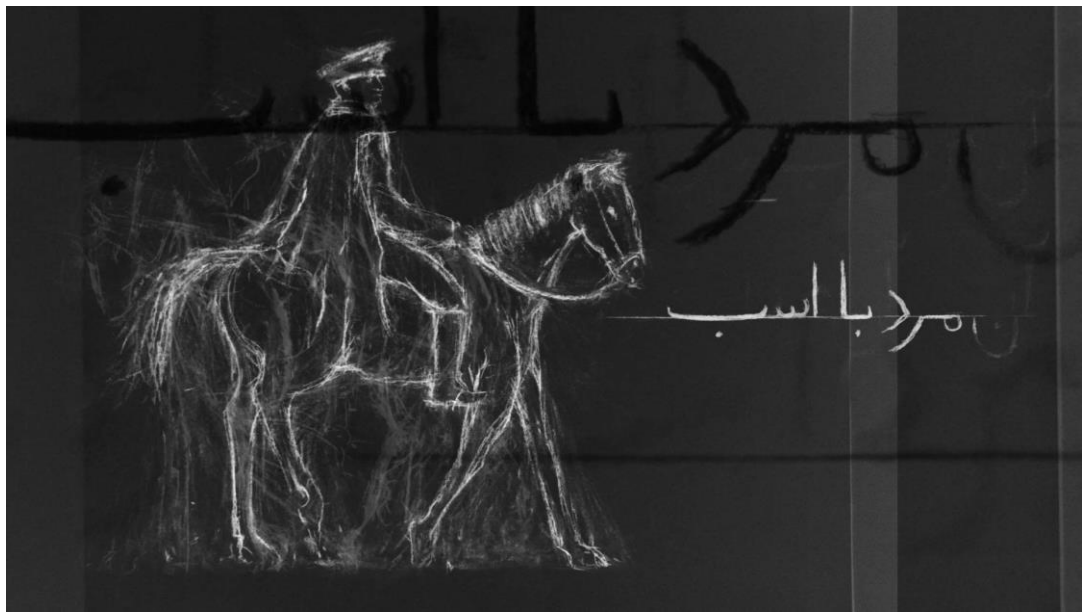


Figure 3.15. Compositing the different parts of recollection in Adobe After Effects.

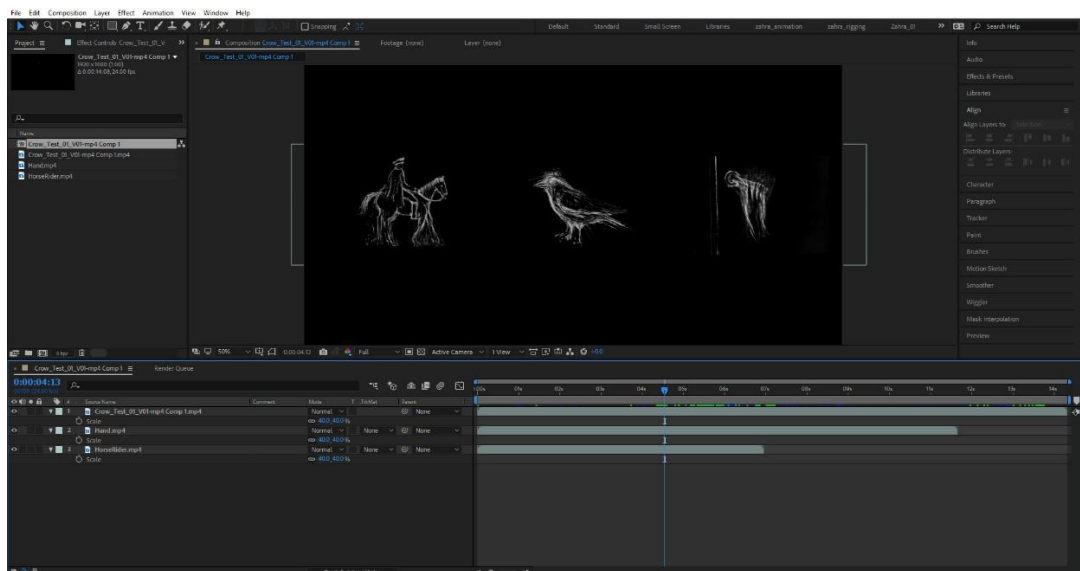
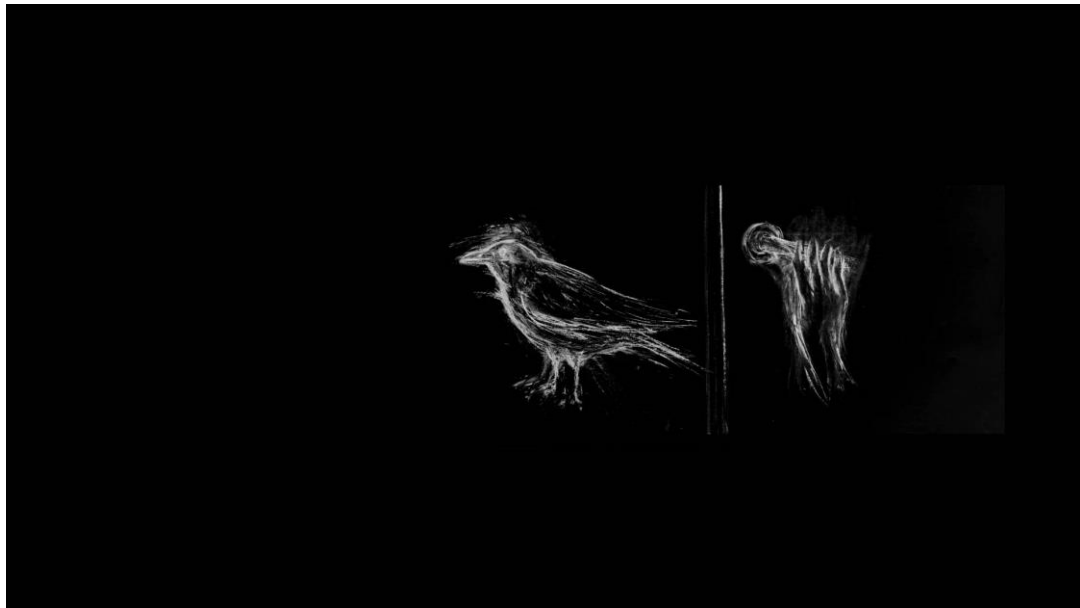


Figure 3.16. Juxtaposing the memory fragments using Adobe After Effects.



Figure 3.17. More memories retrieved.

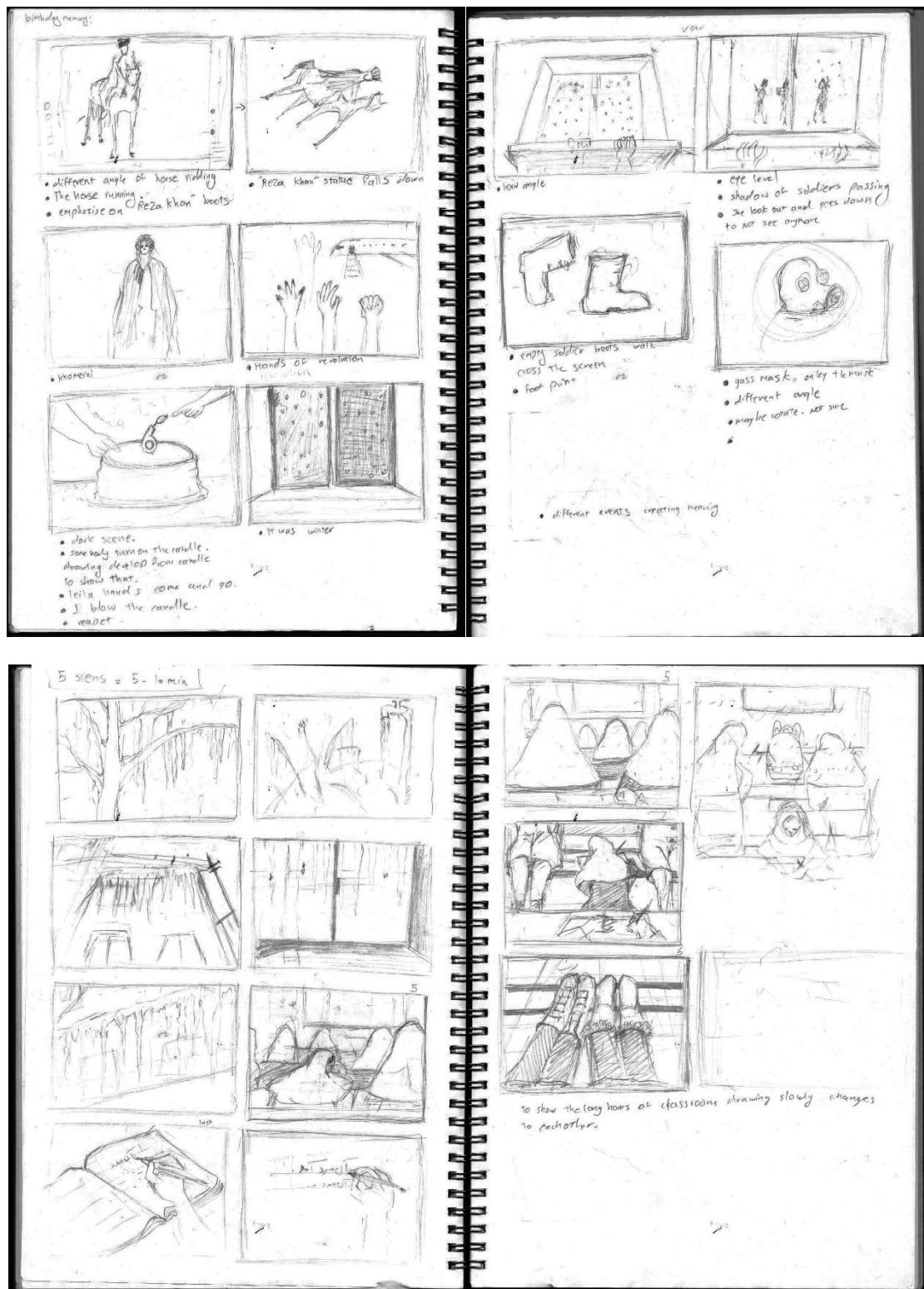


Figure 3.18. More memories retrieved.

3.9 MAKING OF FINAL INSTALLATION

Through iterative trial and appraisal, the final choreography of the *No.28* installation was developed. Firstly, I made a virtual prototype in order to experiment with the animated video's placement, order, and duration (Figure 3.19). I put the three animated videos of the same memory side by side, using Adobe After Effects, so that each one virtually represents a projected video on a gallery wall. The animations varied from between 8 to 15 seconds, starting at different times. The three-screen setup was suitable for a kinaesthetic viewing experience. However, the duration of each video was short and difficult to absorb. Consequently, I increased their length to one minute for the next experiment and made the videos of the same memory begin and end simultaneously. The new modification resulted in a more immersive experience, which was crucial for conveying the mood and feeling of my childhood memories.

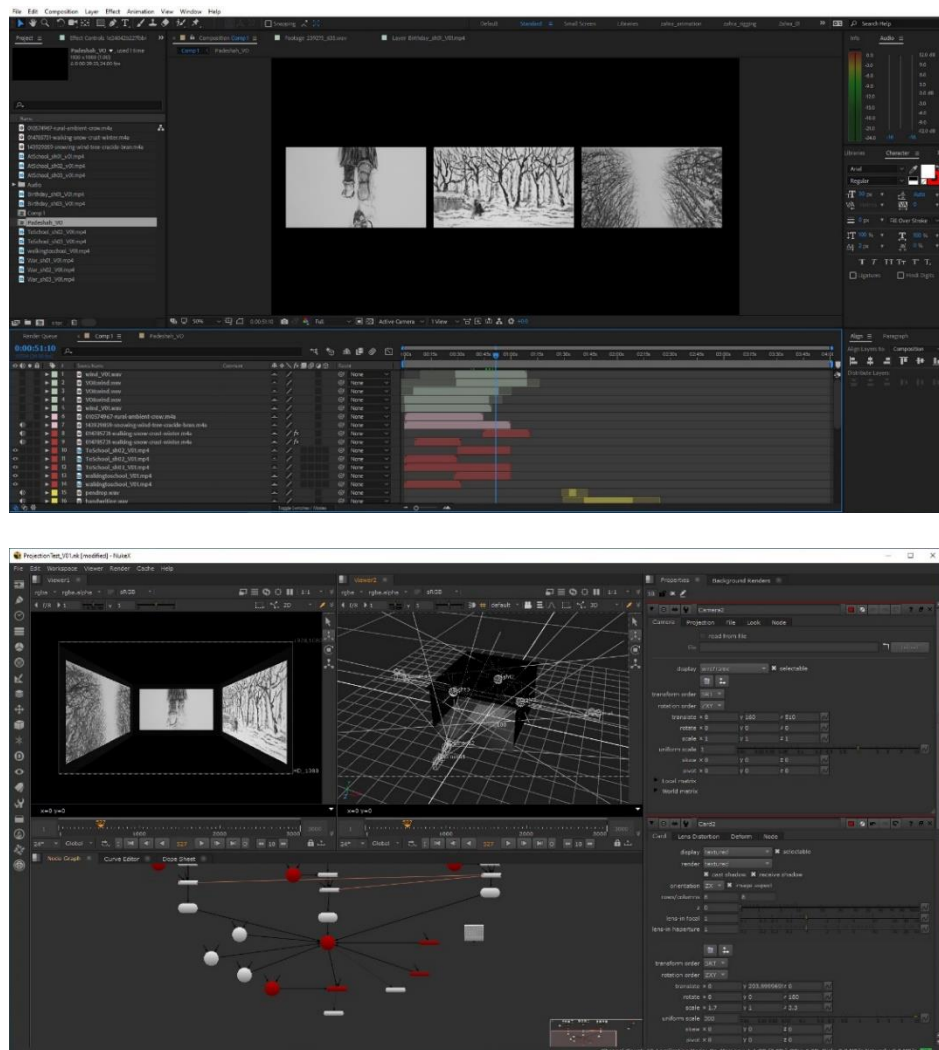


Figure 3.19. Virtual installation setup in Adobe After Effects and Nuke.

Then, I tested the virtual setup in a real gallery space (Figure 3.20). I used three long-distance projectors connected to the MacBook. Three videos were edited, rearranged, and projected using installation software, Millumin. The hallmark of this software is its live and interactive editing and the manipulation of videos for projection. When I projected my videos, the place felt empty because three videos could not cover all the long walls. However, the arrangement of the videos increased the kinaesthetic viewing experience: the viewer must move their head or body between these three panels and get involved physically with the installation space to make their own stories and connections between imageries.

To eliminate emptiness, I put up all twelve videos on the wall separately. Because I only could connect four projectors to the MacBook with Millumin software, I had to project them in small sizes to fit each projector's maximum dimension (1,920 x 1,080 pixels). The size of the videos could be maintained if there were twelve projectors, one projector for each video. Besides the videos' small dimensions, putting them around the space created a panoramic experience. A viewer's physical engagement with the installation space was more than the three video panels. The installation could even stimulate an immersive experience if the size of the videos were larger (Figure 3.21). After technical and conceptual reflections on these installation experiments, I decided to continue with a three-channels video installation projected on three separated walls with the same dimension. This setup stimulates viewers' physical engagement in the space with fewer technical difficulties in a smaller gallery room. I used Nuke, a VFX compositing software, to create a virtual demonstration of the ideal gallery space for my installation and the arrangement of video channels (Figure 3.19). I also stopped using Millumin as I could edit my videos in Adobe After Effects and send them through a projector using Media Player.

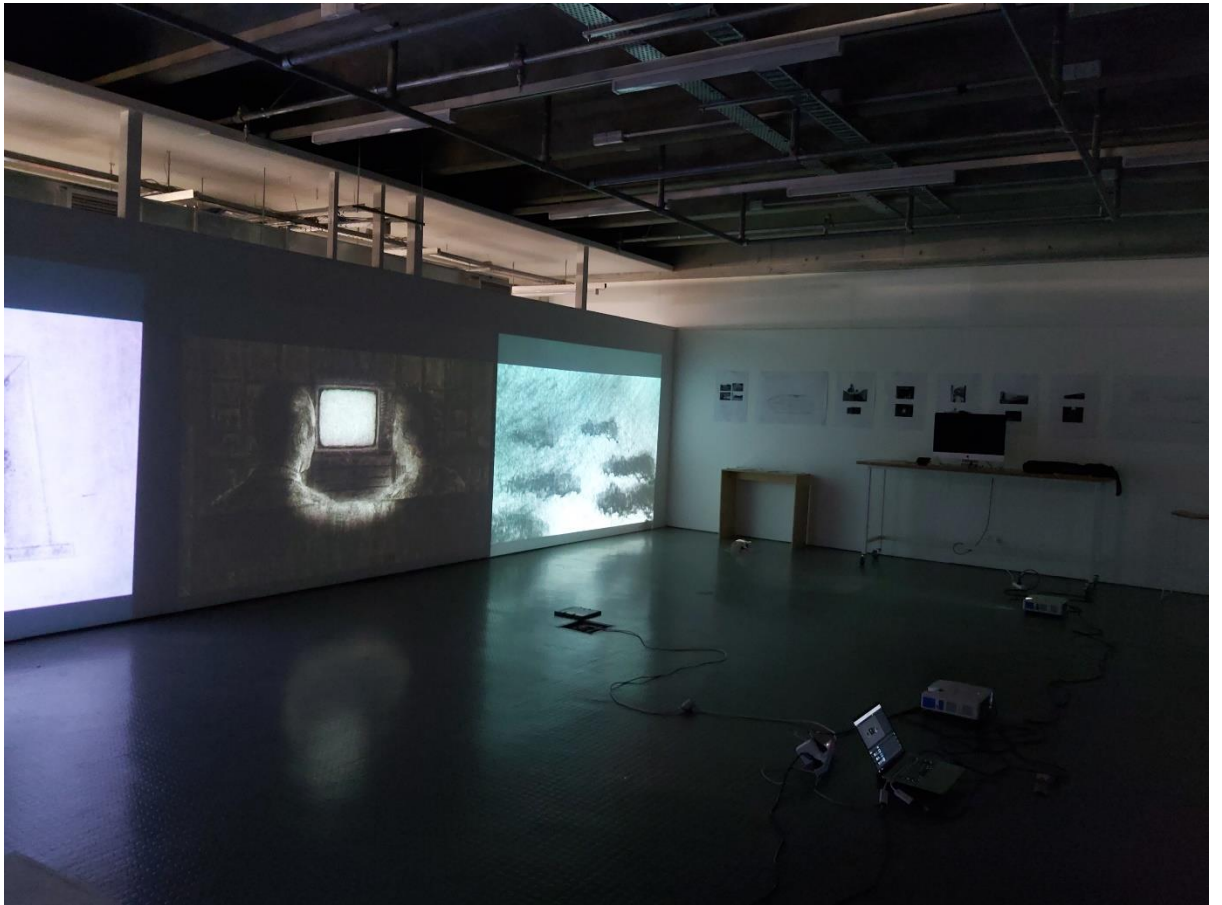
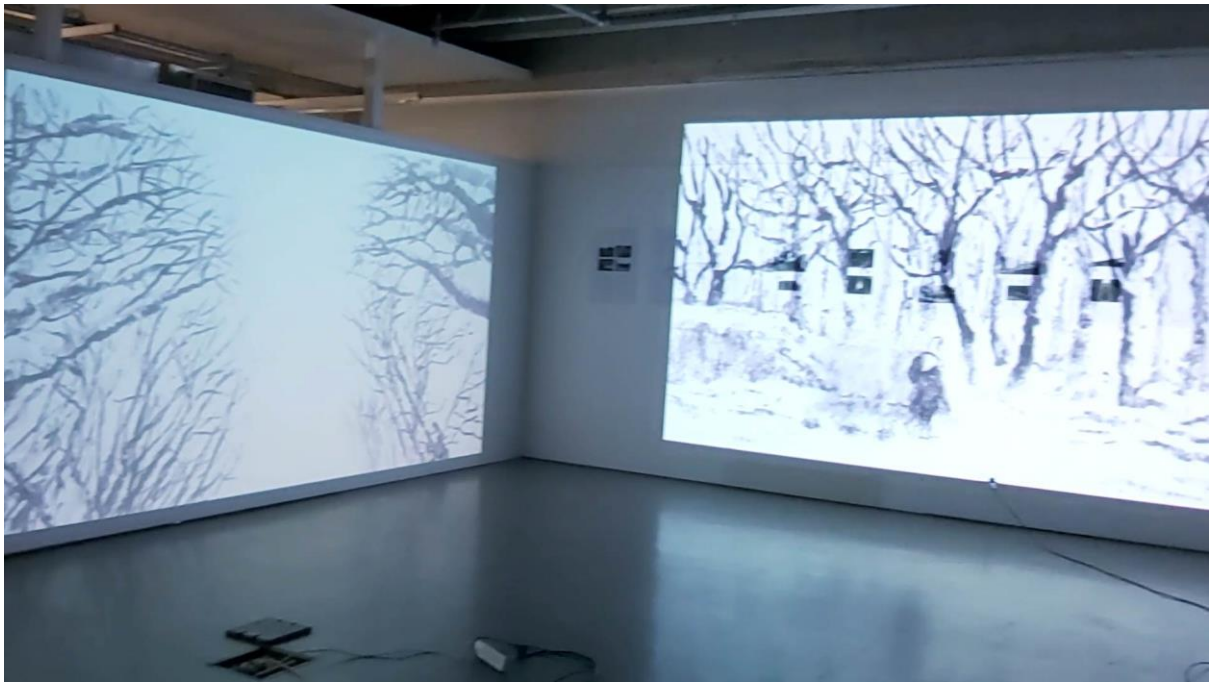


Figure 3.20. Three-screens installation set up.



Figure 3.21. Twelve-screens installation setup.

3.10 SOUND DESIGN

The *No. 28* installation's audio is a collage of my fragmented sonic memories. The sound design was created through experimentation, examination, and appraisal. I delved into my memories to examine their sound quality. Also, I reviewed the drawings and writing from memory to discover sonic memories. I wanted the viewer to be surrounded by the acoustic quality of the memories so they could sense and experience being in my childhood environment. The sound design constitutes sound-effects, voice-over, and the sound from the archive, which I will elaborate on further in the following sections. I used a Zoom H4n Pro handy recorder to record the voice-over. The sound effects are from the online library, and the Iran 1979 revolution and Iran-Iraq war soundtracks are extracted from YouTube videos. I used Adobe After Effects for the preliminary experimentations with the sound design. However, I switched to DaVinci Resolve because it is an industry-standard postproduction software with an advanced audio editing toolset, Fairlight. I reduced soundtrack noises and added different audio effects to create an acoustic ambience for the *No. 28* installation (Figure 3.22).

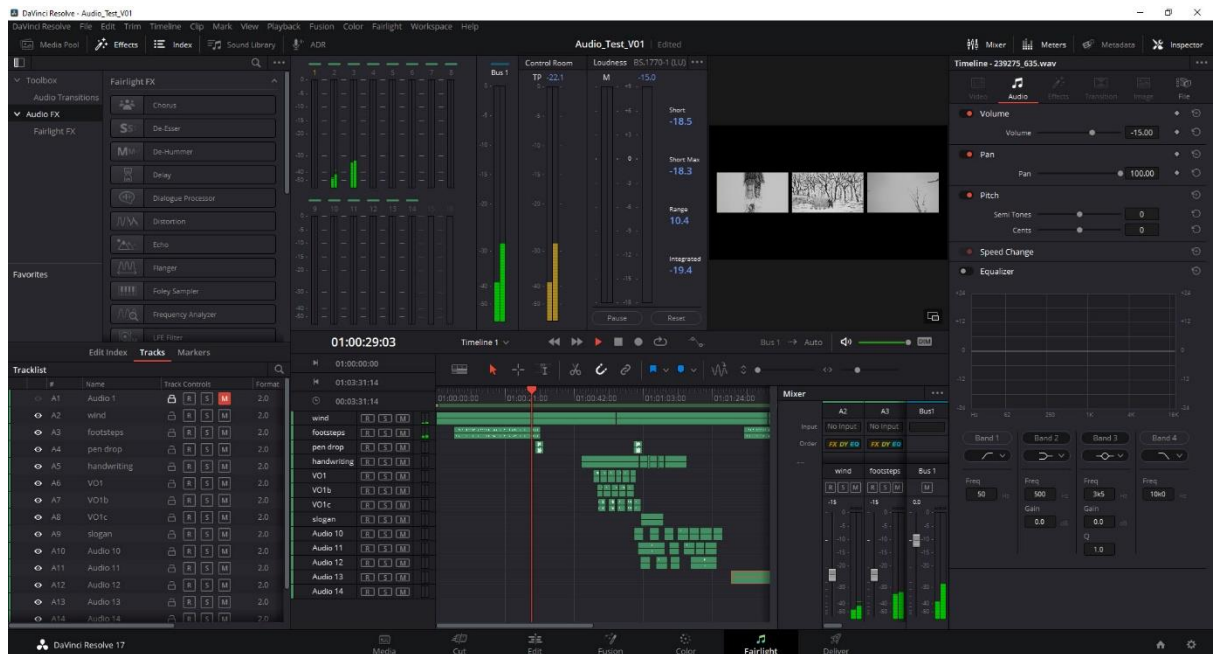


Figure 3.22. Audio editing in DaVinci Resolve.

3.10.1 Sound Effects

The sound effects established the atmospheric and sensory viewing experiences of the *No. 28* installation. As previously discussed in [Chapter One](#), the viewers may gain an understanding of my childhood environment as their sense memories are resurfaced through ambient sounds. The installation starts with *The Snowy Alley*, with the ambient sound of the wind that continues to the end, establishing the ambience of where I grew up. It provokes a sense of the peaceful life of a child in the countryside while functioning as a pattern for creating the link between different memory scenes. Additionally, the footstep sound effect was added to the first and last scenes to link them and intensify the acoustic ambience. The other sound effects, such as the pen hitting the floor, writing on paper, and the war siren alarm, transform the installation site into my memory space. Furthermore, I played with the audio pan setting to create variety in the direction of the sound and enhance the sonic ambience of the installation. For instance, the footstep sound effect gives the sense of someone walking in the snow from the far-left to the far-right side of the environment.

3.10.2 Voice-over

The Classroom and *The Birthday* scenes are accompanied by my voice-over. I duplicated and overlapped my recorded voice audio tracks irregularly, creating the echo of an ambiguous whisper. By eliminating the natural sound of my voice, the breath, the lips, and the throat became audible, foregrounding the materiality of my voice. Also, the repetition of the Persian words produced ambiguous vocals which are not understandable by international and Persian audiences. Liberated from linguistic meaning, the sound of Persian words embodies the *grain* of the voice and may create corporeal and physical resonance in the viewers. Furthermore, the echoed voice-over embodies the sound of nonlinear, repetitive, fragmented memory in my mind. The textural quality of murmuring vocals sounds like the internal voice living in most minds. I wanted the *No. 28* installation site to sound like my mental space chained to past events.

3.10.3 Sound from Archives

In *The Birthday* and *The War* scenes, I added my memory of the sounds from Iran's national TV and radio station. One is the slogan during Iran's 1979 revolution, repeating "Death to the

king,” and the other is the reporter’s voice announcing the news of Khorramshahr’s liberation from occupation during the Iran-Iraq war. For Iranians, the sounds are very nostalgic and emotional; they may not resonate with international viewers as they belong to the collective memory of Iranians. The low quality of the archive sound embodies the passage of time and the enactment of memory in the present.

CONCLUSION

The project's exploratory approach challenged my technical and theoretical knowledge and led to self-discovery. Understanding the associations of time, memory, drawing, and animation by investigating theories and examining them in other artists' work helped me to develop an animation technique suited to the embodiment of memory. Additionally, phenomenological film theories facilitated the production of a multi-channel, hybrid installation that evokes multisensory perception. The *No. 28* installation is not only the overt representation of my memories, it is my memory space in which the past repeatedly interrupts the present moment. The textural and temporal quality of what I remember from childhood is embodied through the materiality of charcoal drawings, the temporal rhythm of animation, and the installation space. For instance, the residue of the erased charcoal marks depicts the nature of fading memory that stays in our subconscious forever. Also, through the progression of a charcoal drawing, one gesture morphs to the next, interrupting the linearity of time and the visual space, foregrounding the act of drawing and the dynamic nature of memory as a process of *becoming*. Additionally, the juxtaposition of complete and incomplete, figurative, and abstract drawings creates flickering broken imageries about to be shattered at any moment, like a fragile memory image. Also, the action progresses, suspends, and repeats, embodying the nature of time in memory through the visual rhythm of animation. Lastly, projecting looped animations turns the gallery into my memory space where the past enters the present, depicting the way in which I frequently remember the same past events.

Besides depicting my childhood memories, *No. 28* engages with viewers' own sensory memories and evokes their tactile, visceral, and kinetic responses. Auditory and visual elements create multisensory reactions due to our senses being interlinked. As a result, the audiences feel the atmospheric experience of being in my childhood environment as the sonic and pictorial components of *No. 28* call up similar lived experiences stored in their senses. Additionally, the construction of meaning is subject to the physical movement of viewers between screens to connect my different memories through their past experiences and imagination. Also, the texture quality of charcoal drawings projected onto the gallery wall may evoke the viewer's tactile

experience through vision. Plus, the temporal rhythm of expressive drawings may stimulate viewers' visceral responses.

Above all, *No. 28* is a synthesis of the fragmentary and fading remains of my memory with no narrative structure. However, when I juxtaposed the episodes of memories next to each other, I discovered their tacit meaning and association. In drawn memories, I witnessed political events in post-revolutionary Iran constantly interfering with my peaceful domestic life. Consequently, the animated drawings revealed a duality in my childhood life: peace and war, calm and fear. A contradictory life that I was not aware of until then. Therefore, the reclamation of tacit memories opened the unknown experiences concealed in my psyche; in *No. 28*, animation expanded from the art of movement to the process of self-discovery and becoming.

REFERENCES

- Arnold, M., & MacDonald, S. (1994). Sp... Sp... Spaces of inscription: An interview with Martin Arnold. *Film Quarterly*, 48(1), 2-11. <https://doi.org/10.2307/1212917>
- Arsenjuk, L. (2018). *Movement, action, image, montage : Sergei Eisenstein and the cinema in crisis*. University of Minnesota Press.
- Barker, J. M. (2009). *The tactile eye: Touch and the cinematic experience*. University of California Press.
- Barthes, R. (1988). *Image, music, text* (S. Heath, Trans.). Noonday Press. (Original work published 1977)
- Bergson, H. (1911). *Matter and memory*. Swan Sonnenschein. (Original work published 1896)
- Bochner, A. P., & Herrmann, A. F. (2020). Practicing narrative inquiry II: Making meanings move. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 284-328). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190847388.013.19>
- Bond, R. (2011). Poetics and public space: an investigation into animated installation. *Animation Practice, Process & Production*, 1(1), 65-76. https://doi.org/10.1386/ap3.1.1.65_1
- Bryson, N. (2003). A walk for a walk's sake. In C. De Zegher (Ed.), *The stage of drawing: Gesture and act* (pp. 149-158). Tate Publishing and the Drawing Center.
- Carels, E. (2013). Spaces of wonder: Animation and museology. In S. Buchan (Ed.), *Pervasive animation* (pp. 292-316). Routledge.
- Curtis, R. (2008). Immersion und Einfühlung. Zwischen Repräsentationalität und Materialität bewegter Bilder. *montage AV. Zeitschrift für Theorie und Geschichte audiovisueller Kommunikation*, 17(2), 89-107.
- De Zegher, C. (2003). *The stage of drawing: gesture and act*. Tate Publishing and the Drawing Center.
- Deleuze, G. (1988). *Bergsonism*. Zone Books.
- Duquet, A.-M. (2000). Scenography of the image. In A. W. Balkema & H. Slager (Eds.), *Screen-based Art* (pp. 81-88). Brill. https://doi.org/10.1163/9789004495005_013
- Fisher, J. (2003). On drawing. In C. De Zegher (Ed.), *The stage of drawing: Gesture and act* (pp. 217-226). Tate Publishing and the Drawing Center.
- Grisewood, J. (2010). *Marking time: Investigating drawing as a performative process for recording temporal presence and recalling memory through the line, the fold and repetition* [Doctoral thesis, University of the Arts London]. <https://ualresearchonline.arts.ac.uk/id/eprint/6509/>
- Grosz, E. (1999). *Becomings : Explorations in time, memory, and futures*. Cornell University Press.
- Grosz, E. (2005). Bergson, Deleuze and the becoming of unbecoming. *Parallax*, 11(2), 4-13. <https://doi.org/10.1080/13534640500058434>

- Gurevich, M. (2019). ". . . The film is not about that:" Notes on (re)reading Tale of tales. In F. Bruckner, H. Lang, N. Gilic, H. Turkovic, & D. Suljic (Eds.), *Global animation theory : International perspectives at Animafest Zagreb* (1 ed., pp. 143-162). Bloomsbury Academic.
- Harris, M. (2020). Drawing on memory: Layers of association in Robert Breer's animated films. In M. van Gageldonk, L. Munteán, & A. Shobeiri (Eds.), *Animation and memory* (pp. 105-123). Springer International Publishing. https://doi.org/10.1007/978-3-030-34888-5_6
- Hosea, B. (2018). Siting animation: The affect of place. In V. Smith & N. Hamlyn (Eds.), *Experimental and expanded animation: New perspectives and practices* (pp. 257-278). Springer International Publishing. https://doi.org/10.1007/978-3-319-73873-4_13
- Kentridge, W. (2017). "Fortuna": Neither program nor chance in the making of images (1993). In R. Krauss (Ed.), *William Kentridge* (pp. 25-32). The MIT Press. <https://doi.org/10.2307/j.ctt1trkjp5.7>
- Krauss, R. (2000). "The Rock": William Kentridge's drawings for projection. *October*, 92, 3-35. <https://doi.org/10.2307/779231>
- Krcma, E. (2010). Cinematic drawing in a digital age. *Tate Papers*(no.14). <https://www.tate.org.uk/research/tate-papers/14/cinematic-drawing-in-a-digital-age>
- Kuhn, A. (2010). Memory texts and memory work: Performances of memory in and with visual media. *Memory Studies*, 3(4), 298-313. <https://doi.org/10.1177/1750698010370034>
- Marks, L. U., & Polan, D. (2000). *The skin of the film : Intercultural cinema, embodiment, and the senses*. Duke University Press.
- McCloud, S. (2008). *Understanding comics: The invisible art* (M. Martin, Ed.). Harper Perennial. (Original work published 1993)
- Merleau-Ponty, M. (2012). *Phenomenology of perception*. Taylor & Francis Group. (Original work published 1945)
- Miller, N. A. (2020). "A printing machine for the memory": Stillness, metamorphosis, and the poesis of memory in Ruth Lingford's *Death and the mother*. In M. van Gageldonk, L. Munteán, & A. Shobeiri (Eds.), *Animation and memory* (pp. 81-103). Springer International Publishing. https://doi.org/10.1007/978-3-030-34888-5_5
- Moustakas, C. (1990). *Heuristic research : Design, methodology, and applications*. SAGE Publications. <https://doi.org/10.4135/9781412995641>
- Munteán, L. (2020). Animating amnesia: The materiality of forgetting in Izabela Plucin'ska's *Liebling*. In M. van Gageldonk, L. Munteán, & A. Shobeiri (Eds.), *Animation and memory* (pp. 63-78). Springer International Publishing. https://doi.org/10.1007/978-3-030-34888-5_4
- Nelson, R. (2013). *Practice as research in the arts : Principles, protocols, pedagogies, resistances*. Palgrave Macmillan UK.
- Newman, M. (2003). The marks, traces, and gestures of drawing. In C. De Zegher (Ed.), *The stage of drawing: Gesture and act* (pp. 93-108). Tate Publishing and the Drawing Center.

- Plate, L., & Smelik, A. (2009). Technologies of memory in the arts: An introduction. In L. Plate & A. Smelik (Eds.), *Technologies of memory in the arts* (pp. 1-12). Palgrave Macmillan.
- Plate, L., & Smelik, A. (2013). *Performing memory in art and popular culture*. Taylor & Francis Group.
- Ramm, A. (2005). What is drawing? Bringing the art into art therapy. *International Journal of Art Therapy*, 10(2), 63-77. <https://doi.org/10.1080/17454830500347393>
- Richards, R. (2020). "Nothing but paper and ink": Metamorphosis, memory, and trauma in *the hat*. In M. van Gageldonk, L. Munteán, & A. Shobeiri (Eds.), *Animation and memory* (pp. 143-160). Springer International Publishing. https://doi.org/10.1007/978-3-030-34888-5_8
- Rose, B. (1993). Thinking is form: The drawings of Joseph Beuys. *MoMA*(13), 16-23. <http://www.jstor.org/stable/4381217>
- Rostron, E. (2013). *Amy Kravitz*. Edge of frame. <http://www.edgeofframe.co.uk/amy-kravitz/>
- Rutherford, A. (2014a). Moving image installation, the embodied spectator of cinema and Amar Kanwar: Learning from intermediality. *New Cinemas: Journal of Contemporary Film*, 12(3), 225-238. https://doi.org/10.1386/ncin.12.3.225_1
- Rutherford, A. (2014b). Space, body and montage in the hybrid installation work of William Kentridge. *Animation: An Interdisciplinary Journal*, 9(1), 81-101. <https://doi.org/10.1177/1746847713517194>
- Schön, D. A. (1994). *The reflective practitioner : How professionals think in action*. Taylor & Francis Group. (Original work published 1983)
- Sturken, M. (1997). *Tangled memories: The vietnam war, the AIDS Epidemic, and the politics of remembering*. University of California Press.
- Sultan, N. (2019). *Heuristic inquiry: Researching human experience holistically*. SAGE Publications. <https://doi.org/10.4135/9781071802632>
- Szekely, M. D. (2006). Gesture, pulsion, grain: Barthes' musical semiology. *Contemporary Aesthetics*, 4, 22-22.
- van Gageldonk, M. (2020). Montages of memory: Collage, memory, and gender in the films of Stacey Steers. In M. van Gageldonk, L. Munteán, & A. Shobeiri (Eds.), *Animation and memory* (pp. 45-62). Springer International Publishing. https://doi.org/10.1007/978-3-030-34888-5_3
- van Gageldonk, M., Munteán, L., & Shobeiri, A. (2020). *Animation and memory*. Springer International Publishing AG. <https://doi.org/10.1007/978-3-030-34888-5>
- Walden, V. G. (2018). Animation and memory. In N. Dobson, A. Honess Roe, A. Ratelle, & C. Ruddell (Eds.), *The animation studies reader* (pp. 81-90). Bloomsbury Publishing.
- Weibel, P. (2003). Expanded cinema, video and virtual environments. In P. Weibel & J. Shaw (Eds.), *Future cinema: The cinematic imaginary after film* (pp. 110-125). MIT Press. <http://www.yorku.ca/caitlin/futurecinemas/resources/coursepack/expanded.pdf>

Wells, P. (1998). *Understanding animation*. Taylor & Francis Group.

Artworks

Arnold, M. (Director). (1989). *Pièce touchée* [Film]. <https://www.martinarnold.info>

Cournoyer, M. (Director). (1999). *The hat* [Animation]. National Film Board of Canada.
https://www.nfb.ca/film/the_hat

Eisenstein, S. (Director). (1928). *October: Ten days that shook the world* [Film]. Sovkino.
https://www.youtube.com/watch?v=jpxfwIF18Wc&ab_channel=TheCinemaArchives

Kentridge, W. (1989–2020). *Drawings for projection* [Installation].
<https://www.kentridge.studio/projects/drawings-for-projection>

Kentridge, W. (2008). *I am not me, the horse is not mine* [Installation]. Sydney Biennale.
<https://www.tate.org.uk/art/artworks/kentridge-i-am-not-me-the-horse-is-not-mine-t14213>

Kravitz, A. (1985). *River Lethe* [Animation]. <https://vimeo.com/10490599>

Kravitz, A. (1988). *Trap* [Animation]. <https://vimeo.com/10490757>

Kravitz, A. (1998). *Roost* [Animation]. <https://vimeo.com/10490863>

Leaf, C. W. D. (1976). *The street* [Animation]. National Film Board of Canada.
https://www.nfb.ca/film/the_street

Norstein, Y. (Writer/Director), & Petrushevskaya, L. (Writer). (1979). *Tale of tales* [Animation]. Soyuzmultfilm;
https://www.youtube.com/watch?v=hN1zimADh6Q&ab_channel=AlexandraPryakhina

Plucinska, I. (2013). *Liebling* [Animation]. <https://player.vimeo.com/video/87081776>

Steers, S. (2006). *Phantom canyon* [Animation]. <https://www.staceysteers.com/phantom-canyon>