The Sublime Landscapes of Frankenstein: An investigation through abstraction, distant reading and data collection

Amy de Nobriga

The output is a creative project comprising a risograph printed object and conference paper.

Research Process

In order to examine the representations of the sublime through the landscapes of Frankenstein and Shelley's use of pathetic fallacy, the practical research seeks to investigate representations of the sublime through an investigation of reduction, abstraction and Euclidean geometry. Reduction was used to explore functionality in the narrative. Abstraction sought to investigate theories about perception to analyse the sublime in Frankenstein through a review of the abstract sublime in the work of Rothko who uses form and shape to emote a sense of the sublime. This paper posits the question: is there a congruence between Shelley's elemental pathetic fallacy and Rothko's spatial infinity?

Research Insights

The axioms of Euclidean geometry have been explored as a method to reduce and abstract landscapes into congruent shapes and form. The 3_{rd} postulate discusses the circle while the 5_{th} postulate or the parallel postulate uses two straight lines to construct triangles. The circle and triangle are used to infer what Burke identifies as the relationship between the beautiful and the sublime. The landscapes seek to find what Derrida calls a 'satisfaction' between the negativity of the sublime and the positivity of the beautiful. These shapes are used to construct space and depth through a manipulation of scale and line, using Kantian ideas about boundlessness and limitlessness. This practical investigation seeks to answer the question: can landscapes be reduced and abstracted to convey a sense of the sublime in Frankenstein?

Dissemination

This research was disseminated in the form of a risograph printed book object and paper presentation discussed at the 'Gothic Realities' Symposium 24-25 October 2019 at Stirling University.
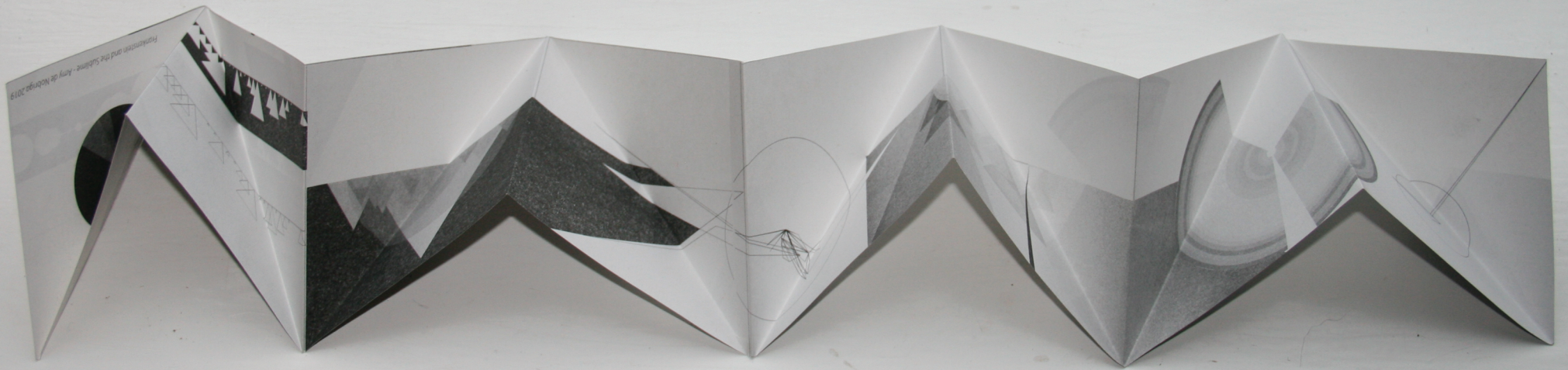
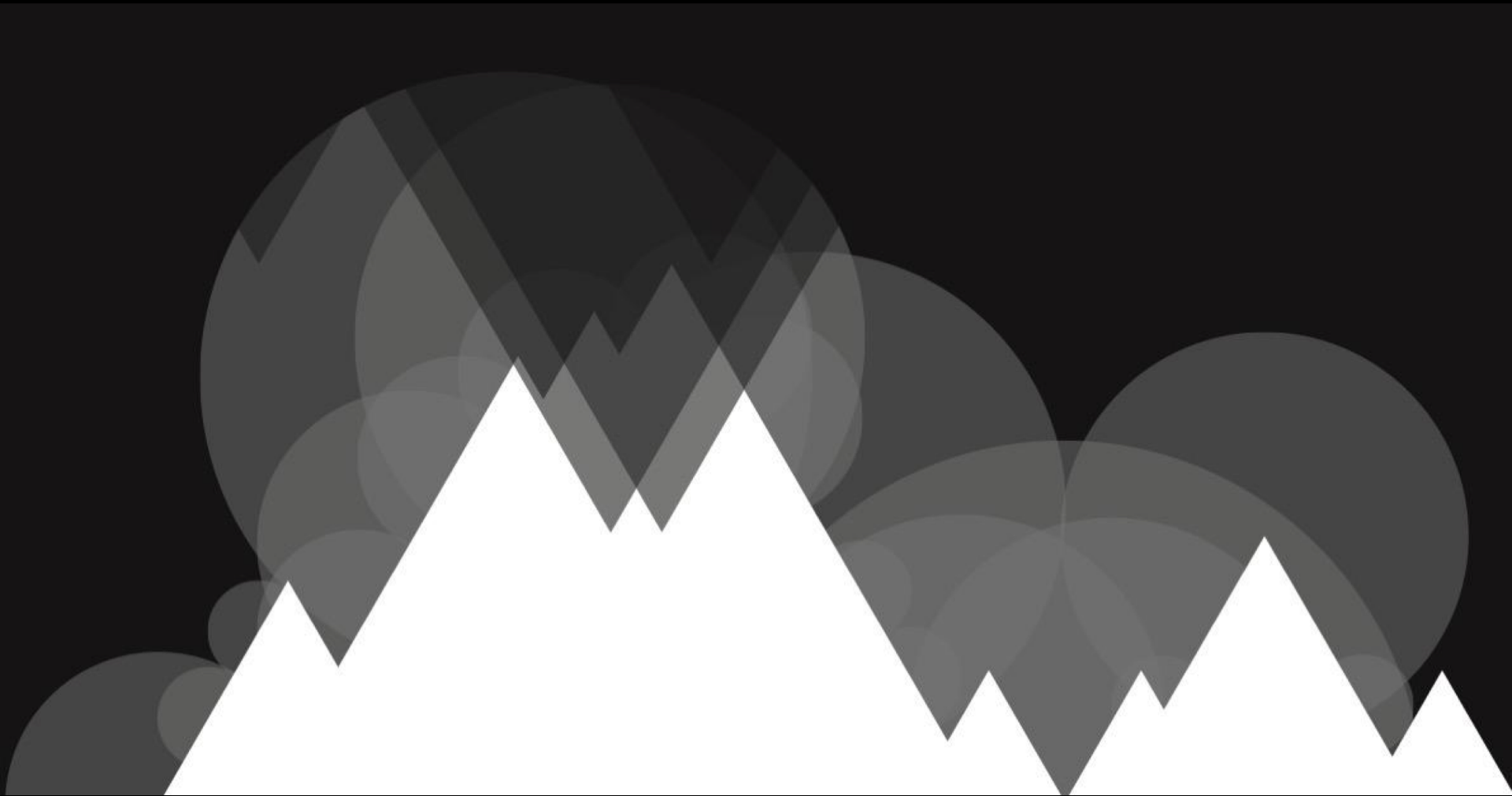Frankenstein and the Sublime - Amy de Nobriga 2019
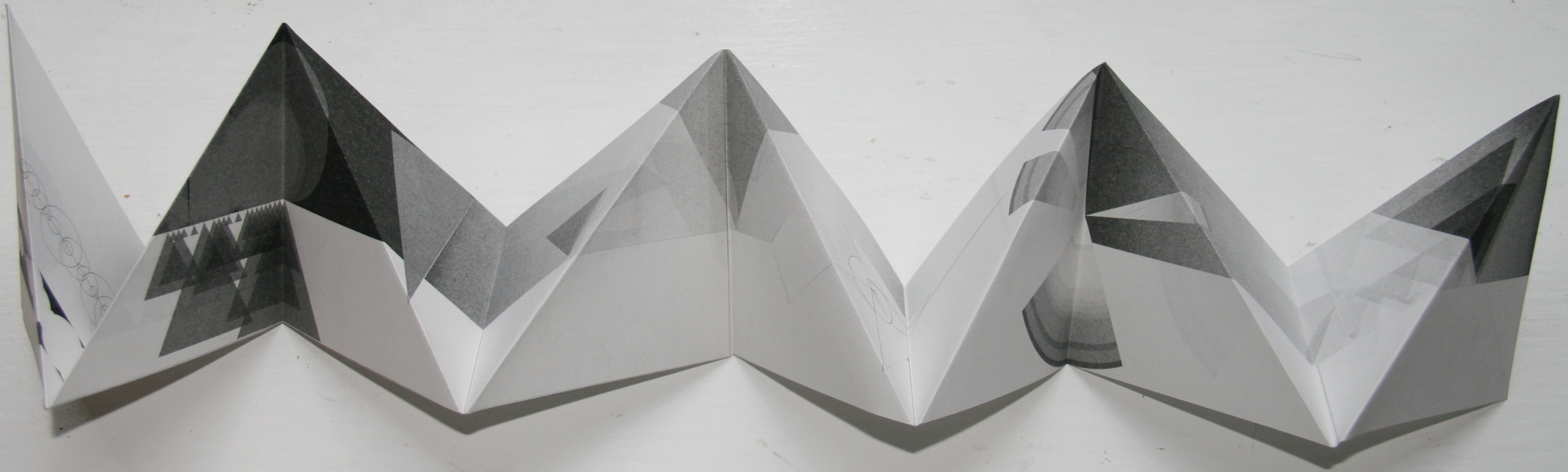
The Sublime Landscapes of Frankenstein: An investigation through abstraction, distant reading and data collection
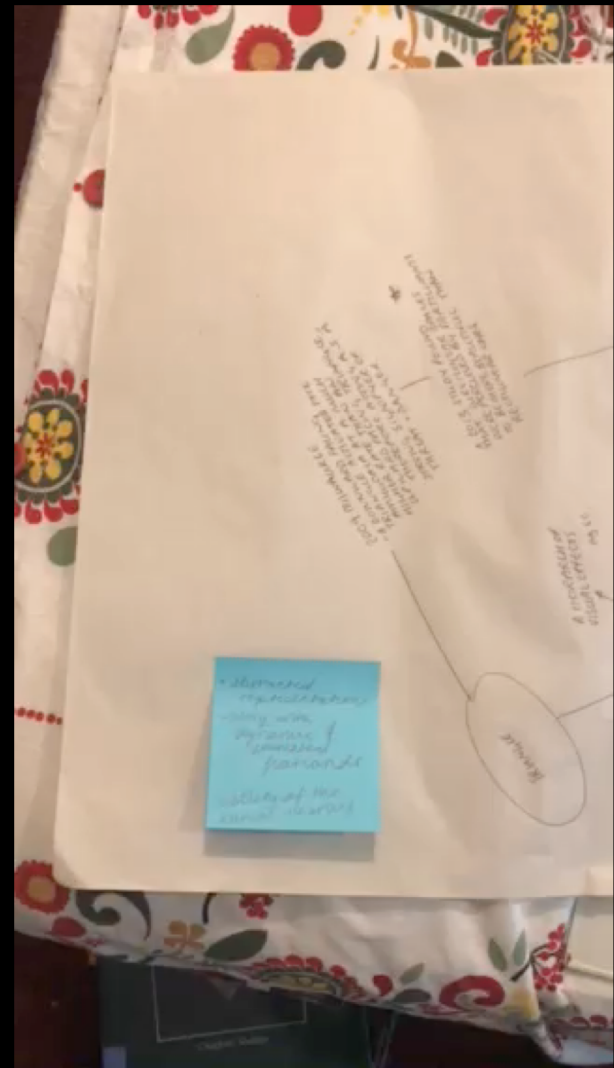
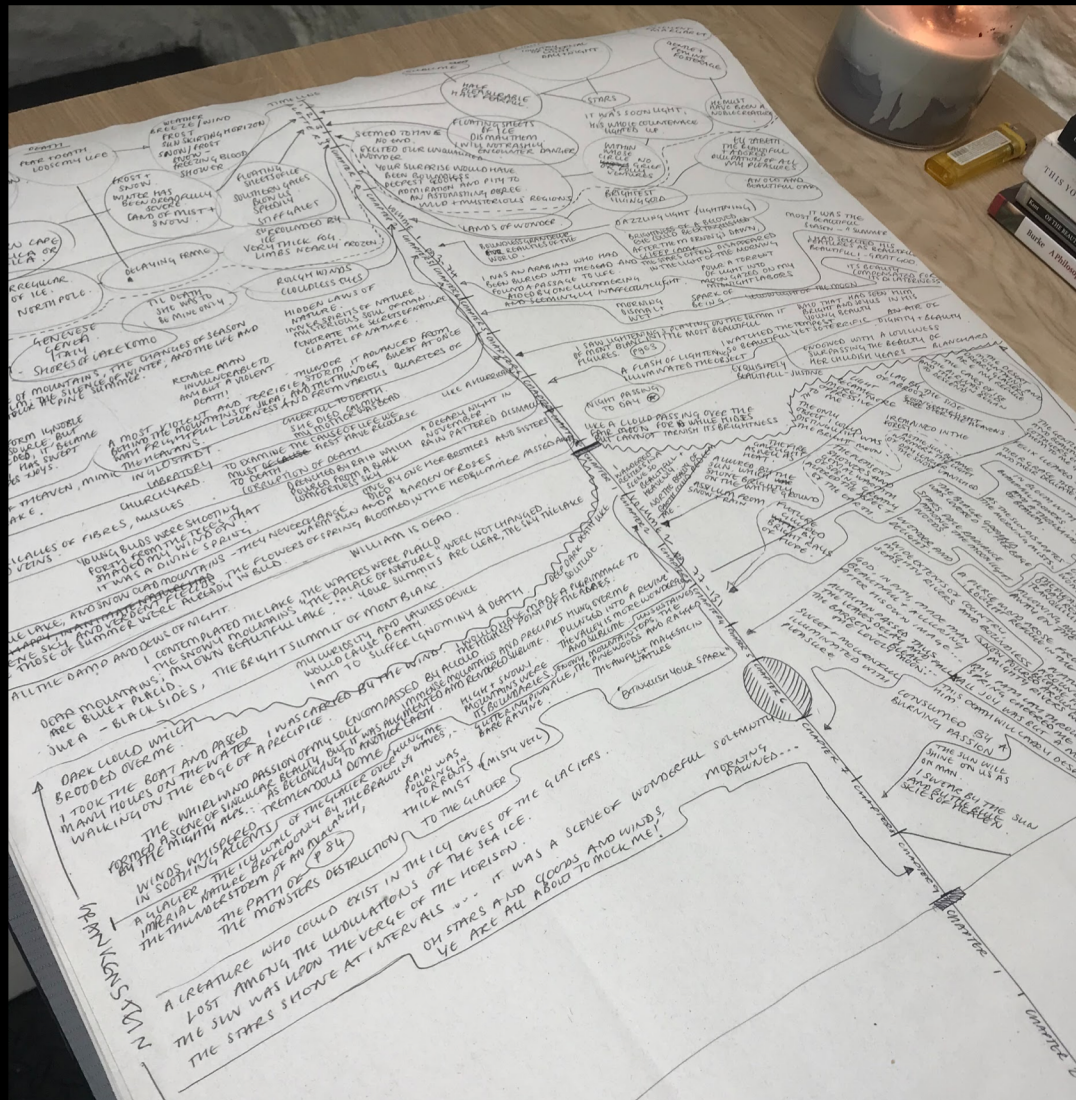**Amy de Nobriga**

Contextual Information

The sublime landscapes of Frankenstein

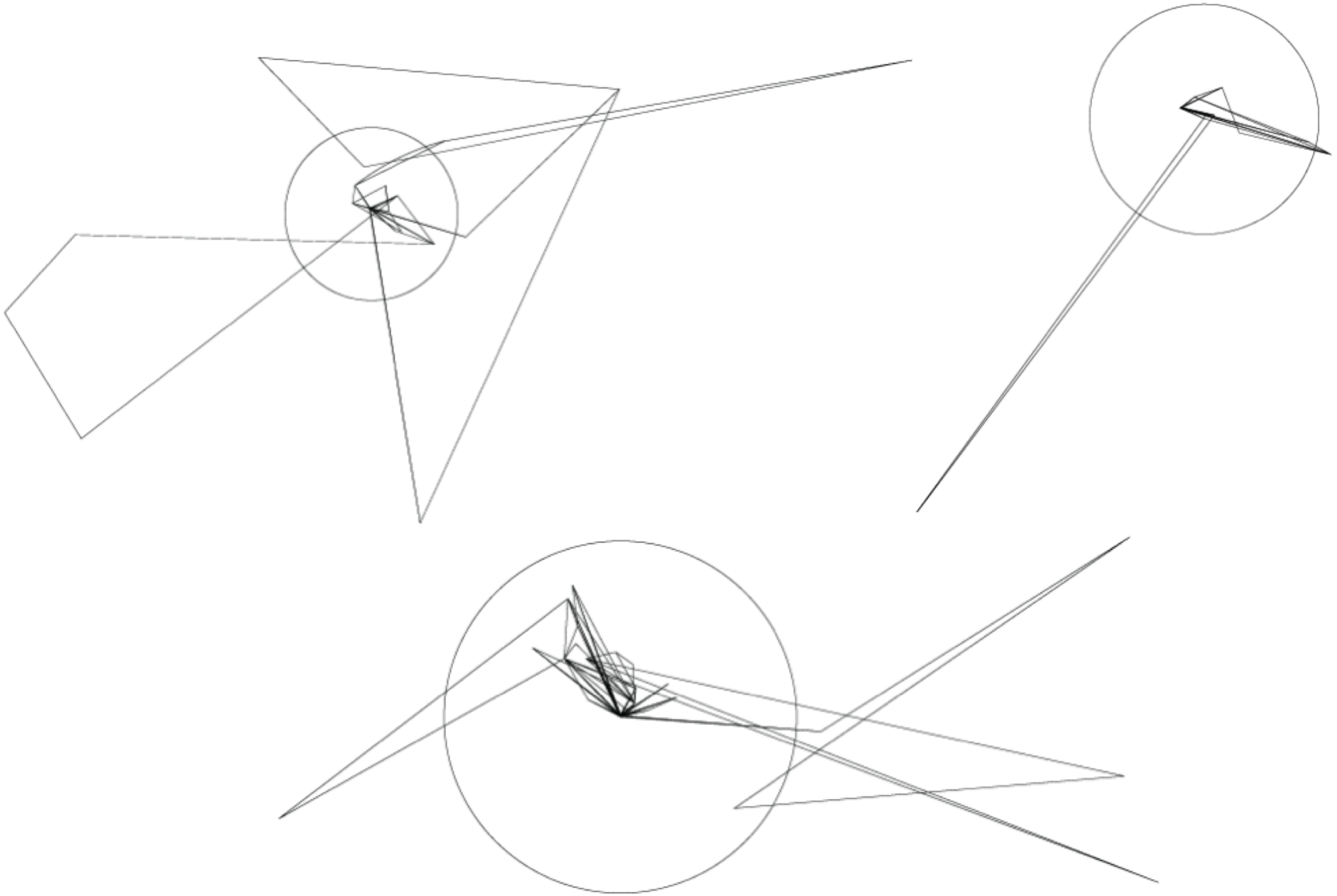An investigation through abstraction, distant reading and data collection.

Making sense of research

Collecting Data: Close reading with constraints

Collecting Data: Distant reading and defining constraints for collecting - data mining.
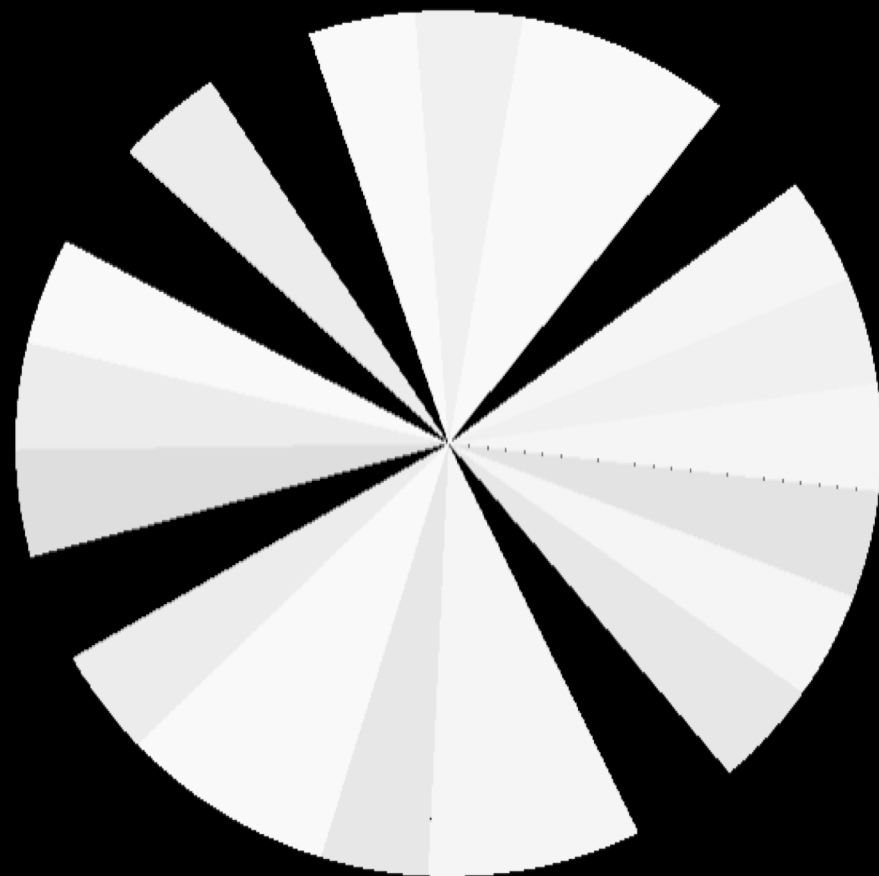
Maps and distant reading

Narratives: Circles, concentric rings and death
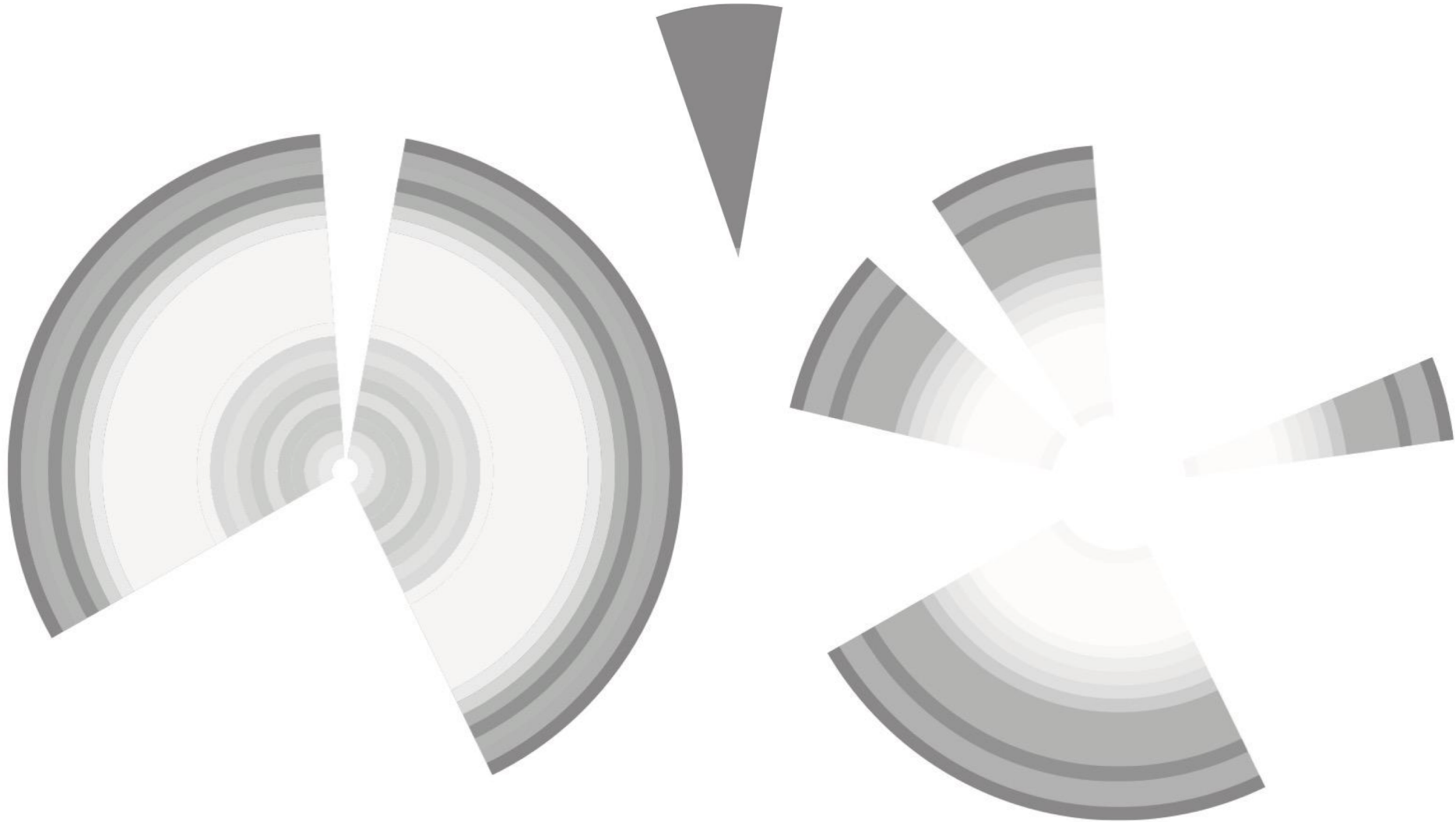
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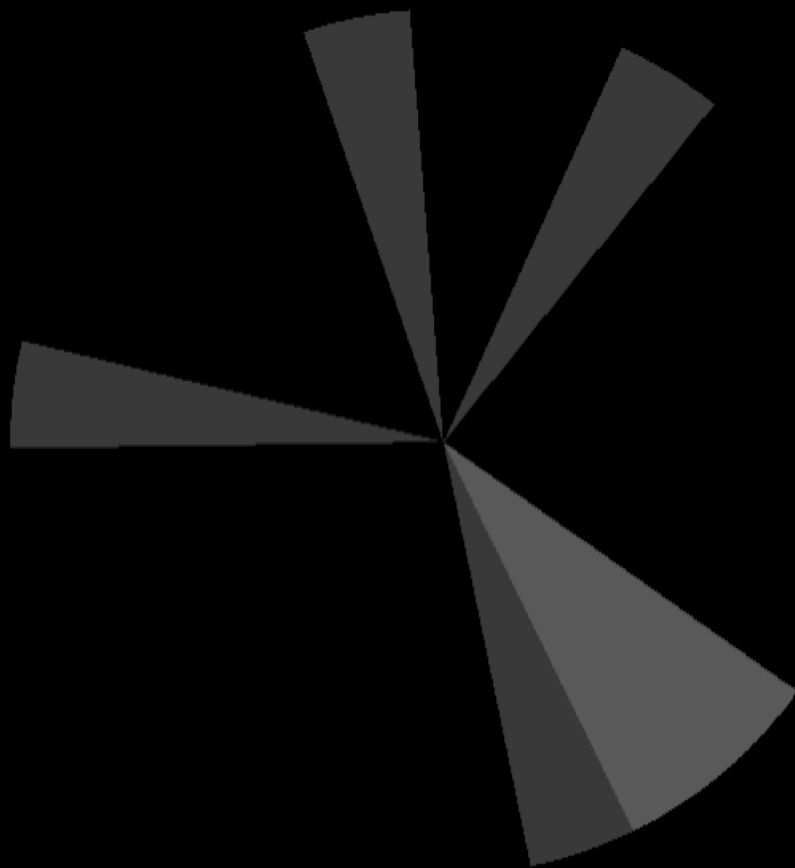
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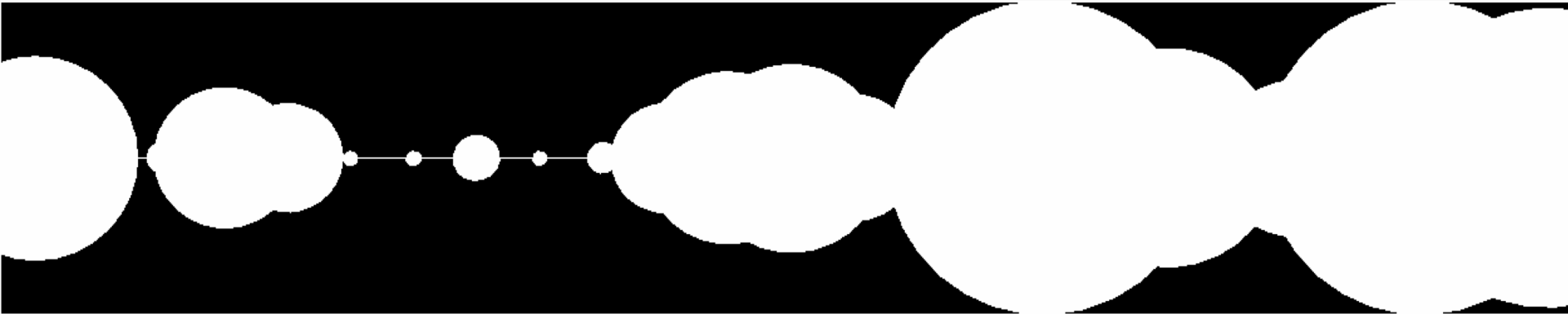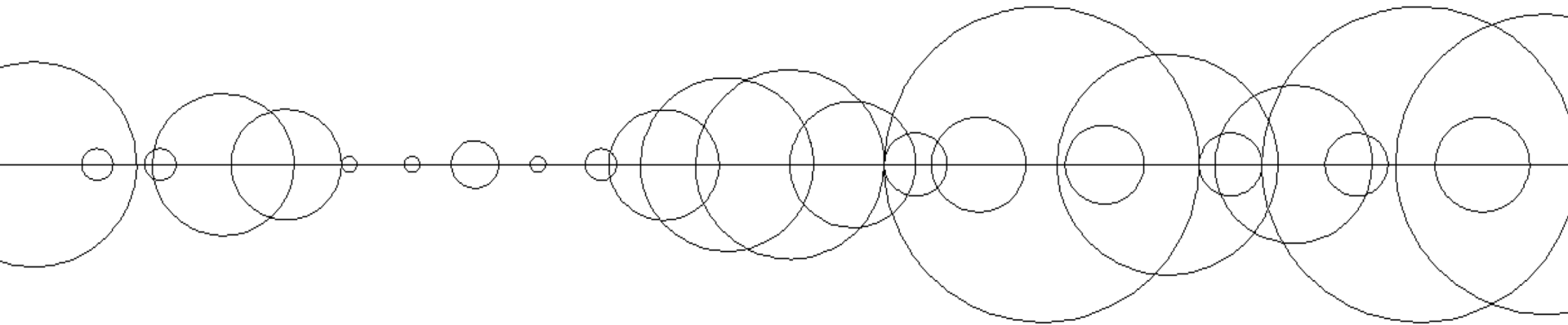
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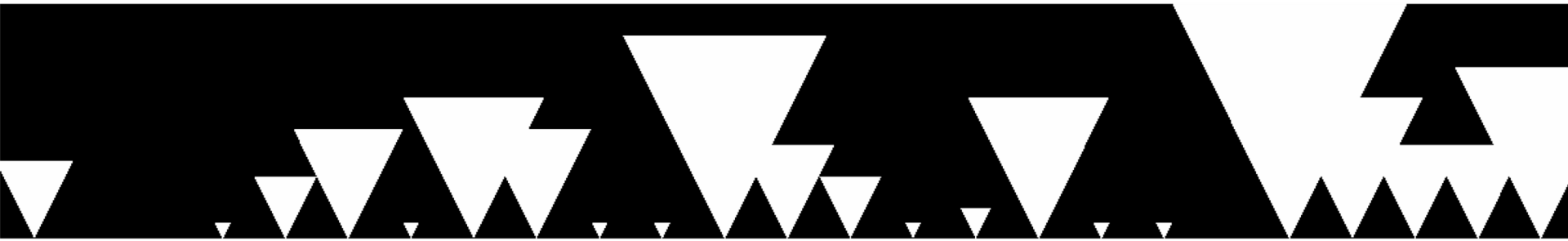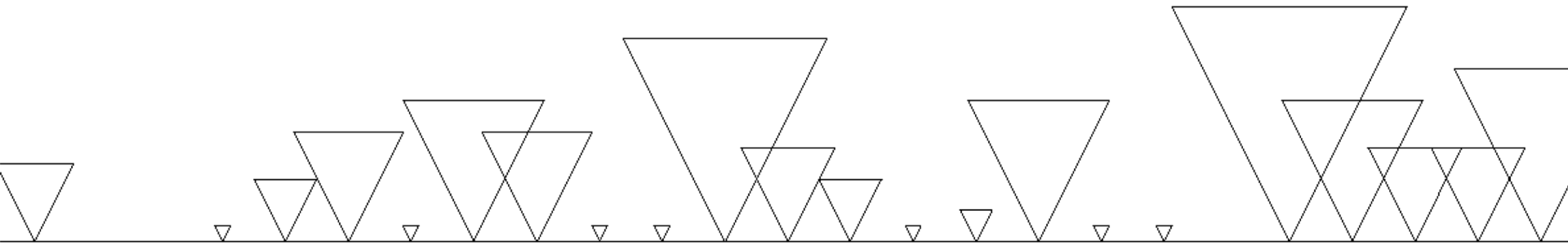
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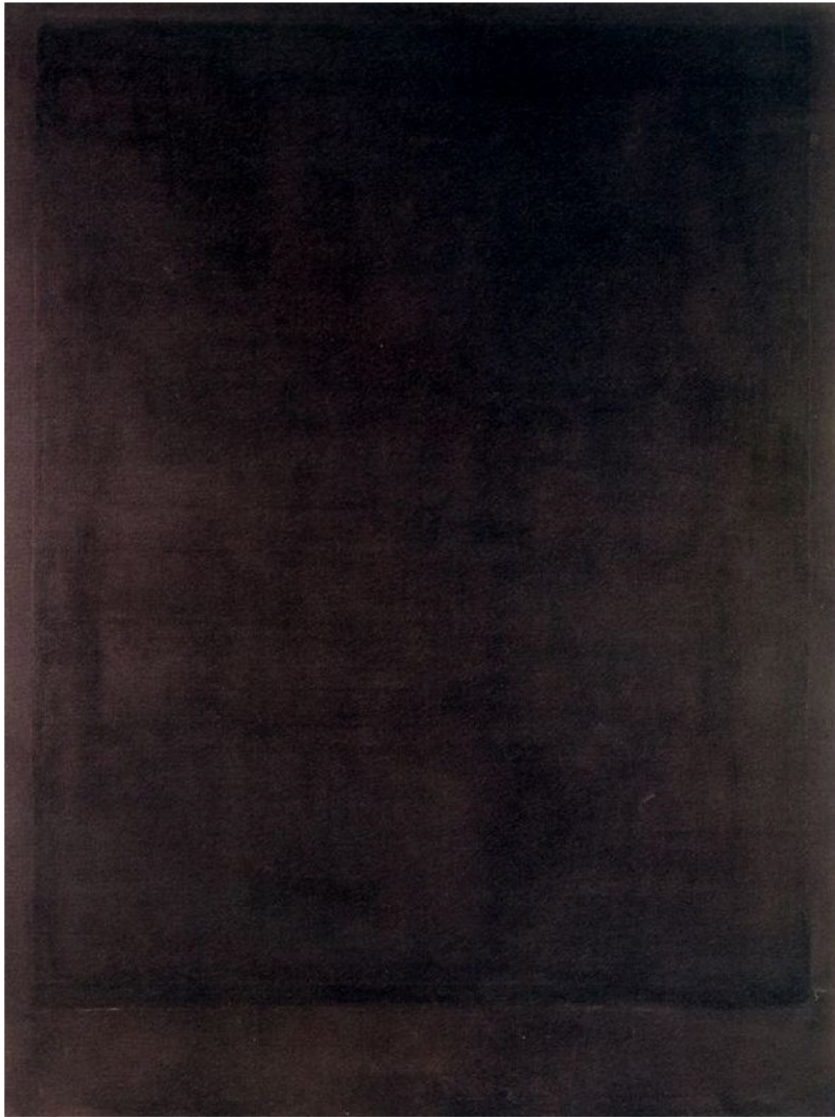
Rothko's Black form Paintings – No. 8 & No. 1

Heavenly Bodies and Rothko's veils
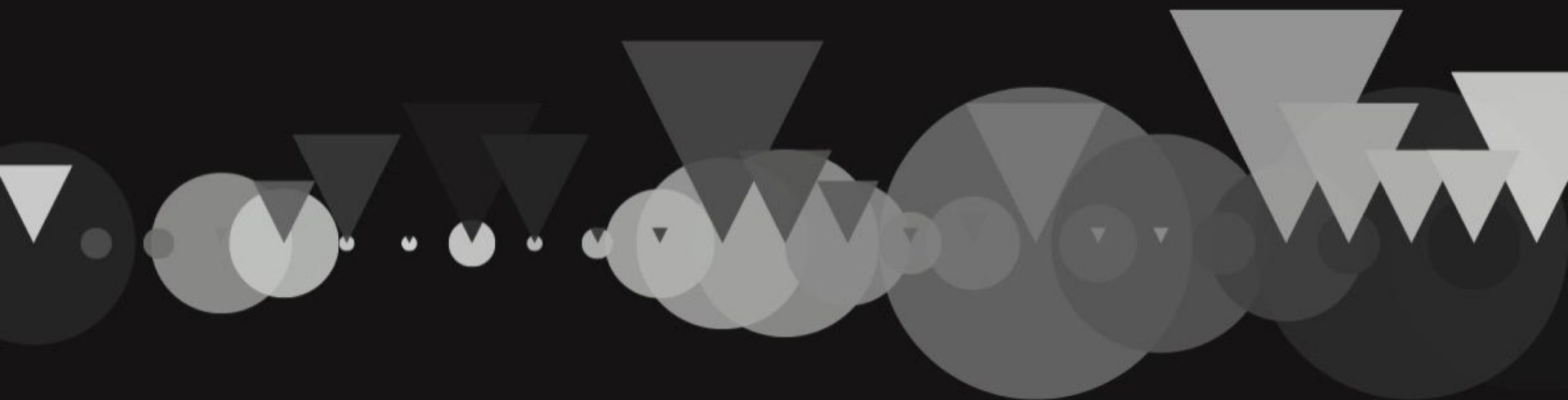
BOOK I.
Basic plane geometry

BOOK II.
Geometric algebra

BOOK III.
Circles and angles

BOOK IV.
Regular polygons
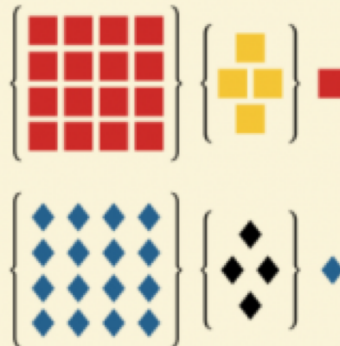
BOOK V.
Ratios and proportions
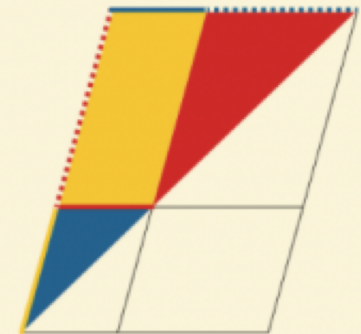
BOOK VI.
Geometric proportions

Stormy Oceans – data centric landscape abstractions
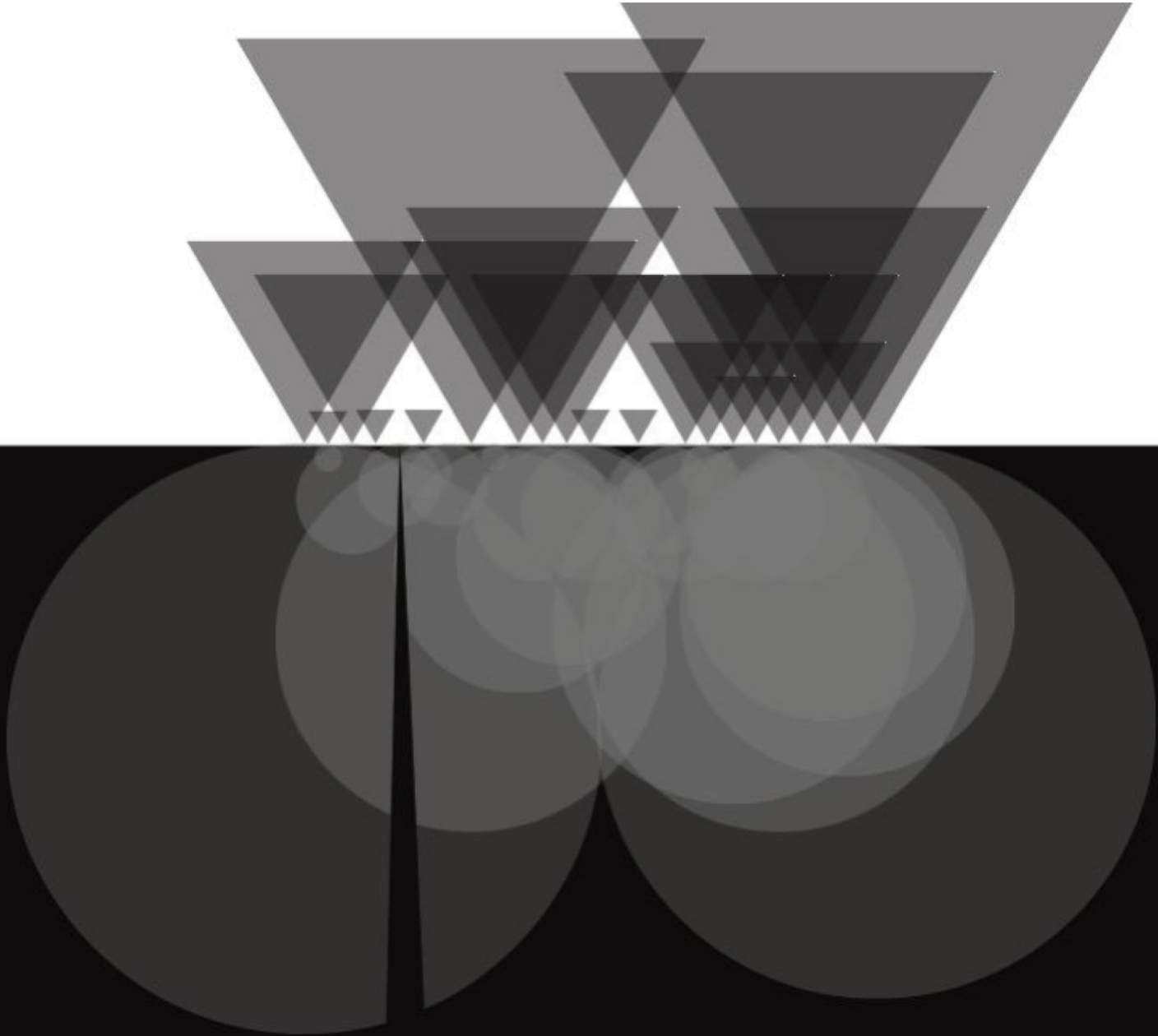
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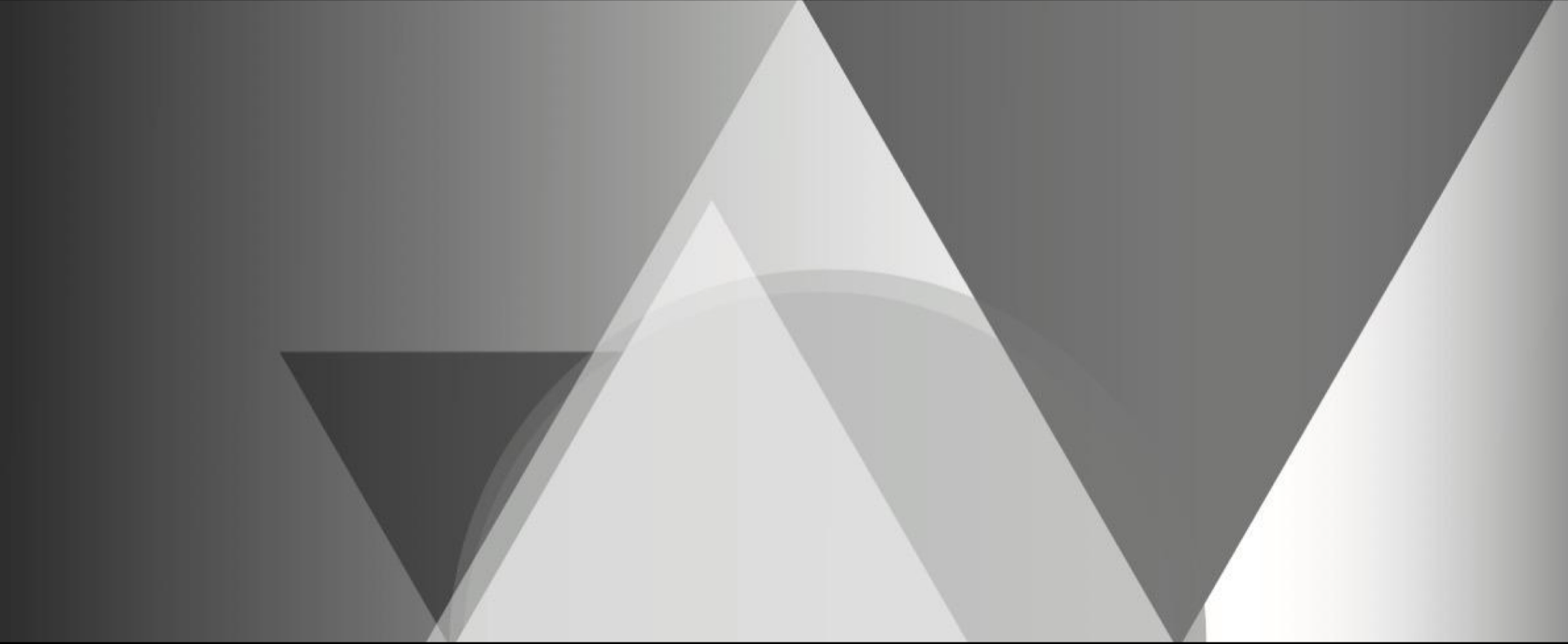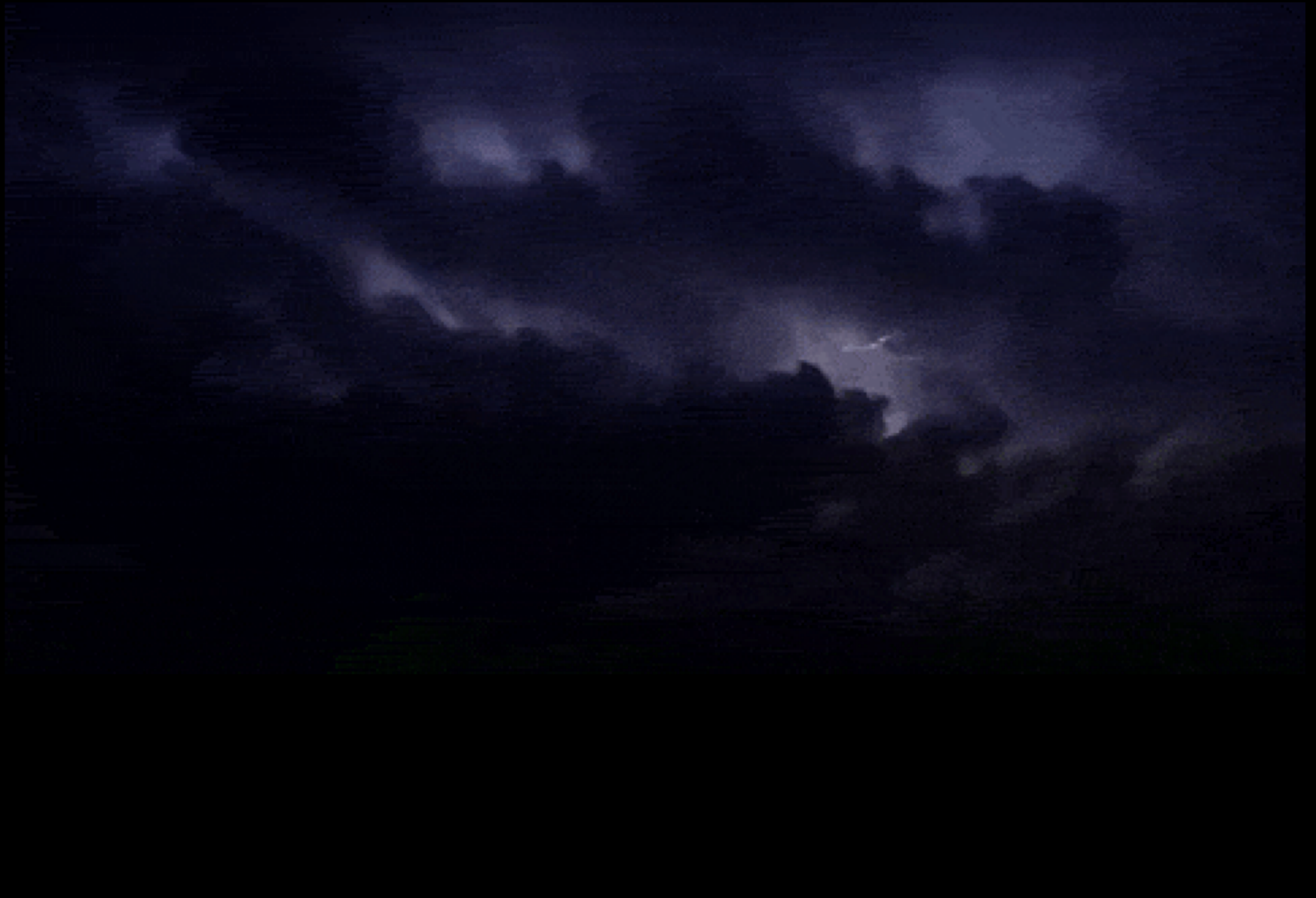
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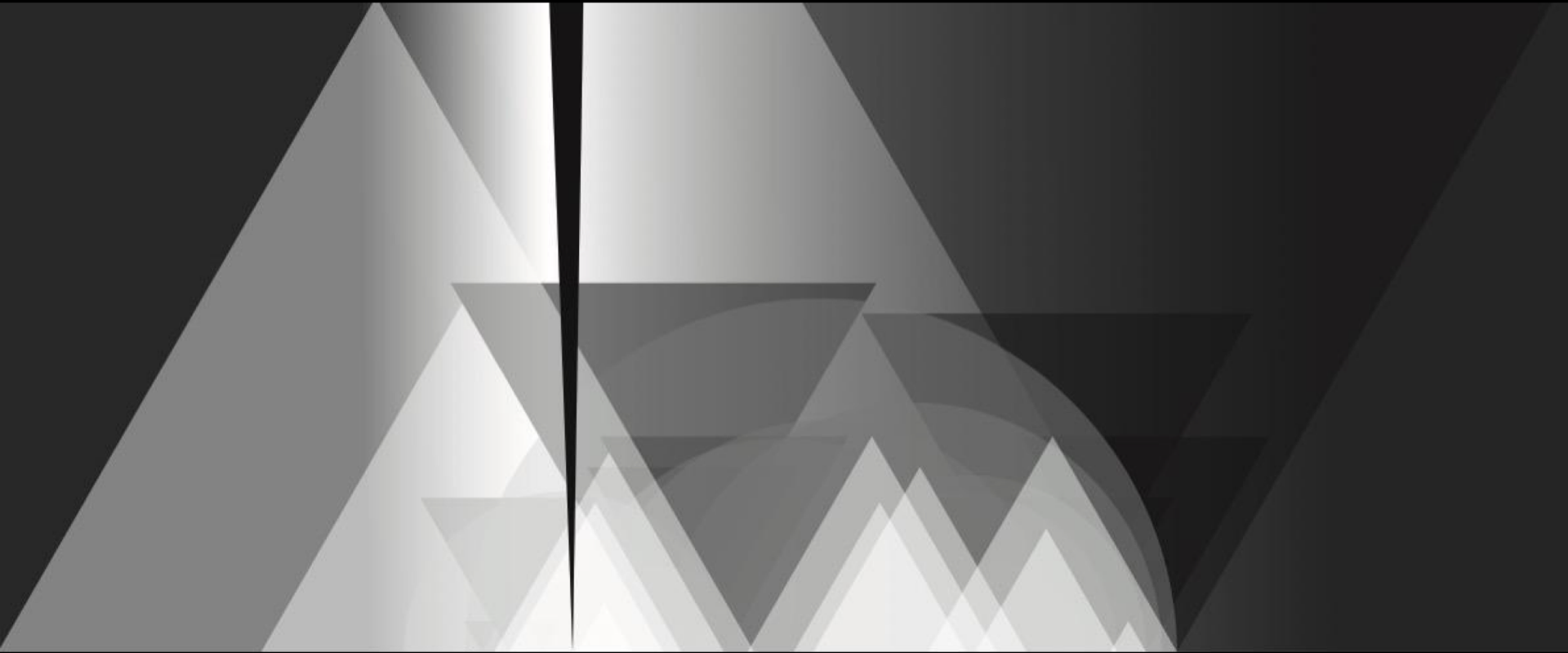
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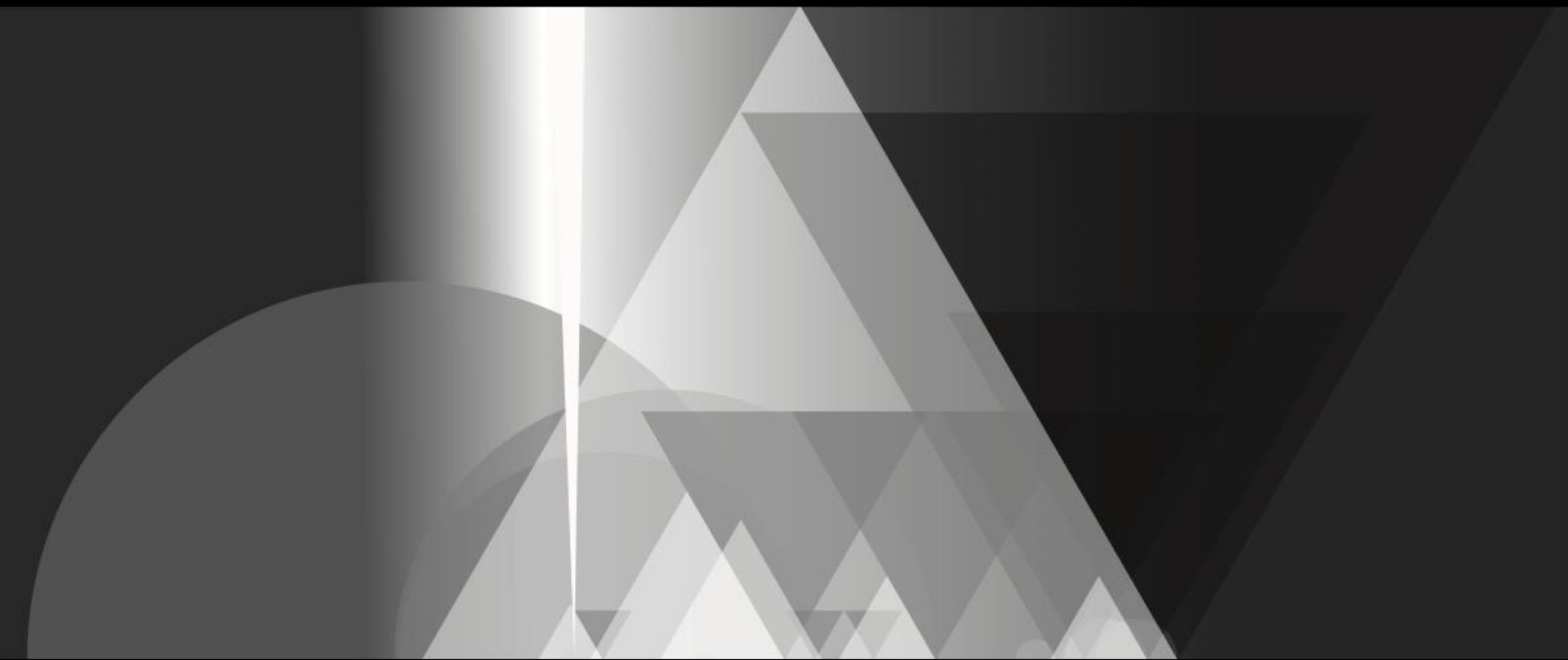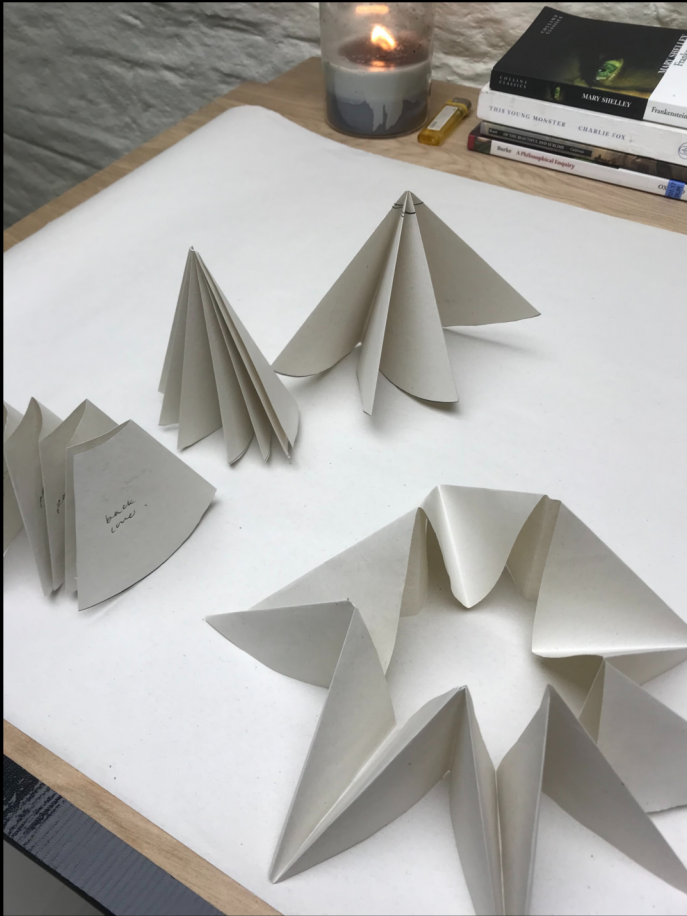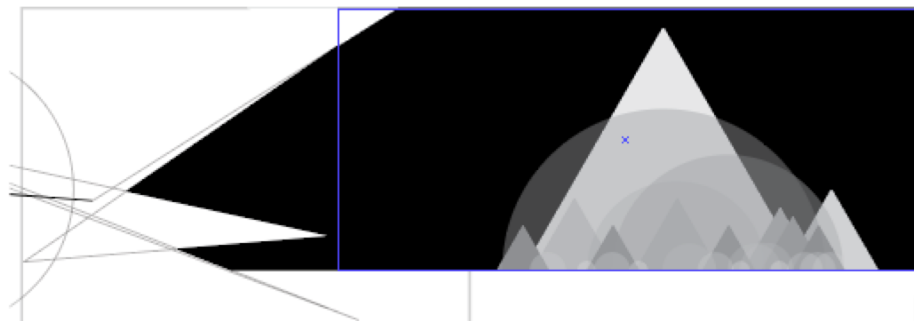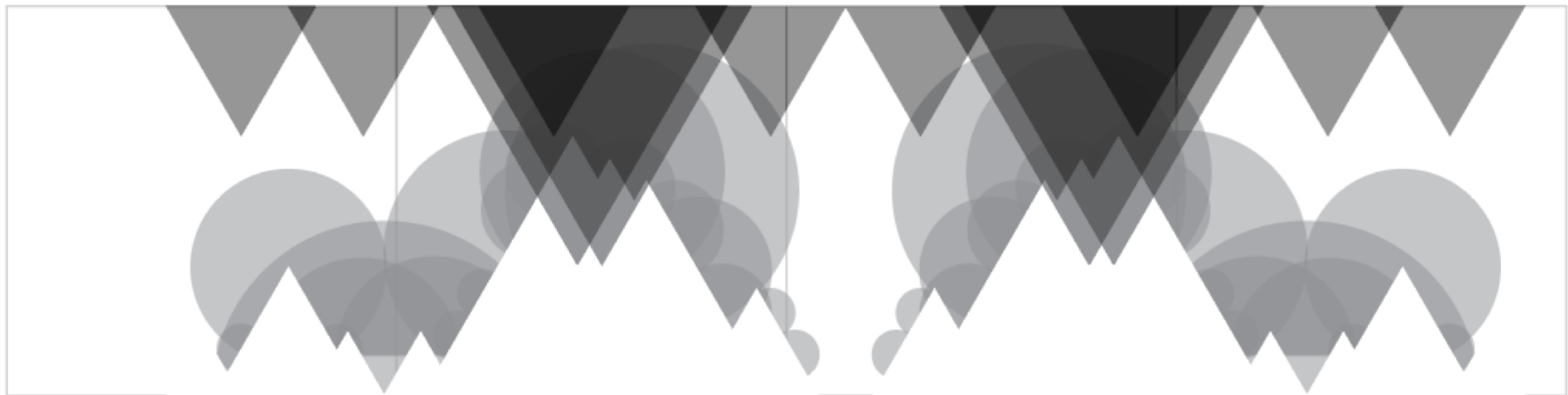
Frankenstein and the Sublime – Amy de Nobriga 2019
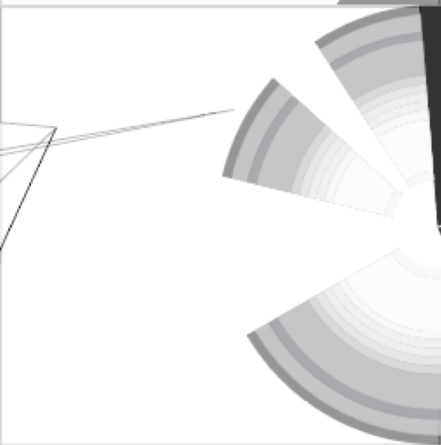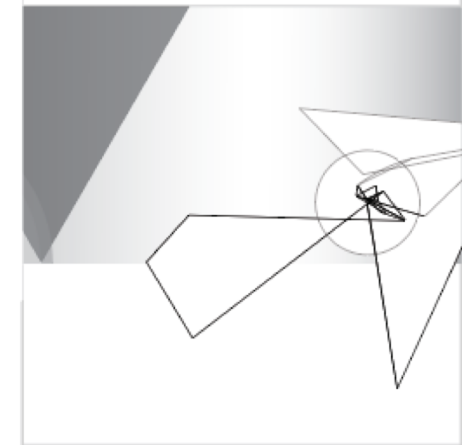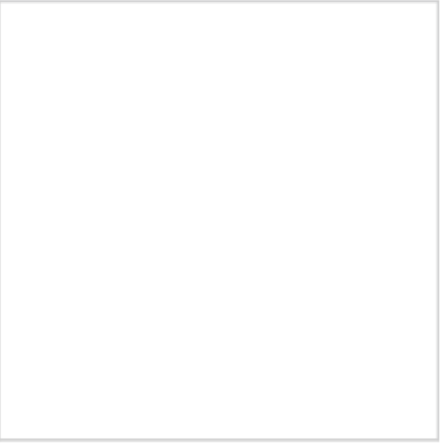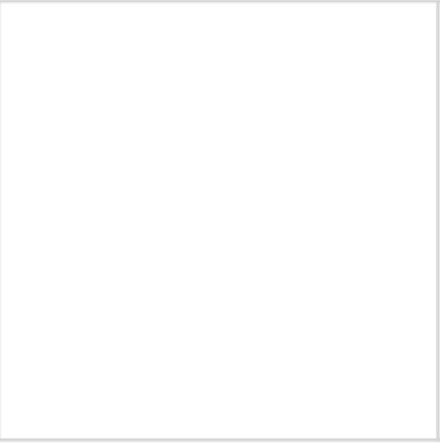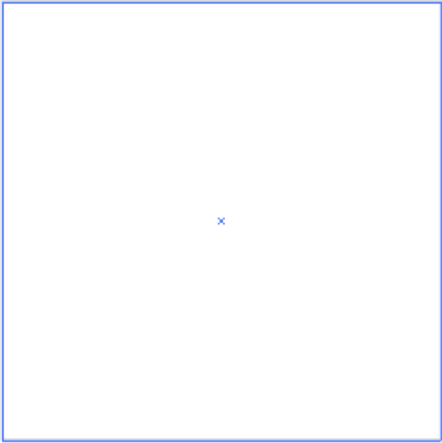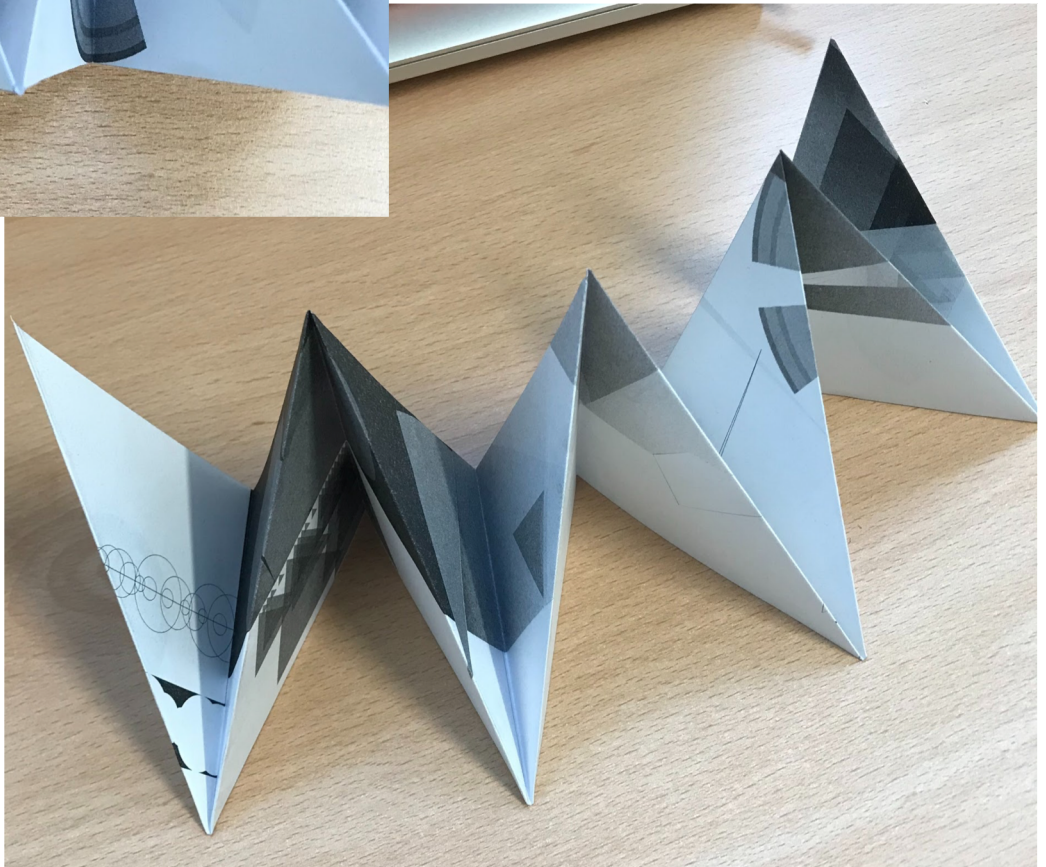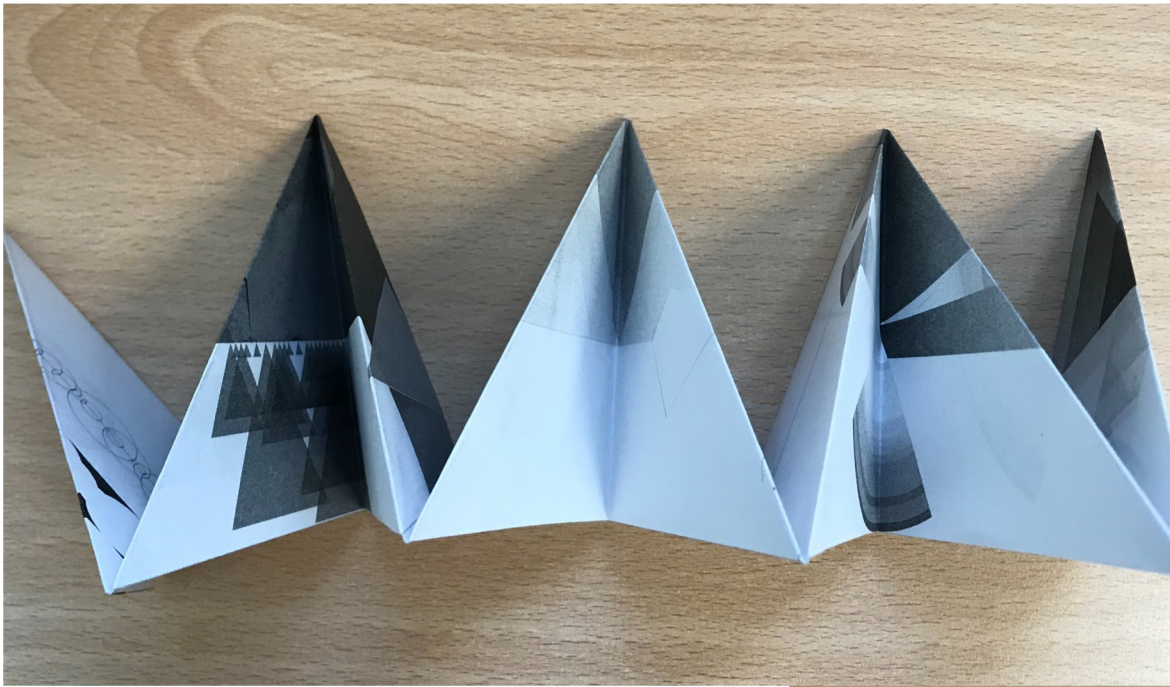
What next?

Can it be experiential?

Can sound and motion infer sublimity?

Can augmented reality immerse us in the sublime experience?

Thank you

Introduction

This presentation discusses the practical investigation of representations of the sublime in the abstracted landscapes of Mary Shelley's Frankenstein: the modern Prometheus. It will examine Shelley's use of the sublime natural environment and elemental force of pathetic fallacy. This research does not aim to clarify definitions of the sublime but seeks to find understanding through the visualization of it. In order to under pin the term, I will be using two theoretical texts, Edmund Burke's '*A Philosophical enquiry into the Origins of the Sublime and the Beautiful'* (1757) and Immanual Kant's *'Observations on the feeling of the Beautiful and Sublime'* (1764).

Burke's sublime is the pleasurable terror of identifying an unclear powerful danger that is imagined to be beyond comprehension. In summary, terror, obscurity, power, privation and vastness/infinity. Burke's beautiful is proportional, small, smooth, gradual and delicate. The beautiful and the sublime are mutually exclusive.

Kant's sublime is the noble, the splendid and the terrifying. Kant subdivides the sublime into the Mathematical, thought, and the Dynamic, natural. For Kant reason is fundamental to the sublime, our ability to reason beyond our sense. For Burke, however, it is recognition of our physical limitations and a psychological experience.

I would like to identify some sublime and beautiful axioms: the sublime and the beautiful correlate, the sublime can be vast and unfathomable in-sighting a pleasing terror; the beautiful can be smooth and tangible in-sighting loving pleasure. The sublime is a feeling, a sensation. In *'How Pictures Complete Us'* Paul Crowther explains this further, 'the sublime is something beyond reality, beyond material existence.' (2016:93) How can we represent the unrepresentable?

Data Gathering in the Gothic.

In his book, 'Gothic' Fred Botting states that 'Gothic texts are not realistic.' (1994:17) We can agree that Shelley's story is fundamentally not realistic. The descriptive passages and landscapes are rooted in reality, but the crux of the novel, the creation of the creature, is not. However, the relevance of the text as a tangible object is fundamental to the investigation of representation.

The text arguably is central to some theories about the sublime. Philosopher Georg Hegel purports that 'only the written word can be sublime, to the precise extent that the written word is neither representational or imaginative.' (De Man, P. 1996:39) While Burke refutes this 'in unfinished sketches, I have often seen something which pleased me beyond the best finishing.' (1757:95) The role of the imagination is clearly important in exploring the sublime, when the imagination is overwhelmed; when reason is challenged then the sublime is felt. My aim is to use the text to collate data that will inform the pursuit of abstraction from the real into something new. The *Suprematism* movement of the 1913 launched by Russian Avant-garde artists Malevich sought, as a revolution against realism, to explore 'pure artistic feeling' (2012:51) through abstraction and the disregarding of reason. If the sublime is a feeling can Suprematist abstraction convey it, Malevich also had an 'ineradicable attraction to the numeric' (2012:58) which led me back to the text itself. Could I use numeric language data from Frankenstein to abstract the landscapes? Are there parallels between data collection and Kant's mathematical sublime?

Maps and distant reading

I started my analysis through real world topology of the text and mapped it in relation to each chapter of the book. In order to map the trajectory of the characters, I implemented a system of geographical tracking. This is done by referencing the characters' locations, chronologically to the text. This serves to create a backdrop to the breadth and diversity of landscapes traversed in the novel both literally and vicariously.

This mode of study is similar to what Franco Moretti calls the 'computational analysis of literature' in his book '*Distant Reading'* an unorthodox data centric

field of literary study. (2013:211) This device serves to provide systematic embodiments of the 2 main characters, the protagonist Victor Frankenstein and his creation; the creature. The starkest contrast surfaces in chapter 2 where the creature recounts his narrative, his limited and narrow experience of the world through a crack in the wall and his observations of the Delaney family; their exotic guest providing most of the location diversity. The weight and dynamism of the lines emanate from each sections focal or most referred-to location. We can see that the creature occupies a much smaller area while Frankenstein's most traversed dialogue is between Geneva and Inglostadt; a fitting reminder of his internal struggle. The beauty of Geneva and the sublimity of Inglostadt.

Narratives: Circles, concentric rings and death.

'Walton both begins the story and ends it, his narrative contains and this subordinates Frankenstein's narrative, which in turn contains that of the monster.' (Moretti, F.1983:89) With the cyclical nature of the narrative construct evident, it is apt to investigate the circle as a visual device. The circle is a 'universal metaphor' (Lima, M. 2012:32) one that connotes simplicity, perfection, unity and wholeness, intimacy and perpetuality. The condition of the circle is synonymous with Burke's ideas about the beautiful and the sublime and what Kant calls 'indefinite continuation.' 1764:89) The circle allows us to explore the notion of the sublime represented in the narrative. Here for example, I have used the circle as a means to represent references to death within the text. Death feels pertinent as Vijay Mishra discuss in their 1994 discourse the '*Gothic Sublime'*. 'The process of sublimation is reaching the inevitable goal of death.'(1994:151) If death is the characters inevitable goal then is this what perpetuates their narrative?

Walton, Frankenstein and the creature have death narratives which use the circle dissected both radially and concentrically. The radial divisions represent the characters' presence in each chapter, the concentric dissection represent references to death in each chapter and the gradient - and intensity - of colour directly correlates to the numerical death reference. Frankenstein as the

protagonist has the most complex visualisation. His death data serves to record his relationship with death and its increasing severity and pertinence over the course of the novel. The creature, however, has a death narrative that is fractured and fragmented, arguably a visual metaphor for his limited and brutal experience of life and death.

The Sublime vs the Beautiful – contrast as a means of creating space.

In order to explore the sublime in relation to the text we need to consider a point of contrast or difference to gain perspective on one phenomenon in correlation to another. Burke's philosophies about the relationship between the beautiful and the sublime seek to gain understanding through comparison, one providing context for the other. If beauty is limited to the intimate form of an object then the sublime is its vast limitless counterpart. Shelley uses the word sublime very rarely in the text, only 7 times, while beauty and the beautiful feature more prominently, 57 times in total. Whether you perceive the text to be Gothic or 'Romantic', we would not consider Frankenstein to be an inherently beautiful text. 'There is no such thing as the aesthetics of the beautiful in the Gothic, only a superabundance of the sublime (Mishra, V. 1994:156), it could be argued that Shelley's reluctance to use the word directly is because of it illusive and indefinable nature. 'The very nature of the sublime is that it cannot be contained or defined.' (Mishra, V. 1994:51) Is Shelley using the sublime as a metaphor to discuss the monstrous?

The creature represents that which cannot be defined, nameless, impossibility, something 'other'. It could be argued that the use of elemental nature within the landscapes serves as a visual metaphor for the sublimity of the creature. Genevieve Lloyd in her work *'Reclaiming Wonder after the sublime'* agrees that 'the idea of the sublime is a constant presence throughout the story in the form of landscapes of awesome beauty.' (2018:84) Tonal contrast seeks to identify space in the relationship of one to the other and their magnitude within the text. This may be less inspiring visually, but it helps to provide a data visualization strategy to dissect the text further. What part can divergence play in the story of dichotomies? Can it seek to find what

Derrida calls a 'satisfaction' (1979) between the negativity of the sublime and the positivity of the beautiful?

Light and Dark – infinite glowing voids.

Definitions of the sublime are synonymous with extremes. Kant calls it 'boundlessness and limitlessness', while Burke favors 'vastness'. Burke explores this further stating that darkness and light, as opposite extremes, operate equally in favor of the sublime. Light and dark is a vital tool used within the narrative of Frankenstein. Shelley often refers to extreme sources of light 'a flash so beautiful, so terrific', 'dazzling light', and 'a torrent of light', (1818:75) most potently the 'spark of being'. Victor undertakes his experimentation at night, using darkness to hide his endeavors and often referring to the 'light of morning' as a nuisance. In contrast the creature, hideous and disfigured finds comfort in the moonlight and dark embrace of night, seemingly becoming empowered by night's veil; murdering William under the cover of darkness.

Shelley refers to heavenly bodies, the sun and the moon, and uses light as a metaphor for heaven, 'brightest living God' (1818:66) like Hegel's sublime 'light of god'. (Alloways, L. 1975:39), It could be argued that Frankenstein occupies the night because darkness veils his work from the world but also makes his 'god light' more sublime. This use of heavenly light can be seen in the work of the abstract painter Mark Rothko, known for his exploration of the sublime. Rothko often uses Hegelian 'God light' in what Lawrence Alloways in his analysis of the '*American Sublime'* refers to as 'Rothko's exalted light'(1975:38), i.e. walls of light and doorways to hell. The relationship and contrast between light and dark constructs space that emotes the abstract sublime, seeking to represent the unrepresentable. In Robert Rosenblum '*Abstract Sublime*', he refers to this as the 'infinite glowing void that carries us beyond reason to the sublime.' (1961:40) In utilising Rothko's glowing light and haunting dark in conjunction with data from the text, this seeks to find new representations of the narrative. Rosenkranz observes 'the pure image of

the beautiful arises shining all the more against the dark background of the ugly.' (1853:36) Does beauty radiate from darkness?

Critiques of Rothko's work often refer to the use of washes of paint, building of layers to add tonal richness. Alloways refers to this as the 'peril of the veil' (1975:41) the visual mist that clouds our perception of the whole, something seemingly familiar and yet removed, the uncanny. If the sublime can be described as a concealment of the whole, or an unsettling experience of incomplete comprehension, can Rothko's tonal veils add mystery and awe to a 2-dimensional 'flat scape'? (Tufte, E. 1990:18) In collecting data from the text there is a root in the real, tangible evidence, using the sun and the moon as the starting point and mapping their use throughout the novel creating landscapes of light and dark. The size and scale of shapes used correlates directly with numerical evidence, while the tonal variants are calculated through percentages of the total words references. Tone - in this context - provides a light landscape that evokes the passage of time, seasonal change and the dichotomies of the text in the pursuit of the sublime.

Euclid beyond reason – Shape relationships.

We have established the relevance of the circle in relation to Shelley's narrative and Burkean aspects of the beautiful. 'The eye is the first circle, the horizon which it forms is the second and throughout nature this primary figure is repeated without end.' (Lima, M. 2017:2) In the pursuit of visual contrast we must seek an understanding of some of the fundamentals of geometry. Euclidean Geometry has long been associated with the sublime to complement its earthly origins as an exemplar of precise reasoning, using scientific and measurable understanding. Kant's discourse of the sublime speaks of knowledge and the unknown; which in turn brings about the sublime. This circle is central to the axioms of Euclidean geometry in which 5 postulates are given as absolute truth. This 2 dimensional plane geometry provides a constraint to investigate depth, scale and contrast. Consider the circle, the 3_{rd} postulate, as a representation of nature and the natural supported by a 2013 study that found curvilinear spaces to be more beautiful

than rectilinear ones. (Lima, M. 2017:85) As such, we can assume the circle as an appropriate representation of the beautiful in line with Burkean ideas about smoothness. Then its antithesis, opposite, counterpart should be a direct visual contradiction to that. Consider Euclid's 5th postulate, the parallel postulate which evolves to form the triangle. The relationship between the triangle and the circle in Euclid's work is illustrated beautifully by Charles Byrnes 1847 edition. The circle makes the equilateral triangle; one shape forms the other, echoing theories that the sublime originates from absolute beauty. The scientific reliability of the shapes, or 'more geometrico' (Lima, M. 2017:7) provides tangible structure in the creation of the imagined landscape. Similarly, for the *Suprematists* using pure geometry to imagine new realities. A 2009 study identified that a downward facing triangle activated the amygdala at a higher rate than an upward facing one. (Lima, M. 2017:105) Therefore acting as a strong signifier of threat and danger. Drawing parallels between the threat response and Burke's reference to astonishment and terror, we can see the sublime as something fearful, with a capacity to destroy, dangerous and impending. In Shelley's words 'a most violent and terrible thunder storm, it advanced from behind the mountains' (1818:68) The triangle also is congruent with a visual representation of mountains. Botting states that 'mountains were the foremost objects of the sublime'. (2014:8) Shelley's infrequent use of the word sublime in the text is often used in conjunction with mountainous vistas. Victor exalts at 'the sublime shape of mountains' and 'was rendered sublime by the mighty Alps'. (Shelley, M. 1818) We can assume the inverted triangle; a denaturalized shape (Tufte, E. 1990:87) can represent elements of the sublime, where its inversion simulates danger and threat. Botting argues that 'imaginary qualities of the sublime allow for both terror and pleasure.'(2014:7) In fact it is the close relationship between pleasure and terror that evokes a tangible sense of the sublime.

Stormy oceans and forest fires – data centric landscape abstraction

Emerging ideas in the EcoGothic from theorists like Smith and Hughes (2018) highlight the significance of the environment in Gothic literature and its role in the construction of monstrosity and fear. Smith and Hughes state 'Gothic

tropes are manifest in the body of nature through land, water, air and plants.' 2018:4) Using these categories, I collected data from the text in relation to but not reliant upon the literal landscapes of the narrative. It is important to note that the references in the text are both positive and negative, in collecting the data neither is exclusive. I separated environmental and elemental language. One offers permanence while the other is inconsistent and irregular. Kant would argue that it is this dichotomy between timelessness and incomprehensibility of scale in the landscape in conjunction with the complex irregularity and sensory chaos of the elements that creates the sublime.

The environment is subdivided into Land: mountains, caves and valleys; Plants: woods, trees and forests; and Water: oceans, lakes and rivers. While elemental weather is subdivided into Water: ice, snow and rain; Air: wind, storms and tempests and Veils: fog, cloud and mist. Elemental veils fells pertinent to synthesize Rothko's veil and Shelley's use of 'misty veils' and 'thick fog' as a metaphor for obscuring or 'concealment of the whole' another Kantian trope. Victor curses the 'cloudless sky' as the veil is lifted on his terrible deed. Shelley uses pathetic fallacy as a metaphor for the anguish and turmoil of the characters. Victors surge of emotions after the 'creation' referred to as 'like a hurricane'. (Shelly, M. 1818:45) Elemental air force plays an active role in the narrative, seemingly blowing the protagonist on and off course. The creature uses it to describe its power, promising to 'unleash a whirlwind of rage upon them'. Crosbie Smith's paper 'Frankenstein and Natural Magic' (1994:89) refers to the point at which nature's permanence meets Victor's instabilities as pivotal in the text.

I have deliberately omitted lightening within this category as its function as a literary device is more complex, it is a 'marker of significant transition and plot development' (Olorenshaw, R. 1994:159), the point of creation. Christina Riding refers to this volte-face in her analysis of the sublime register; 'Frankenstein's sublime limit is reached when he is confronted with the unmodified power of God and the sublimity of nature.' (www.tate.com) As such the lightening features in landscapes as an isosceles triangle, directly at the point of creation in the narrative.

Cataloguing the data in correlation with the character narratives highlighted patterns within the text for example: the relationship between environmental water and elemental air. Shelley use of bodies of water, not only encircle the narrative through Walton but also with elemental force act as a metaphor for Victors turmoil. Emily Alder in her work on the Nautical Gothic (2017:60) highlights the ocean as a precarious surface between life and death and a place to conceal monsters. Is Shelley using environmental water for Victor to conceal the creature? In seeking out a visualization that speaks of the relationship between water and elemental force, I used the circle and triangle to find clarity of contrast. The water becomes torrid and violent under elemental force, therefore we can consider water as beautiful and as such represented by the circle. The elemental force, in this comparison, operates as the powerful sublime, the inverted triangle. The tonal veils mirror the force and volume of language data within the text.

To test this strategy, I examined a contrasting topology within the narrative, the Creature's time in the woods. This contrasts in perspective and environment. Can the same system derive an effective landscape? Close reading of the Creature's narrative shows reference to the woods as providing refuge, comfort and knowledge. 'I sought refuge in the woods.' The creature finds its humanity in the woods. Fire provides a pertinent contrast, not only the point of the creature's inception but also as a force to destroy the tranquility of their faunal existence. The Creature burns the Delaney cottage in rage and is 'consumed by burning desire.' I employed the same system with the noted inversion of the triangle in order to reflect the different narrators. Can the creature know the nature of the sublime if the creature is a representation of it? Is the creature the threat?

To summarize, this practical investigation thus far, has sought to explore abstraction, distant reading and data collection as a means to represent the sublime in the landscapes of Frankenstein, trying to find ways of exploring the narrative beyond the text. In the pursuit of this I have begun to find strategies

that can continue to be explored within the text and potential that of other Gothic novels. To pose some questions moving forward.

Can it be experiential? Through exploring Kant's ideas about 'sensory chaos'.
Can sound and motion infer sublimity?
And can augmented reality immerse us in the sublime experience?

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