SPACES BETWEEN: NAVIGATING TIME AND MEMORY

THROUGH COMIC PANELING

by

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A THESIS

Presented to the Department of Art & Technology
and the Robert D. Clark Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Fine Arts

June 2024

An Abstract of the Thesis of

Chloe Lee for the degree of Bachelor of Fine Arts
in the Department of Art & Technology to be taken June 2024

Title: Spaces Between: Navigating Time and Memory Through Comic Paneling

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This thesis explores the usage of comic panel and page transitions to investigate fluid shifts in internal perceptions of time and space. Through a research-based analysis of comic compositional strategies and discussion of technical methodologies in crafting digital comics, comic studies are approached with both conceptual and process-based considerations, exploring how the medium allows for unconventional and intimate visualizations of the relativity of time. It also extensively discusses my comic, *unravel*, through a vulnerable analysis that seeks to investigate how comic theory is actively applied to creative works to manipulate the temporal beat of a narrative. Finally, in implementing interactivity as part of the intended viewer experience, this thesis creates a cyclical reading experience where opportunities for the viewer's narrative perception are left as ambiguous as the time and space of the comic itself, crossing boundaries from the purely digital into an experiential mode of communication.

Acknowledgements

I would like to first thank Ty Warren for mentoring me throughout my undergraduate education. Though his classes have provided me the opportunity to grow as an illustrator, comic artist, and designer, it is ultimately his empathetic, yet critical, approach to discussing art, media, and education that has shaped me into the person I am now. Ty has shown me, by example, the kindness, dedication, and humor that the world desperately needs. Thank you to Ulrick Casimir for wholeheartedly engaging with my project from its inception, examining my work from the viewpoint of a scholar in another department, and asking the difficult questions that need to be answered. Thank you to Colleen Choquette-Raphael for fostering a creative and conceptually rigorous space that has completely and entirely changed how I approach my work, for the better. Additionally, I am extremely grateful to Michael Salter for pushing me throughout this past year, encouraging me to question everything but also trust myself and my ideas, and to convince everyone else that they should care, too.

Without my friends, family, and peers, this project would not have been possible. Thank you to my parents, Hae Young and Lisa Lee, for trusting me to pursue art in college and beyond, and for hearing out my ever-changing gameplans. Thank you to my partner, Will Ybarra, for believing in me more than I ever thought possible and for encouraging me when I felt like I'd confronted the impossible. To the 2023-2024 Art & Technology BFA cohort, Pixelgarden: thank you for being here since day one, for staying awake for days and days on end because we care about our work that much, and for always lending a hand or being around to teach each other something new in this ever-changing digital landscape.

Finally, thank you to the faculty of the Art & Technology program and Robert D. Clark Honors College. I will forever be grateful for the interdepartmental support between the programs, and for making it possible to link my interests in academic research and visual arts.

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Chapter 1: Introduction

Comics are a sequential art, making time an inherently crucial consideration in their making. From character growth and development–regarding both internal and physical growth–to the use of the page's blank space to elongate or shorten moments, it is time that breathes life into the panels composing each page, and the unwavering ticking of hours, minutes, and seconds that turn the pages forward and backward.

Despite the centrality of time, comics are not bound to a clock's linear rhythm; through panel arrangements and deliberate use of spaces between, comics artists have the capability to manipulate perceptions of passing time. One page can span five seconds, five hours, five minutes, ten days, or thirty years: the key lies in the artist's hands, the page waits to be unlocked. This is where I find comics to be most lucrative: the intentional shaping of blank pages to reflect the temporal flow and shape of internal landscapes. Definitive truths need not define each page, nor stories with succinct conclusions, or endings tied together with delicate satin bows. Rather, the capability to elongate or condense time through comic panels allows us to abstract the entity of time itself and process a contrast between the pulsing beat of linearity and internalized, complex experiences that feed into cyclical motions.

This thesis is composed of sentiments and snapshots derived from processing states of suspension, stuck in the clutches of precious seconds ticking away with a passing breeze. In these moments, I find the surrounding world–foggy mornings and the first crimson leaves of autumn, sticky summer heat and brilliant verdant leaves–exists in constant, fluid motion. When investigating the processes, memories, and experiences that influence my work, each moment feels ephemeral, happening just once, then disappearing with all the subtlety of a failed supernova. But I am inanimate. Stuck, as though time moves in slow motion and somehow, I

need to sprint to catch up with traces of reality. I trip and stumble through the motions of creativity and reflection, yet the cavity in my chest renders me breathless. In the end, it's always the same place I began that awaits me.

I've understood this stillness within my work in two ways. First, as a tether to the past, a nomad of hazy memories. It's the familiarity in looking through faded photographs and dusty bins of childhood keepsakes. But it's also desperation, the gnawing desire to preserve and protect what is nestled in the past. Vignettes of those who live only in letters and stories, walking the same path in hope of something appearing once more.

In the space where everywhere becomes nowhere, silence and stillness confront me. In response, I indulge a transience that both troubles and fascinates me. My work explores cyclical familiarity, the ways in which our known can become little but memory on a page: suffocating stagnation as time ruthlessly passes.

unravel is an interactive comic cataloging the relationship between a girl and the full moon. Though she looks to the moon and stars for their beauty and resolution, the moon, too, is bound to a cycle. It becomes fragile, fragmented – its shards dissolve senses of reliability. Throughout the latter half of the comic, repeated tidal motifs create a sense of instability while the girl ruminates on what she believes to be true of the moon. As the final panel takes viewers back to the start, the unknown becomes intimate, then distant once again. It exists both inside and outside memory, a recursive cycle inviting time to linger as the outside world blurs together. This thesis seeks to use the comic medium to investigate a fugue form of time while simultaneously recognizing the external passage of time to create a dialogue between perception, memory, and reality.

Chapter 2: Literature Review and Case Study Panel Analysis

Literature Review

As comics are the primary mode of investigation to explore time and space in this thesis, it is of paramount importance to first understand the formal structure of comic pages and panels. Historically, scholars of comic studies have extensively studied the relationship between panel constructions and the blank space, gutters, between them as signifiers of the passage of time from panel-to-panel and page-to-page. Within this section, I examine existing literature regarding panel transitions, and gutters to provide a basis for the formal elements of this project. I also recognize and discuss reexaminations of these visual elements within context provided by Japanese manga scholars, elaborating on ways in which comic principles can be utilized to evoke a nuanced sense of temporality through means derived from distinct understandings of these formal structures.

Closure, Gutters, and Time

Without both the artist and viewer understanding the passage of time in comic panels and pages, the medium is rendered null. This understanding is referred to as closure, a visual agent of time and motion that requires varying degrees of audience participation to piece together individual panels into an interrelated story[1]. We place our faith into fragments of stories and collaborate with closure to make the pieces whole.

The space where closure occurs is between panels: the blank space referred to as the "gutter." The gutter manifests a myriad of possibilities for the next panel, while the following image is the dictator of the degree of closure necessary for the audience to understand the story.

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[1] Scott McCloud, *Understanding Comics: The Invisible Art* (HarperCollins Publishers, 1994), 65.

If closure is the agent of time, then the transitions between panels escort closure to prominence. There are six primary modes of panel transition, listed in order of most-to-least closures: moment-to-moment, action-to-action, subject-to-subject, scene-to-scene, aspect-to-aspect, and non-sequitur.

Moment-to-moment transitions portray two panels in direct relation to each other, like the blink of an eye or a camera panning towards a subject. Piecing together these moments does not require significant reasoning from the audience; rather, based on an understanding formulated in reality, it is a logical assumption that one moment follows another. Likewise, action-to-action panels follow a set of actions placed in sequence; a pitcher winding up a ball then throwing it, or a car crashing into a fence. In this regard, action-to-action transitions are quite similar to moment-to-moment, but place more time between series of actions, requiring a higher degree of audience involvement[2].

When panel transitions entail more closure, their complexity and room for ambiguity simultaneously grows. For instance, subject-to-subject panels often remain focused on one scene or narrative space, but transition between two or more subjects. To make this transition meaningful, the reader must deepen their involvement with the story to understand that panels portraying two different subjects are connected. Likewise, scene-to-scene transitions transport the reader across significant distances of time and space, in contrast to the scenic consistency in subject-to-subject. If a series of panels portray a sudden ten-year time skip, the reader must be able to make the connection that this sudden jump in time is a logical, integrated part of the narrative[3].

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[2] McCloud, *Understanding Comics: The Invisible Art*, 70.
[3] McCloud, *Understanding Comics: The Invisible Art*, 71.

Perhaps most intricate in the series of panels and closure aspect-to-aspect transitions, used to establish mood or a sense of place. In these moments, assembled through visualizations of scattered fragments, time seems to stand still. The viewer's wandering eye is set upon subtle aspects of a place, idea, or mood to indicate a sense of contemplation[4]. For example, a panel sequence depicting a character cooking dinner may use aspect-to-aspect transitions to feature imagery of oil popping in a pan, steam from a rice cooker, and a household pet lapping scraps of food off the ground. These individual parts make up one single moment, as opposed to a series of moments or actions that indicate the passage of a significant amount of time.

Regardless of the level of closure coupled with various transitions, the possibility of unrelated panels is low; placing panels side-by-side evokes a sense of meaning, even in the most jarring combinations. This is evident in the non-sequitur transition, depicting no logical relationship between panel imagery. However, it is the nature of being placed as panels beside each other that creates the idea of time, relation, and narrative. The form of comics endows images with a "single, overriding identity"[5] to structurally encourage considerations of a whole narrative through the usage of closure inherent to comics.

Reexamining the Constraints of Panels: "Break Space" and Time

Though gutters are where associations between panels are made, the term itself as a definitive boundary between panels is not unanimously accepted. Japanese *manga* scholar Natsume Fusanosuke challenges the notion of the gutter, explaining that–for manga artists– the space between panels is "something more" than blank space, something that characters can break or hang from. Rather than a "gutter," Fusanosuke refers to this space as *mahaku*, or "break

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[4] McCloud, *Understanding Comics: The Invisible Art*, 79.
[5] McCloud, *Understanding Comics: The Invisible Art*, 73.

space"[6]– a visual strategy accredited to Japanese *shōjo* (girl's) manga artists, though it has since expanded beyond the category[7].

In this break space, where images are not confined to the geometric boundaries of panels, artists can make use of emptiness to create a multifaceted, nuanced "tempo, mood, or feeling."[8] Layering images through this method frames the margins of the page as the panel, where the margins then interiorize panels to portray a light, fluid approach to temporal order as opposed to strict courses of dialogue or action. Using break space is not a visualization of time put on pause, but rather a strategy to manipulate perceptions of how long one second may last. Comics are sequential, but they are also simultaneous[9]; by laying panels on a page, we read them both individually and all at once. To defy the boundaries of panels and actively engage with break space is to "neutralize" a sense of time, instead placing focus on ambiguous feelings and inner speech.

Panel Structures: Shape, Compression, and Release

If both temporality and interiority are to play a role in comics, the strategies of panel "compression" and "release" can mediate the passing of time and stillness, allowing for a single moment to linger. Panel compression, which is a progressive sense of closing in on a subject to peer into their mind, pulls readers from a "psychological sense of distance" to a tight, close-up

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[6] Natsume Fusanosuke, "Natsume Fusanosuke on Scott McCloud's Understanding Comics," trans. Jon Holt and Teppei Fukuda, Inks: The Journal of the Comics Studies Society 6, no. 3 (September 2022): 365–73, https://doi.org/10.1353/ink.2022.0034, 371.

[7] Natsume Fusanosuke, "Panel Configurations in Shōjo Manga / 夏目房之介の評論: 少女マンガ のコマ構成 夏目 房之介," trans. Jon Holt and Teppei Fukuda, U.S.-Japan Women's Journal 58 (2020): 58–74, https://doi.org/10.1353/jwj.2020.0005, 68.

[8] Fusanosuke, "Panel Configurations in Shōjo Manga / 夏目房之介の評論: 少女マンガ のコマ構成 夏目 房之介," 71.

[9] 1. Nick Sousanis, *Unflattening* (Cambridge, MA: Harvard University Press, 2015), 62.

view that promotes empathy[10] between the reader and character. Through this method, the reader feels as though they can enter the character's psyche to intimately understand them.

Compression may also persist in the design of panels themselves. For instance, identically sized panels elicit a sense of temporal stagnation due to their consistency and regularity in structure[11]. It functions not only to indicate a sense of time passing as the reader visually approaches the character, but also to elongate the sense of interiority between subject and reader as it continues.

However, compression is then contrasted through the "release" of this tightly wound time. Differentiations in panel shape or structure may indicate release, such as an elongated rectangle arriving after a series of squares. Other strategies include entirely new compositions, such as illustrations that use a full two-page spread, that utilize break space to stray from a previously established, then compressed, temporal beat. Like panel transitions, time makes compression and release possible[12], encouraging combinations with panel structures, transitions, or break space to alter the threads that form the fabric of a comic narrative.

Case Study: Panel Analysis in *Blue Period*

Within comics, panel transitions, constructions, and use of blank space work together to form the overall narrative mood while simultaneously indicating shifts in tone and time: elements that can distance or bring us closer to characters. The following case study of panel constructions in *Blue Period*, written and illustrated by Tsubasa Yamaguchi, serves to examine implementations and effects of these panel methodologies alongside our relationship to the

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[10] Natsume Fusanosuke, "The Functions of Panels (Koma) in Manga: An Essay by Natsume Fusanosuke," trans. Jon Holt and Teppei Fukuda, *Electronic Journal of Contemporary Japanese Studies* 21, no. 2 (August 16, 2021), https://doi.org/https://www.japanesestudies.org.uk/ejcjs/vol21/iss2/holt_fukuda.html.
[11] Fusanosuke, "The Functions of Panels (Koma) in Manga: An Essay by Natsume Fusanosuke".
[12] Fusanosuke, "The Functions of Panels (Koma) in Manga: An Essay by Natsume Fusanosuke".

characters. Since *Blue Period* is a Japanese manga, the panel order and transitions are read from right-to-left. Rather than highlighting features unique to manga, this case study solely examines panel compositions and transitions to analyze ways in which these structures form narrative mood and shape temporal experiences.

First published in 2017, then serialized in *Monthly Afternoon*, *Blue Period* follows a high school student, Yaguchi Yatora, as he develops a passion for and understanding of visual arts in search of lifework that feels meaningful. With a sudden, unrelenting drive to improve his practice and further understand technical practices within the field of fine arts, Yaguchi applies to Japan's most competitive public art university. Yamaguchi uses *Blue Period* to present the internal struggles that accompany the journey to becoming a professional artist, offering introspection on interiority within artistic processes, as well as the complicated relationship between artists and creativity.

Yamaguchi evokes these themes not only in the series' writing, but also the panel transitions and compositions. In chapter 2 of *Blue Period* (Figure 1), we experience Yaguchi's first attempts at extreme, focused drawing sessions that test his confidence, patience, and persistence.

Figure 1: Tsubasa Yamaguchi, Blue Period, trans. Ajani A. Oloye, vol. 1 (Kodansha Comics, 2020), 94-95.

Our first glimpse of this experience comes through aspect-to-aspect panel transitions seen on the right page; lines being erased from a page, a pencil scratching in details of a roof, and sweat dripping from Yaguchi's face while he practices observational drawing. Each of these panels evoke a sense of atmospheric suspension in time as we observe Yaguchi's efforts to draw scenery viewed from his window. The top row of panels are closely spaced together, indicating a strong relationship between each of the images–we are able to understand that the same character is the subject of each panel despite being given fragments of his body.

Using aspect-to-aspect transitions as a mode to explore Yaguchi's practice session provides an overarching sense of the tireless stress he experiences while drawing. Compositional focus isn't placed on only one movement or piece of his work, but rather the sensation of drawing and accompanying mental exhaustion. The lack of speech bubbles or internal thoughts creates a sense of silence on the page; we imagine the only sounds to be heavy breaths or the

scratch of graphite. Through this silence, we feel the toll this session takes on Yaguchi's body, which helps us understand that the physical act of practice requires the entirety of Yaguchi's energy–there is no space for anything else to occur.

When our attention shifts to the second (left) page, we look down at Yaguchi's sketchpad. The panel perspective has been compressed to place us directly in Yaguchi's place— we look down at the sketchpad as though we are him. Internal dialogue, reading "I thought I could do better than this," and "why can't I do this?" further emphasizes this first-personal perspective and reinforces the compression that places readers within the confines of Yaguchi's headspace. As the panels progress, we are presented with one of his own memories of a second character who previously served as a metric of comparison. This is not necessarily a subject-to-subject transition, as the second character is not directly involved in this scene through dialogue or action, but rather a continued effect of panel compression. Empathetic connections between the reader and Yaguchi are further solidified as we are presented with memories seen through his eyes, experienced in his body.

Immediately after, we are presented with a purely-black panel, filled only with word bubbles containing Yaguchi's internal considerations–the idea that "someone like me" can create art. As he ponders this realization and battles self-inflicted doubt, we come to rest at a panel that escapes his internal landscape through a panned-out camera view, exteriorizing Yaguchi once more. Though this final panel is not the largest panel on the page, it releases the pattern of small and narrow rectangles previously used to present his internal experience.

Despite the narrative focus on Yaguchi's personal experience with art, the emotional heart of this scene lies in experiencing disappointment, and frustration, extending the opportunity for emotional connection to readers from a breadth of experiences and identities. Centering these

emotions in the dialogue and panel subjects, alongside the use of panel compression and release to evoke an internalized experience, kindles a gentle flame between the character and viewer. We, as readers, have been "compressed" into Yaguchi's head, then "released" to indicate an emotionally intensive, deeply intimate scene that can be vividly experienced through our imagination, regardless of how closely our personal experience may be to Yaguchi.

Chapter 3: Process and Methodology

Preface

Part of being a creator means that I have the privilege to not only analyze strategies and compositions used in other published media, but also apply them to my own work and explain my process. When discussing creative methods, I believe in transparency with technical processes and influences, vulnerability, and accessibility. By elaborating on my choices and reflecting on the results, I seek to better understand often-unexplained impulses to create and design panels in specific ways. I do not intend to tell viewers how to understand my work, but rather provide a critical framework through which to examine my project.

This section consists of an explanation of each step of my thesis: preliminary ideation through inspiration and influences, narrative and character-related considerations, storyboards, and investigations into my technical process of this comic, *unravel*.

Preliminary Ideation: Inspiration and Influences

My primary thematic concerns within this comic are time, memory, and space–not through direct, tragic scenes, but rather through melancholic contemplation and evocative line and textural qualities. For these reasons, I did not want to create an action-oriented narrative, nor did I want to build a fantasy-oriented world that places more emphasis on genre as opposed to time and reflection. Though genre-fiction is not inherently excluded from reflecting on these concepts, I also knew that in creating a short-form comic, I would not be able to create a sense of believable immersion in a fantasy world that also places necessary emphasis on the reflective emotions that drive my work.

Oftentimes, popular comics like the heroes of the Avengers are known for their flashy action sequences, uniquely costumed heroes, and panels filled with onomatopoeic words like *POW!!* and *BAM!!* However, my interest within sequential art lies in a quiet emptiness. I find these qualities in the work of Hayao Miyazaki's Studio Ghibli movies, frequently pausing to picture scenes of river water rushing across smooth stones or a character sighing with a summer breeze. Though these moments where we stop and breathe the lifeblood of the film's environment don't necessarily advance the narrative, they do ground our feet in its soil. They're moments of stillness, easing tension and allowing us to inhale salty seaside air or bask in the dappled sunlight patterns painting the sidewalk. Miyazaki refers to this emptiness, known as *ma* in Japanese, as a stillness that allows tension to "grow into a wider dimension"–if that tension exists all the time, we become numb to its impact[13]. The inclusion of *ma* allows us the space to process, to grow, and to contemplate.

The emptiness permeating the world of Studio Ghibli films is like the emptiness crafted through deliberate use of panel gutters and aspect-to-aspect panel transitions. Using these strategies provides the opportunity to weave together elongated periods of time with new landscapes that exist outside a realm of action or dialogue-oriented sequences.

While the contents of panels can elicit an environmental emptiness, such as leaves blowing in the wind, birds flying through the sky, the structure of the panels themselves can also function as a form of emptiness. For instance, what if a page holds only one panel? Without other panels providing additional context, this moment exists alone in an infinite void of time. It has the capability to become referential to other panels in the greater narrative while simultaneously existing in its own bubble. This is the sense of time that the structure of comics

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[13] Roger Ebert, "Hayao Miyazaki Interview," rogerebert.com, September 12, 2002, https://www.rogerebert.com/interviews/hayao-miyazaki-interview.

can adapt to, and perhaps encourages–and for these reasons, I opted to invest my time and research into a comic as opposed to a film or series of illustrations.

Narrative and Characters

The overarching narrative of this comic centers on the relationship between a girl named Aster and the moon. I purposefully did not elaborate on the history of this dynamic, nor did I place it in one specifically identifiable time and place. Just as the lunar cycle and passage of time are, in practice, endless, I also wanted to create a narrative that ebbs and flows with the current of memory and time. Thus, my interests fell into the mediation of reality and memory: questions of what we choose to remember, and how we face discrepancies between internal and exterior experiences.

Though this comic takes place over an unspecified amount of time, references to previous panels, repeated poses, panels, and positions, as well as limitations in the number of panels per page are structural strategies intended to create the sense of one elongated scene, interspersed with surreal, internal visualizations. I am aware that this story could take place on one-to-two pages, or between roughly four and twelve panels. However, I have deliberately used the graphic language of comics and panel transitions to elongate one selected moment to focus on a sense of temporal and spatial emptiness. This was often realized through the deliberate use of minimal panels, dividing one landscape or moment into fragments (Figure 2).

Figure 2: A rough storyboarded image of a forest scene.

Initially, this comic portrayed these spatial and temporal concepts as a dialogue between two characters: the main character, Aster (Figure 3), and a personified representation of the moon. However, after I completed my initial round of storyboards for the comic, I felt as though creating a dissonant dynamic between two characters did not align with the intimate, internalized perspective in both visual and textual elements that I intended for this comic. However, I wanted to focus on only one perspective to emphasize a stillness in time that feels all-encompassing through the strategic use of emptiness to paint one single moment that feels non-linear.

Figure 3: A character sheet for Aster, previously referred to as Wanderer in early drafts.

In using a distant figure like the moon, I seek to evoke a sense of consistency. It waxes and wanes in accordance with our predictions and observations, upon which we base calendars and charts. However, we also experience solar or lunar eclipses, blips in our familiar experience of the lunar cycle. Though we know these phenomena occur, each instance still ignites a new fascination and surprise as we watch for sharp, crescent-shaped shadows or total daytime darkness. With these considerations, the literal moon becomes a figure that can replace the secondary human character in this comic, serving as a recipient of memory, but also an untouchable figure that cannot reciprocate or comprehend these feelings, as seen in Aster's

reflection in Figure 4. Including only one character allows the narrative's focus to narrow on a

single intimate experience, as well as internal perceptions of time.

Figure 4: A rough storyboard of Aster stargazing.

Storyboards

With the decision to center this project entirely on one character, I came to the realization

that I preferred to strip down the elements of my comic even further. This came in the form of

limiting the number of panels on pages to remove unnecessary transitions, removing dialogue

and narration, and shifting away from elements that could either distract from the narrative or

push it into something akin to fantasy genre–which, once again, is not an inherently negative feature, but not the type of comic I envisioned for this narrative mood.

Storyboards provide a baseline for the comic, a reference point to turn to when drafting crisp linework and deliberate paneling. It's also something that can be continually revised throughout the comic process while still providing a rough outline of pacing. In a traditional workflow, storyboards may be scribbled on smaller sheets of paper, or drawn lightly on the final paper so it can be later traced over with ink, pen, or other materials. However, my process is digital, allowing for an infinite number of steps forward and backward without consequence. Rather than sheets of paper, I work in digital "layers," where the opacity can be lowered or raised with the click of a button. This method makes it possible for storyboards to be edited, changed, or completely removed with relative ease, as it removes considerations of material waste. It also allows me to change the order of pages and continue to edit the story, even after I "finish" my first rounds of revisions. Through these methods, the creative process is less iterative and more fluid; the changes, like time, become ephemeral.

When working in digital spaces, the goal of storyboards lies in not only drafting a rough outline, but also finding a balance between endless editing possibilities and personal discipline; it requires a strong internal vision and the capability to know when to stop and move onward. For this reason, I left my storyboard sketches loose and simple, as seen in Figure 5, to avoid overworking early elements of this comic, instead allowing my revisions to focus purely on organizational structure and thematic cohesion.
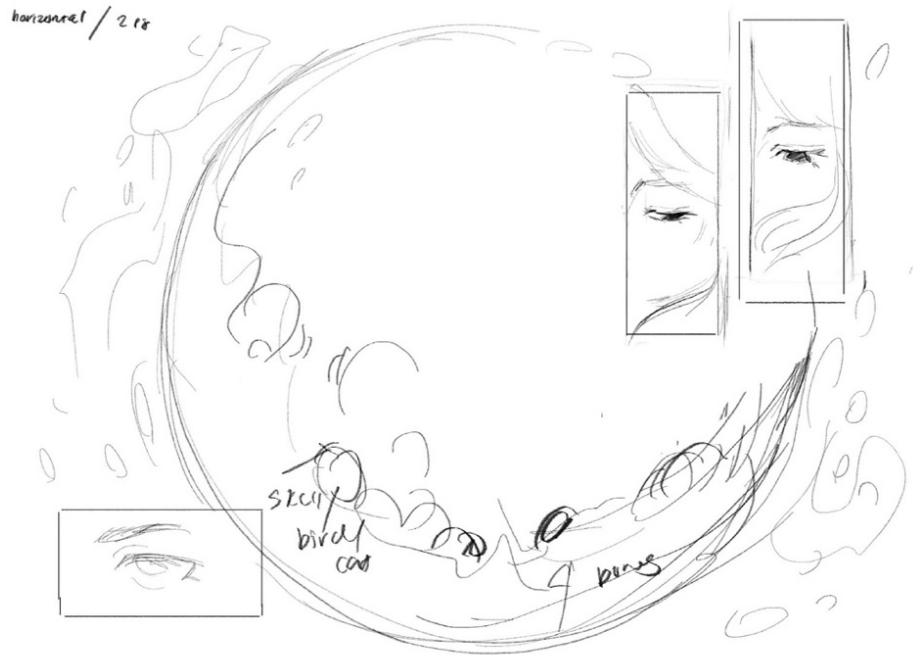
Figure 5: A rough storyboard of the moon and Aster's eye.

Throughout the revisionary stage, considerations of the flow of individual paneled pages versus two-page spreads remained constant. Full spreads enhance a particular moment, story beat, or emotion; they span the breadth of two pages while comprising one instance in time. They're a space to breathe, to pause, and to immerse yourself in the lines and shapes of the comic, much like the emptiness that drew me to Studio Ghibli films.

In my comic, spreads—perhaps more than pages of panels—dictate the story's flow. Therefore, any revisions made to panels were ultimately in comparison to the visual flow directed by illustrative spreads. Allowing myself the time to compose the entirety of my thoughts onto a page, then extract the essence of my intended narrative became a process like the distillation of memory: removing unnecessary elements and condensing outside noise.

Technical Process: Linework and Pixelation

From this project's inception, I intended to create two modes of visual experience: one that is referential to the traditional practice of comic-making, and one that utilizes the very heart of digital software, pixels. I also wanted to maintain a sense of creative integrity through each process, remaining faithful to the unique qualities within each medium. More specifically, I avoided the use of "pixelation" tools to create the pixel-style in the comic, instead drawing the entire comic twice: once in the pixel art software Aseprite, then again in the drawing and painting software Clip Studio Paint EX (CSP). In the end, the completed comic was compiled in CSP because of its robust, comic-oriented file export system.

The two versions of my comic do not exist separately. They intertwine to create an experience that transforms throughout the reading experience; what is crisp, clean, and uses the expected language of print comics becomes something clearly digital, geometric, and associative. Pixels are a mode of distortion, often representative of glitches, censorship, or uncertainty[14], but also the base of digital programs, a core aspect of anything we see on our screens. If halftones demonstrate a sense of nostalgia for early comic-making processes, then pixel art is nostalgic for the early days of digital programs, where smoothing and blending tools were not yet conceived, and Microsoft Paint was an artist's program of choice.

This comic is presented in the order of pixelation, then refined linework, though one version is not intended to be more transparent or "better" than the other. Rather, creating two versions creates the opportunity for viewers to have unique relationships with understandings of clarity, memory, and form coming from one's familiarity and relationship to print or digital media. There is not a correct way to read this comic; it is a cyclical experience with intentionally

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[14] "Pixellation," TV Tropes, https://tvtropes.org/pmwiki/pmwiki.php/Main/Pixellation.

endless repetitions. Interactivity, as detailed later in this chapter, is the vehicle for this limitless transformation, placing a sense of agency in the user's hands as they cycle through the panels, flipping forward and backward.

The following discussion presents technical considerations for pixel art and linework-based visual methods with attention to the unique evocations that accompany each process. Interactivity will be discussed further in Chapter 4 with attention to how functionality facilitates viewer engagement with the narrative.

Pixelation and Dithering

When analyzing the composition and panel layout of this comic, the pixel art and linework-based versions are identical. However, this is intentional as part of my creative investigation involves exploring the different ways in which process-based methodologies affect perceptions of the same story and structure.

In pixel art, I explore this through a visual effect known as dithering. Behind the curtain, dithering is a mathematical process that uses formulas to limits the number of pixels and colors for an image on-screen[15]. While there are different mathematical structures that create different dithering effects, I used a form of dithering known as Bayer dithering, visible in Figure 6, which creates a visual effect with cross-like patterns. Pixel art relies on a grid-based method to align 1 pixel x 1 pixel geometric squares, which also creates even lines for the Bayer dithering pattern.

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[15] "Ditherpunk - the Article I Wish I Had about Monochrome Image Dithering," surma.dev, January 4, 2021, https://surma.dev/things/ditherpunk/.

Figure 6: Gradients made with Bayer dithering on a pixel art page.

Dithering can be used to imitate gradients, create a subtle texture, or limit the number of colors in an image, among other practical uses. In my practice, I use dithering for all three of the above listed reasons: gradients to create a sense of depth, texture on large plains of flat color, and maintaining a three-color base palette. However, the combination of dithering and the capability to raise and lower the opacity of dithered colors also creates the opportunity for new, limited color combinations. While the original palette for the pixel comic is only three colors, changing the opacity created new hues through alterations in brightness levels.

After completing the base art with the initial, muted palette, I imported each of the pages into CSP for both file organization and color adjustment. One of the built-in features in CSP is a "gradient map," which correlates hues to brightness levels. Though my first palette was only three colors, I used gradient mapping to expand my palette to five hues, increasing contrast for a stronger visual mood. By using gradient maps, seen in Figure 7, I was altered the hues created through brightness-opacity adjustments, allowing for deeper hues in the darker values and overall intensified contrast between elements.
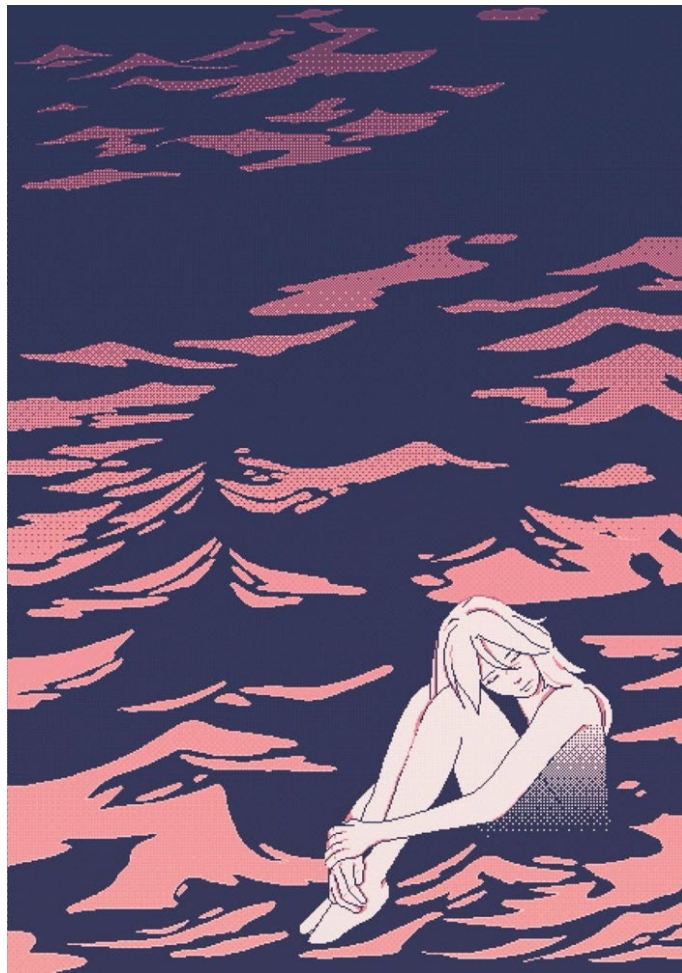

Figure 7: Gradient maps used to recolor a pixel art page.

Pixel art, and specifically dithering, pays homage to the very media it was born from: digital interfaces and visual assets that use the screen at its very core. The gradients and textures created through Bayer dithering are not intended to mask the medium's pixelated nature through smooth transitions, but rather accentuate it in vivid color. In doing so, I seek to avoid associations between pixel art and censorship by intentionally using the medium to highlight its qualities. Though images may be pixelated in attempts to obscure or conceal elements, I embrace the pixel as an honest, purposeful quality that wholly comprises digital and screen-based media.

Linework and Halftones

Though many comics are now created with digital tools and software, the beginnings of many techniques are from traditional comic processes. Halftones, the use of repeated dots with variations in size and spacing, produce a gradient-like effect while limiting the number of colors on screen. For print, halftones optimize the number of colors required by the printer through a visual gradient illusion created by halftone dots[16]. Usually, this is done by applying a sticky sheet with the dot pattern over the desired location on an artwork or print piece, which is then cut out to more specific shapes with something like an X-ACTO knife.

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[16] Alastair Campbell, *The Designer's Lexicon* (London: Cassell and Co, 2000), 190.

Figure 8: Halftone application on paper. zthecreative. February 13, 2018. *Zthecreative*. https://www.zthecreative.com/blog/2018/2/9/artists-guide-how-to-use-screentone-paper-traditionally.

In digital spaces, halftones are not only referential to the pen-and-paper origins of comics, but also create a sense of grit and texture. With tools like smoothing, blur, blending, and uniform buckets of color fill, digital processes have been criticized for "removing the artist's hand"[17]. This doesn't necessarily mean that a program created the art rather than a person, but that we lose texture–brushstrokes, pools of ink from pen pressure–when we work entirely in the digital realm. It also doesn't mean that it is impossible to add texture back into work; there are tools meant to recreate brush and paint textures, the scratchiness of fountain pens, or skips in ink. However, when creating my comic, I found that solely using these tools still felt predictable–I

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[17] Sharné McDonald, "The History and Future of Digital Art," Linearity, December 7, 2022, https://www.linearity.io/blog/digital-art/#:~:text=A%20key%20concern%20or%20technique,artworks%20so%20valuable%20and%20exclusive.

knew when a brush would rotate its shape as it mathematically sought to imitate the texture of pen and paper, which asked me to look further into how I could create a deeper sense of texture.

Halftones became part of the answer, but not the entire solution. Solely drawing with a brush mimicking a halftone pattern left soft edges and incomplete dots: the hallmark of a digital program. Instead, I decided to fill entire layers with the halftone pattern, then use the lasso tool in CSP to select and erase areas where I did not want halftones; a process referential to traditional methods of applying the pattern with adhesive sheets and a knife (Figure 9). Just as halftones imitate smooth gradients, my process imitates traditional black and white halftones despite having the tools available to make smooth gradients. In doing so, I am not blindly attempting to make a comic with these "traditional aesthetics" through digital means, but deliberately subverting what digital programs are capable of with my knowledge of halftones, texture, and the application process.

Aside from the process, halftones also visualize a sense of distortion between perception and reality. When zoomed out, the gradient effect produced by halftones is quite deceptive, and on a computer or phone screen that can be held far from our eyes, its illusion only grows more convincing. However, when we zoom in–whether that be holding a page closer to our eyes or using digital tools to look closer at a picture, we see the black and white pixel patterns that comprise what we believe to be gradients (Figure 10).

Figure 9: Halftones visible from a zoomed-out view of a forested panel.

Figure 10: A close-up view of halftones.

Although digital halftones are referential to traditional processes, they also use illusions to present gradients, shades of gray, and the feeling of texture. It's in this irony that I best see the relationship between digital halftones and pixel art. Despite the association between pixels and censorship, my use of pixel art does not attempt to hide or obscure the medium; each square is visible, and the "gradients" produced by Bayer dithering are visible even from a distance. This makes the structural coupling of halftones and pixelation conceptually plausible through a sense of dissonance not only in perception, but in transparency of imitative effects.

Interactivity

The final intended format of this comic is realized through an interactive experience crafted in the game engine Unity with the comic-creation plugin Panoply[18]. Though not explicitly a game, the use of interactivity as the comic's intended format presents the opportunity

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[18] Erik Loyer, "Panoply," Opertoon, accessed June 6, 2024, https://opertoon.com/panoply.

for further engagement between the viewer, narrative, and character. A crucial element of interactivity is that the player-made decisions do not fundamentally alter the character's personality, history, or overarching narrative experience[19].

In this interactive format, viewers become players. With the click of the right arrow key, panels emerge onto the screen-made-page along the vertical and horizontal axes. Though interaction comics have been critiqued for "breaking" the continuity of presentations in time and space[20], I believe that interactive motion is another form of the gutter. As we click through the panels and allow motion to envelope our senses into this illustrated narrative, the spaces of time between the appearance of panels is where we imagine what could come next. Additionally, the ability to move both forwards and backwards with these key presses defies the notion of one stream of time, imploring players to move backward to re-examine panels that connect to both past and future narrative threads. Interactivity does not limit comics, but rather frames "movement" as another form of the gutter as players, quite literally, navigate space.

The cyclical, interactive experience of this comic is intended to encourage players and viewers to reexperience, reexamine, and relive a cataloged moment through multiple perspectives. Shifting between the halftone and pixel versions of the comic creates a multifaceted, layered experience where the viewer may consider how visual style impacts their personal narrative experience. It asks viewers to consider the nature of appearance; while pixels are often used in forms of censorship, they are also the core of visual media created in digital programs. Similarly, digital halftone patterns–though referential to the lineage of comics and

[19] Kevin Veale, "'If Anyone's Going to Ruin Your Night, It Should Be You': Responsibility and Affective Materiality in Undertale and Night in the Woods," *Convergence: The International Journal of Research into New Media Technologies* 28, no. 2 (May 7, 2021): 451–67, https://doi.org/10.1177/13548565211014434, 457.
[20] Scott McCloud, "The Visual Magic of Comics," TED Talk, February 2005, https://www.ted.com/talks/scott_mccloud_the_visual_magic_of_comics?language=zh&subtitle=en.

printing–are made of the same pixels made prominent in the pixel art comic. I intentionally do not mark one version as the "real" experience, as they are meant to be read together in an interactive format. Though their decisions, ultimately, will not change the drawings and code that paint the comic's outcome, replayability allows the opportunity for an infinite number of narrative understandings and experiences.

Chapter 4: Panel Analysis

Though dithering and halftones are unique to each respective version of *unravel*, the panel composition and contents are not. In this section, I present a panel analysis to convey the process and intent behind the usage of space and panel transitions. For visual clarity on screen and in print, I have only included the halftone comic in the figures, though both versions can be read in the supporting materials attachment.

Panel Analysis

unravel opens with a series of actions asking relatively little closure of the viewer. We see Aster sitting on the ground, the first panel depicting her hand propping her up into a relaxed position (Figure 11). The camera pans outward, a moment-to-moment transition, and our field-of-view zooms out to display her whole body from a slightly elevated perspective. The following panel, picturing her hands pointing at constellations in the sky, is an action-to-action transition, requiring slightly more closure to make a connection between disembodied hands and the previously depicted character. As the page transitions to the final panel, a similar sense of closure and association is asked of the viewer, once again connecting the hands to the character, and the character back to the first two panels.

Figure 11: Page 7.

For the introductory scenes, I wanted to maintain a sense of familiarity as viewers settled into the story. In the second panel, while the character looks at the sky, we view this from a point-of-view that appears like the moon and stars are looking back at her, too. Had this panel been framed either from behind or a lower-angle perspective, it may feel like an outsider looking in as opposed to an intimate relationship between Aster and the moon. I further consider this sense of comfort and familiarity through the compression in the final panel, transitioning to a

tightly cropped, zoomed-in panel as we begin to feel as though we can dance alongside her consciousness.

By using panel transitions that, in comparison to other transitions, require less closure, I seek to establish an initial sense of familiarity between the character and viewer. However, I also use shifts in perspective to begin an initial "compression" of the panels and ignite sparks of connection. For instance, when the first panel zooms out, it transitions to another panel with an elevated perspective for reasons twofold: first, to establish a relationship between the character and skies, then to enhance the effect of the zoomed in final panel.

As the pages progress, this sense of compression is intensified through the cropping and composition of the panels. Due to the previously established sense of familiarity, heavily cropped panels of Aster's hands are recognizable as the same character from previous pages, and even the moon's consistent portrayal frames the first panel as though viewed from Aster's eyes (Figure 11). Additionally, subjects begin to break free from the panel border constraints and make use of the gutters, perhaps best referred to as break space as I have utilized it to expand Aster's framing beyond the panel borders. This strategy brings her closer to the viewer through breakage of expected comic structures. In doing so, this composition not only breaks free from the redundancy of completely encapsulated panels, but also heighten a sense of emotional intimacy as the page begins to feel alive.

In comparison to Figure 11, Figure 12 also makes greater use of the negative space between panels, not only to allow increased room for the extended panel elements, but to elongate the sense of passed time between each panel. While Figure 11 depicts very little space between panels one and two, assisting in the immediacy of moment-to-moment transitions,

Figure 12 encourages a sense of emptiness in time through an ambiguity in the length of each moment, furthered by the spans of blank space between panel borders.

As the page concludes, the final panel compresses to a tight crop on Aster's eye as she looks upward to moon in the first panel, a page feeding into itself. Were the viewer not to turn the page, Figure 12 endless cycles into itself: the moon in the sky, Aster recording its shape, gazing at it once more, and repeating. Thus, the cycle of recursive page structures begins to make itself evident; each page, as well as the overarching story, do not have a definitive end and can be experienced endlessly.

Figure 12: Page 9.

On the following page (Figure 13) I chose to "release" the compression through a full spread. In my comic, two-page spreads tend to serve more illustrative purposes than purely narrative; the absence of divisions between pages provides the opportunity to intensify a feeling of relief from compressed panels, as seen in Figure 12. However, the spreads do not abandon the narrative. For instance, this spread (Figure 13) visually elaborates on the relationship Aster holds with the moon, demonstrating a sense of idolization in the doubling of her figure and singularity of the moon.

Despite its centrality in the composition, the moon is entirely inaccessible–Aster's hands sprawl as though waiting for a blessing to fill her palms, but still she is left to wait eternally within the confines of the page. The texture in her clothing, hair, and skin grounds her as something earthly and tangible, whereas the flat color and simplicity of the moon evokes the cold air of a distant stranger. Though Aster's gaze seems to frame their relationship in a warm light, the contrast between her figure and the moon questions her narrative reliability. This is not intended to create dichotomies between perceived "right" and "wrong," but rather elaborate on the complexities of internalized memory and dialogue. As written by Bahar Gholipour, "our memories are influenced by how we want things to have been, and not necessarily the way things were."[21] Though I recognize this discrepancy between individual memory and a more collective sense of reality, I also directly present these memories through comic pages to make this individual experience a reality for the character, and by extension, the viewer.

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[21] Bahar Gholipour, "Writing a Memoir Is a Strange Psychological Trip Through Your Past," The Cut, April 5, 2017, https://www.thecut.com/2017/04/what-happens-to-your-memories-when-you-write-a-memoir.html.
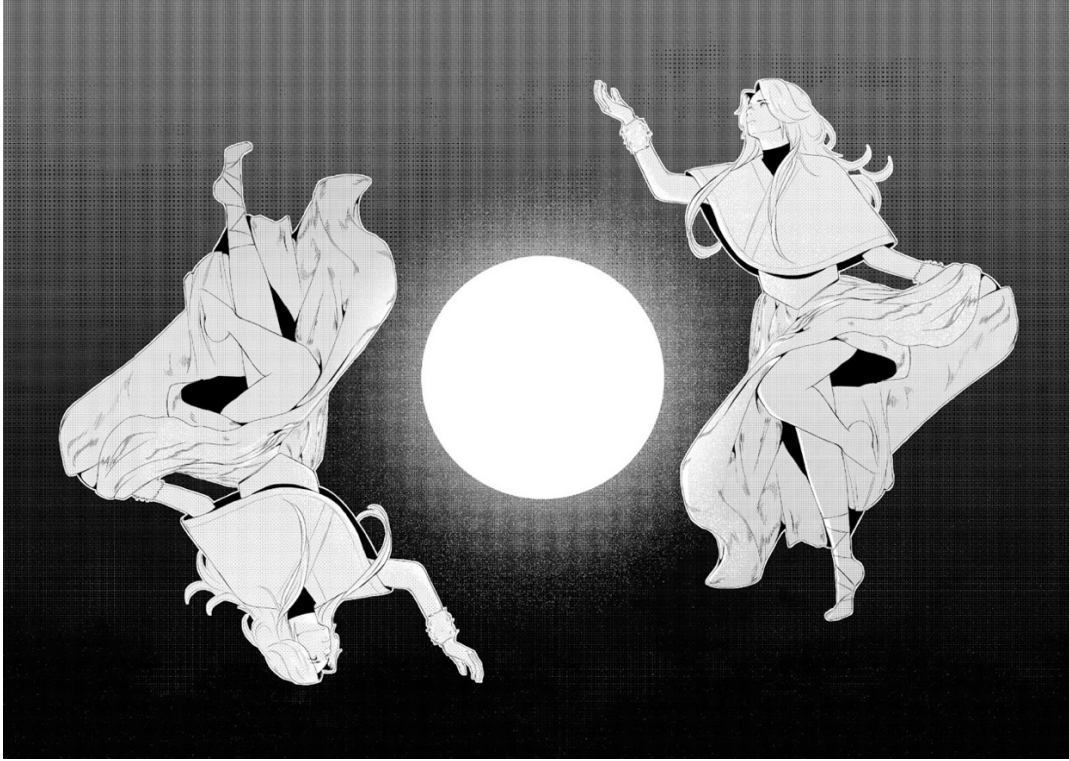
Figure 13: Page 10-1.

Progressing forward, our perspective is grounded once again through a montage sequence utilizing movement and compression as agents of time (Figure 14). The left side of the page changes Aster's position, and her eyes slowly shift to the ground. On the opposite page are views of her face that slowly compress once again. Though these elements–the shifting of her position and compressed perspective–indicate the passage of time, lighting is the crucial element that ties together the temporality of this page and makes clear the difference between internal and external time.

On prior pages, the united presence of Aster and the moon had been marked by soft lighting, evoking a feeling that her body is washed in the moon's light. Conversely, as the lighting on her face darkens, we understand this as the moon's disappearance, despite being incongruent with the consistent lighting on the opposite page. From a distant perspective, little

has changed, but as we enter an intimate gaze, we notice a rising turmoil. Through these

discrepancies, I highlight the complexities in internal and external consistency in perspective and

time; though our understanding of time changes through compression, from an external view

time remains consistently still, and thus cannot be confined to a sense of linearity, becoming

relative to the individual.[22]

Figure 14: Page 14-15.

On the next spread (Figure 15), the smaller, zoomed-in panels of Aster's eye reflect a

continued sense compression from the previous page through their tightly cropped framing. They

also directly create contrast between the "released" moon and compressed panels. In doing so, I

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[22] Mario Radovan, "Time Is an Abstract Entity," *Time & Society* 20, no. 3 (November 2011): 304–24, https://doi.org/10.1177/0961463x10371882, 305.

elaborate on the temporal contrast previously pictured. Now, an internal-perspective landscape becomes the focal point, with an externalized perspective of Aster serving as a framing elements for the moon.

Additionally, I use Figure 15 to further expand on visual implications from Figure 14; the moon is no longer full, but rather an abstracted crescent. This figurative representation, as well as the textured line quality, bring Aster's imagined moon closer to her reality. Its texture appears tidal, flowing in line with previous lines to create microcosms of uncertain, ever-changing memories and experiences. This version of the moon is only pictured alongside compressed panels of Aster's face, making evident that this is how she now sees the moon, and that she believes it has changed. It also couples her with the moon—her hair flows in patterns much like those seen within the moon, questioning if she and the moon are truly separate entities.

Figure 15: Page 16-17.

The following pages, pictured in Figure 16, present the same scene from the previous two spreads (Figure 14, Figure 15) through a series of aspect-to-aspect transitions. Bunches of flowers, leaves framing broad tree trucks and swaths of leaves—from these elements, we are given a sense of scenery and surroundings, placing a physical space around the character. However, we do not see Aster depicted in this grounded landscape; the panel picturing her hands resting on the ground, which calls back to Figure 11 and Figure 14, does not place her back in the previously displayed scenery. As these are aspect-to-aspect panels–that is, presenting one moment through a series of sensory and visual snapshots–we can infer these to be her surroundings, yet she is not seen grounded within them after the moon has changed.

In this shift, I seek to further evoke the discontinuity between internal perceptions of time and its impact on placement, coupled with the abstracted moon and external stagnation. Aster believes the moon has changed, that some constant in the world has shifted–and yet, this is the very same moment where the moon was once full, the very same moment where she had kneeled on the ground. Usage of more vertical spacing between the panels further visualizes this liminality and avoids the sense of urgency, that may be present with panels kept close together, evoking emptiness across the pages.

The right page continues with a sense of emptiness, presenting a compressed panel of Aster's hand in the same position as Figure 11. With the full moon appearing once again as a background element, I imply that very little time has passed between Figure 11 and Figure 16, yet Aster perceives it as far more–alterations in the moon she believes is changing with a blink of her eyes.

Figure 16: Page 18-19.

Continuing the cyclical motif of references to the comic's beginning, page 20 (Figure 17) is structured similarly to page 1 (Figure 17), referenced in its first two panels: hands grasping at walls, then feet traversing a grassy field. However, page 20 compresses these panels' perspective, indicating the intimate look viewers have been given into Aster's psyche. Additionally, the final panel of page 20 depicts her full body, seated, with the borders of this panel implied through blank space and posture. Her feet rest where the bottom line of the panel box would sit, her back leaning against the suggested leftmost panel border. This structure, in comparison to page 1, visualizes a sense of unsurety; the ground is not made explicitly clear, the panel borders left to the viewer's imagination.

Additionally, as page 20 has come to represent an internal viewpoint from Aster's perspective, the moon is no longer visible. From Figure 14, we understand that she believes it is

disappearing, that it leaves her to fend for herself. Despite the similarities between page 1 and page 20 in panel structure and content, we now view this landscape from her perspective, floating in a sense of liminality and ambivalence. However, this also makes for a more intimate experience between the viewer and character as they are also left to imagine the in-betweens of the page's blank space.

Figure 17: Page 1 placed in comparison with page 20.

This section of the comic pauses with a two-page spread of Aster resting (Figure 18). Her eyes fall shut, a neutral expression on her face alluding to the unsteady nature of her relationship with the moon being commonplace.

Below Aster are tidal patterns, like those found in the moon in Figure 15. This page, though not explicitly paneled, is a transition into the next section of the comic: a look at her internal state, and an examination of the use of aspect-to-aspect transitions across pages, rather

than just panels. The appearance of the tide repeatedly signifies a sense of unsteadiness and unsurety; in Figure 18, the water begins to lap at her body, too.

Figure 18: Page 24-25.

Immediately following are two pages intended to be viewed as a diptych (Figure 19). While the tidal motif continues with the ocean horizon line, Aster steps directly into the water, with the moon—full, yet blank—rising in the background. Though this contradicts the crescent-then-new moon previously pictured, it also visualizes the inconsistency in her perception. We begin to see why the moon's changing appearance troubles her, as it is never consistent with what she imagines.

On the next page, the spatial orientation of the moon on the left is coupled with Aster's pupil and iris on the right. From it flows an abstracted tidal pattern like the waves from the following page and the patterns within the moon from Figure 15. This transition is sudden,

surreal, and relies far more on visual associations and connections than it does clearly laid out transitions from one action to another. However, these associations are made possible in using internal perception and symbolic landscapes as the setting for this section: Aster chases the moon, hosting it in her own body, but this is merely her perception. She cannot hold the moon in her palm, save for her longing imagination. She compresses then breaks apart internally, as if trying to swallow the sun.
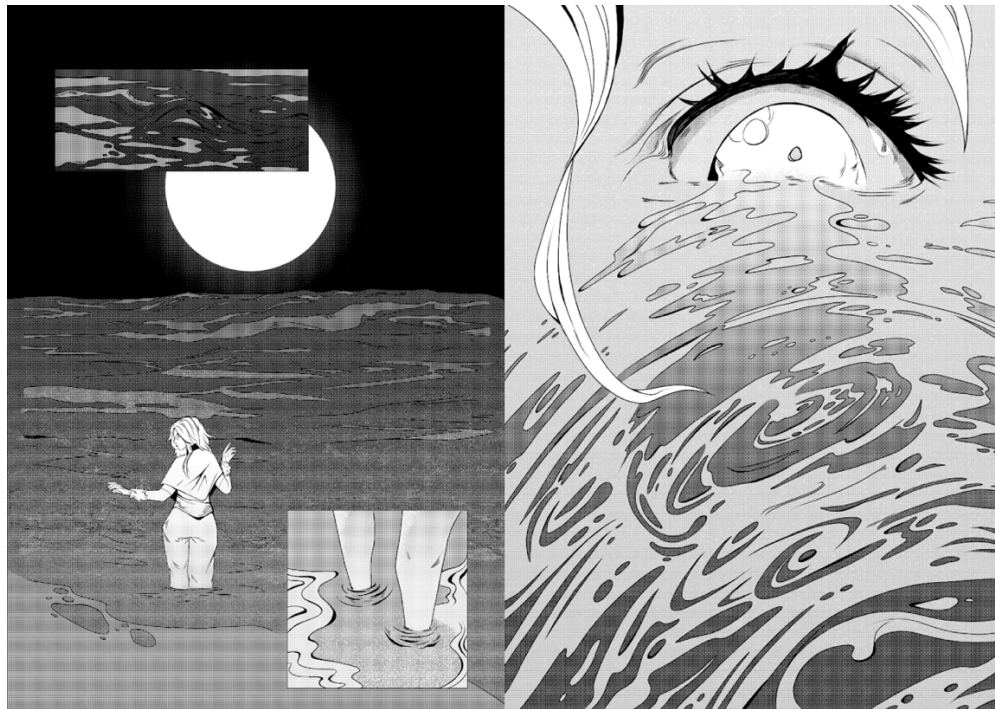

Figure 19: Page 28-29.

Formal associations between reality and surreality continue in the next spread (Figure 20). The first page pictures Aster's lowered eyes and the tree seen in Figure. The tree's leaves sprawl outward, covering her vision and creating a sense of loneliness in its empty surroundings: only its roots dive into the surrounding soil and grass. In contrast to the previous spread, the tree is grounded, firm, and unchanging–much like what Aster clutches onto in her mind, and what she wants to remember.

The right page utilizes a cascading wave to return the viewer to the unsteadiness in perception. Its tidal line mirrors the flow of the tree's leaves, creating associations between the two pages through negative space and shape-association; a comparison also used to create a sense of perceptual instability. Despite their structural differences, the connection between the two panels becomes an aspect-to-aspect transition between the time and space of physical reality and that of the cascading wave of memory and imagination. What is real, sturdy, and constant in memory can also be swept away in distress, shaking the foundations on which our perception of reality is reliant. Though in this moment we exist in Aster's memory, her experiences—visually metaphorized—are real to her, and thus become real to us.
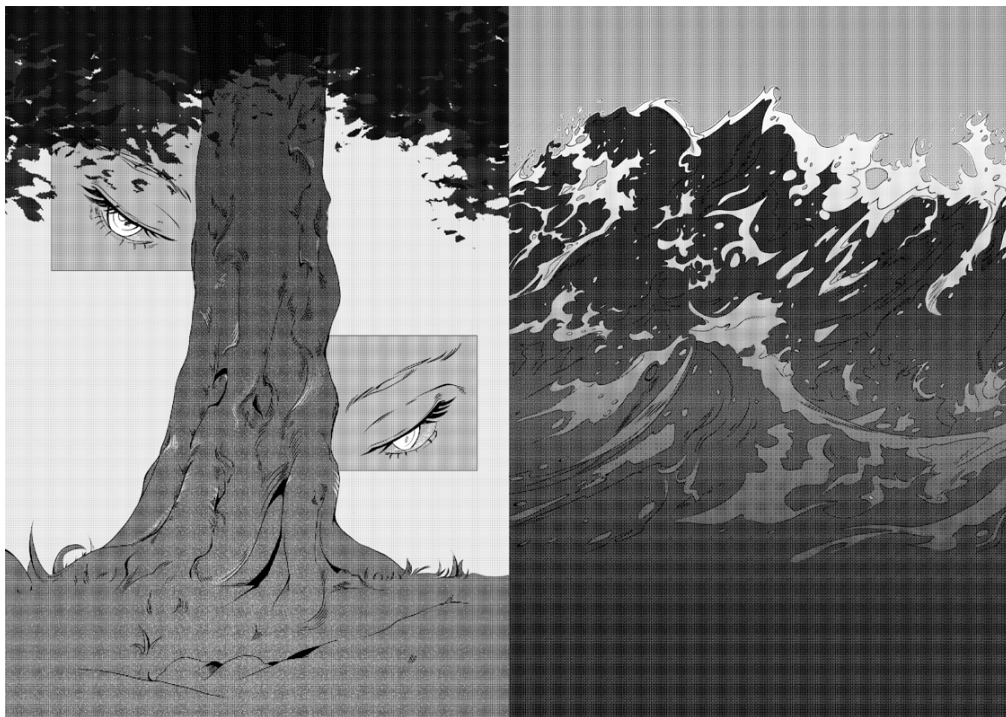

Figure 20: Page 30-31.

The sequences of discrepancies between outward reality and inward experience draw to a close with three horizontal panels of the moon (Figure 21). The transitions return to a moment-

to-moment sequence, the moon remaining in place while our view pans over a span of clouds. However, much like Figure 15, the clouds are abstracted into wisps and pools, mirroring the patterns of tidal motifs from previous pages, and creating a sense of contingency with the comic's beginnings.

Alongside the changing clouds, the moon also varies in its texture; glimpses may be seen of its craters and topography, only to fade away in the next panel. In doing so, these three panels still carry the weight of discrepancies between memory and reality through subtle differences–a continuation of the growing understanding that repeatedly mediating these differences is a cycle for Aster. Like the moon's phases, it ebbs and flows, but does not come to definitive cessation.
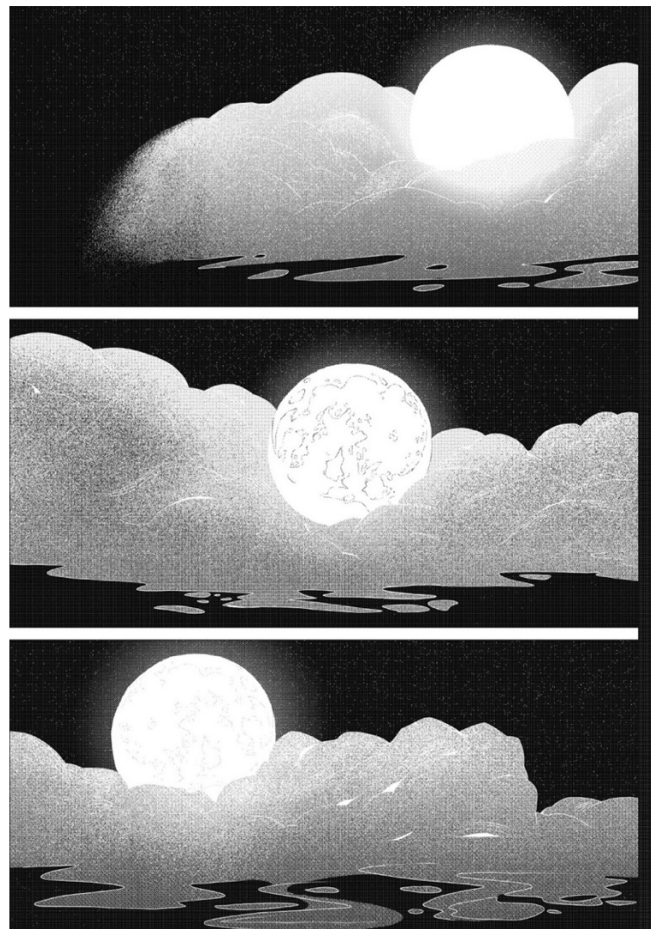

Figure 21: Page 38.

The moment-to-moment transitions of the moon are set beside Aster, amid abstracted tidal patterns that hark back to previous water-like depictions (Figure 15), as well as the clouds masking parts of the moon (Figure 21). In Figure 18, she'd floated on the water's surface, then begun to submerge herself in Figure 19, and now stands hip-deep in the waves (Figure 22). These comic-wide transitions assist in visualizing stages of submersion in her perspective and accompanying attempts to mediate her internal response with the outward passage of time.

From the bottom of the page, hands reach up toward Aster. The fine line serving as a panel border and containing her torso separates her from these hands, allowing viewers to infer that the hands are then in their own panel and could belong to her body. Additionally, Aster's exposed vertebrae–though part of a visualized internal state of being rather than physical reality– indicate a sense of intimacy, baring of self-to-self as she's abruptly jumped from perception to perception and space to space. The placement of two sets of hands, four total, becomes indicative of a sense of memory across different periods of time, or perhaps reaching between memory and reality to bring the comic to full cyclical realization.

Figure 22: Page 40.

With another return to more structured, rectangular panels (Figure 23), the tension from the previous pages begins to release. The same pose, ordered from compression to release, invokes a return to physical stillness and releases a sense of urgency created through constantly changing panels, backgrounds, and structures. Our perspective in Figure 19 through Figure 22 has been largely internalized since the moment she closed her eyes in Figure 18. However, "releasing" this compression through moment-to-moment panels also frees us from an internal view to bring us back to an external view of time and space. Additionally, using moment-to-moment transitions to create this page indicates a clearer sense of time. Whereas previous pages and panels asked for an understanding of internalized thought, self, and perception, this page returns to a recognizable form of one figure, one space, and one continuous moment. Gone are

backgrounds of imagined shorelines and shifting currents, now replaced by the emptiness of the space between reality and consciousness.
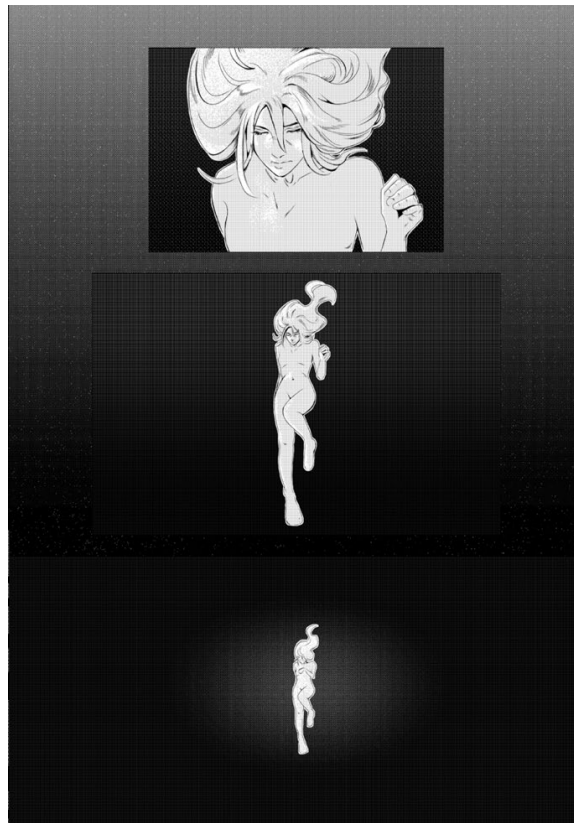

Figure 23: Page 41.

As the comic draws to a close, the previously depicted sinking sequence is released in a full page spread (Figure 24). The first panel, which emphasizes a sense of compression, displays her eye open, with a clear pupil drawing similarities to the shape of the moon. Following the moment of clarity, her eyes close, placing her in a moment of rest with an undulating reflection below her, fragmenting her body within the page's darkness.

By leaving the background empty, this page alludes to an internal state, where the moon is less literal and more an imaginative presence, becoming the harbinger of internalized reflection and memory. Though an external, unreachable figure at the beginning of the comic,

referencing the moon as part of Aster's body becomes a silent acceptance of internal turmoil. Previous pages, where she'd closed her eyes with the moon remaining external, widely differ from the composition seen in Figure 20. The panels are often implied though the margins of the page or exist in relation to the previous page; a series of aspect-to-aspect pages, evoking an unsurety in time and space. It concludes on this page, Figure 24, with an altered perspective on the moment order began to fall apart. Memory and perception are fickle, coming and going with age and experience; thus, through the invocation of similar paneling to represent the end of an internalized quickening of time, I also ask the reader to understand the abrupt change in structure as a symbol of swimming through internal horizon lines, discontinuities in perception, and physical afflictions left upon the body through intangible turmoil and uncertainty.

Returning to a structure that is more structured in paneling leads the comic back to its beginning and encourages a cyclical read. Though we are compressed into Aster's head, experiencing earthquakes and fragments of memory, we cannot change the story–it will always formally repeat in the same ways. Yet, our understanding can change as we learn to dance in the empty spaces. The story is endless, but so are the possibilities for new perspectives and understandings.

Figure 24: Page 42-43.

Chapter 5: Reflection and Concluding Remarks

This comic first began as a strict exploration of comic paneling structures and transitions, inspired by the books and pages that consumed after-school hours in my childhood bedroom and motivated me to pursue my craft throughout college. However, it also began to transform into a far more experimental, fluid, and internally driven project as I allowed the process to plant roots and spread organically. Previously, I'd studied comics or manga like *Blue Period* and close-read pages and panels, yet I did not consider ways in which I could deviate from well-known panel structures to choreograph time through comics as a unique medium. Though this narrative is, in its most literal sense, a story between a girl and the moon; the moon is intended to be a proxy for experiences, relationships, memories, and moments that are unreachable, fluid, and ever-changing in perception and memory. It signifies something you can see and imagine, a consistent North Star of personal navigation that troubles us all the same when our reality changes or inaccuracies arise. It's the sound of birds chirping when, just moments ago, the sun had already risen, bringing with it the hum of early morning rain.

In allowing myself to experiment with panel structures, this comic became a study in deliberately exploiting the medium's temporal opportunities as means of navigating internal time, memory, and their interactions. It collided into an interactive experience that mirrors the character's repetitive, recursive experience. Rather than seeking to discredit memories, regardless of their integrity, this comic juxtaposes them with time as an experience, even if solely internal, makes it real to that individual. These experiences have the capability to not only disintegrate memory but also manifest the repeated presence of something that is no longer[23]. In

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[23] Avril Maddrell, "Living with the Deceased: Absence, Presence and Absence-Presence," *Cultural Geographies* 20, no. 4 (April 5, 2013): 501–22, https://doi.org/10.1177/1474474013482806, 504.

this regard, space and panel transitions are not only as agents of time, but instruments in the symphony of unreachable memories. And in the blank spaces between panels, the melody becomes ours to compose.

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