『영미연구』
제66집 (2026): 51-94
http://doi.org/10.25093/ibas.2026.66.51

Planetary Structures of Feeling in End Times: A Scalable Reading of *How High We Go in the Dark*[*]

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[Abstract]

This article examines Sequoia Nagamatsu's SF novel *How High We Go in the Dark* (2022) through a combined digital humanities and literary-theoretical approach, focusing on how the novel imagines disaster, death, and mourning as processes that are technologically mediated and institutionally organized. Drawing on Raymond Williams's concept of structures of feeling, the article argues that the novel articulates an emergent, twenty-first-century structure of feeling shaped by anticipatory grief and diminished futurity. The novel is set in a hypothetical near future where humanity struggles to cope with a global pandemic and the underlying threat of global warming. Employing a scalable reading methodology, the study integrates lexical and sentiment analyses to trace affective and semantic distributions within the text. The novel's imaginations for future pandemic and climate crisis are structured by dominant formations that extend contemporary technocratic and

* This article is based on a version originally presented at 2025 ELLAK conference (19 December, 2025). It has been substantially revised and extended for the present publication.

biopolitical logics of crisis management, care, and affective governance. Alongside these persist residual cultural forms of familial attachment, ethics of care, inherited practices of mourning, reorganized through the dominant formations under conditions of ongoing catastrophe. In this context, the novel articulates an emergent structure of feeling oriented toward endurance and acceptance — grief is normalized, care is detached from futurity, and new ethics of survival and mourning emerge.

Key Words: *How High We Go in the Dark*, Sequaia Nagamatsu, scalable reading, digital humanities, structures of feeling, mourning, disaster

I. Introduction

This article examines Sequoia Nagamatsu's SF novel *How High We Go in the Dark* (2022; "*How High We Go*" hereafter) through a combined methodology of digital humanities and literary-theoretical approach, focusing on how the novel imagines disaster, death, and mourning as processes that are increasingly technologically mediated and institutionally organized. A scalable reading approach was applied, analyzing chapter-level sentiment, keyword frequencies, and narrative patterns across the text. The term "scalable reading" represents a methodological evolution beyond the binary of "close" and "distant" reading and the use of quantitative data to systemize hermeneutic insights of the analyst. Scalable reading's strength, Martin Mueller suggests, lies in its ability to move seamlessly between "a bird's eye view to close-up analysis. Often it is a detail seen from afar that motivates a closer look" into the text, while a traditional close reading can determine if the statistical finding is humanistically significant (Mueller). Florentina Armaselu and Andreas Fickers

introduce that the metaphor of zooming and scale in historical, cultural, literary analysis has gained scholarly interest "as a way to imagine and revisit concepts, methods and tools for processing, analysing and interpreting data, and for creating innovative representations of knowledge" (6).

The scalable reading approach was employed to examine the novel's representation of emotional currents and broader structures of feeling across the narrative. Scalable reading is particularly suited to *How High We Go* and contemporary speculative fiction more broadly, as these texts operate simultaneously at planetary and intimate scales. While close reading captures the affective density of individual narratives, computational analysis enables the detection of recurring semantic clusters, structural intensifications, and long-range narrative patterns that would otherwise remain diffuse. In a fragmented, omnibus narrative that stages crises across temporal and spatial horizons, the combination of distant and close reading reveals how thematic fields converge, disperse, and reconfigure over time. Scalable reading thus mirrors the novel's movement between representations of micro-level human experience and macro-level systemic transformation. *How High We Go* is set in a hypothetical near future where a global pandemic caused by an unknown virus breaks out, and humanity struggles to cope with the outbreak as well as its aftermath. Underlying this deadly pandemic is also the pervasive threat of global warming. The novel is structured as a sequence of loosely connected episodes with some recurring characters, and this episodic structure allows the text to stage varying responses to catastrophe. Each chapter is set in a different temporal or spatial context — ranging from a near-future pandemic to speculative space travel, spanning various cities in the U.S. and Japan — while they are bound together by recurring motifs of mass death, intergenerational loss, memory and care. This does not, Nagamatsu explains, mean that *How High We Go* is a collection of short stories. Rather, he insists that

it be read in order, since, “beyond thematic overarching threads, there is also a narrative backbone that comes to fruition only if a reader follows breadcrumbs throughout” (Finch).

While there has not been a vast range of scholarly criticism on Nagamatsu’s works, climate crisis has garnered particular attention from reviewers and critics. Taking this theme a step further, Matthias Stephan reads Nagamatsu’s apocalyptic imagination along what E. Ann Kaplan terms *pretrauma* to highlight humanity’s response to climate crisis that we have been anticipating but which has not fully arrived — an “in-between period” (Stephan 429-30). In this reading, the novel’s description of a global pandemic becomes an allegory of how humanity responds to environmental losses (430). For Kaplan, this ability to move beyond past memory and look to the future is imperative: “to move people suffering, perhaps unconsciously, from trauma future-tense — seeing no hope for survival and living in anticipatory fear — towards some sort of what Jonathan Lear calls radical hope” (Kaplan 391). Stephan argues that *How High We Go* addresses exactly this question of how we may still find hope for the future within this prolonged crisis.

The article, however, does not claim that the digital humanities methodology constitutes the most effective approach to reading Nagamatsu’s novel, nor that it can, on its own, fully account for the novel’s complex and often contradictory emotional and institutional responses to the global catastrophe. Critics suggest that computational analysis, rather than replacing reading altogether, can effectively complement literary analysis and vice versa (Jänicke et al. 227-28; Drucker 630, 634). Bomi Jeon similarly frames digital sentiment analysis as a mediating approach that complements established modes of literary criticism, following Katherine Elkins and Jon Chun’s idea of “middle reading” (Jeon 58-59). Using computational methods, distant reading shifts the mode of inquiry from the symptomatic to the systemic,

ensuring that close reading is grounded in the systematic reality of the text, but Johanna Drucker emphasizes that because "these tools don't read," we must also value human perception for its "capacity for ambiguity, ambivalence, contradiction, and association" (633-34). Close reading can validate the digital model by confirming that the patterns found by the machine actually align with the novel's theoretical and conceptual framework (Piper 655). Drucker's summary of the value of computational text analysis as "start points for study" and a mode of inquiry that allows us to discover systematic patterns (633) aligns closely with the aims of my methodology. Although the chapters of *How High We Go* are tightly focalized around individual characters and their interiority, my interest lies in foregrounding the broader social world evoked through its descriptions of the social changes. In particular, I seek to trace how the novel registers transformations in its overarching worldview and social structures across and beyond catastrophe, as well as the collective ways in which communities respond to disaster and its aftermath. The research was designed to meet this goal, and revisions were made as I went through each step and analyzed the data collected through computational methods.

1. Research Questions and Hypotheses

This study began from a perceived tension: although commercialization and institutionalization are typically rendered negatively in SF or dystopian fiction, *How High We Go* did not appear to sustain an overtly condemnatory view toward them. While these processes are critically depicted, they are not accompanied by unequivocal despair. This raised a series of questions: Is "despair" an adequate descriptor for the novel's affective register? If the text gestures toward hope after catastrophe, how can I understand its generic category?

The initial hypotheses were thematically aligned with my reading of the novel along dystopian conventions, to cross-check the dominant thematic categories of the novel, and to confirm the novel's overall sentiment about these themes (or other dominant themes). The digital analyses were conducted to verify the following hypotheses:

1) Lexical fields related to disaster, death, loss, and mourning will be dominant across the text, which will intersect with two other domains:

(a) Technological systems designed to manage catastrophe, including medical, digital, or infrastructural systems.

(b) The commodification of death and mourning through services, facilities, institutions, and market logics.

2) A progressive emotional arc to be discovered, following the novel's narrative progression from pre-to post-pandemic, beyond catastrophe and toward recovery.

3) In other words, I expected the novel's generic characteristics as a speculative, science, and dystopian fiction to appear clearly in lexical and sentiment analyses.

4) From this initial reading, I aimed to map the accumulation of technical vocabulary, procedural language, and commercial register inside the novel and ask how these registers function as narrative architecture, assuming that these linguistic structures will reveal an infrastructure of death and mourning. At the same time, the technological mediation and commodification are not portrayed as uniformly dystopian in *How High We Go*. This in part corresponded to the novel's temporal progression through the chapters from the discovery of the unknown virus through the end and aftermaths of the plague. The central question, therefore, was not whether these infrastructures are featured as simply good or bad, but how they are affectively framed — as dehumanizing systems, provisional forms of care, or likely both. This article refines these hypotheses by examining where and how technology,

mourning, and commerce intersect, and what kinds of affective configurations accompany them. It concludes, however tentatively, that the novel persistently frames and interrogates these infrastructures as ethically ambivalent — troubling in their institutionalization of death and grief, yet gesturing toward relational continuity after catastrophe. This finding distinguishes *How High We Go* from many dystopian and SF narratives that imagine technology and commercialization as either essentially inhuman and self-destructive.

2. Methodological Design

The article combines Voyant Tools for exploratory corpus analysis and *R* (*syuzhet* and *quanteda*) for controlled, dictionary-based analysis. Additionally, I also used Orange Data Mining for supplementary visualization and topic modeling. These tools were selected so that all analyses can be conducted locally without relying on external servers or cloud-based processing, given that *How High We Go* is a recently published text. Not all steps were progressive or logically connected to the next, but rather followed an iterative cycle. To be more elucidating, the workflow eventually can be rearranged into five steps:

1) Word Frequency: Exploratory frequency analysis to test whether disaster and death indeed dominate the text.

2) Thematic Identification: Topic modeling was used to detect recurrent lexical patterns across the text and to see how the text organize meaning through these patterns of vocabulary across the chapters.

3) Affective Validation: Sentiment and emotion analysis were used to test whether these interactions align with purely negative or more ambivalent emotional trajectories. This step was also intended for me to decide whether the text

emphasizes dystopian critique or the benefits of the infrastructures of grieving and recovery.

4) Operationalization: Customized dictionary-based tracking of technology, mourning, and commerce across chapters.

5) Contextual Check: To verify how categories and scores appear in context, collocates and streamgraphs were used to see how these signals are linguistically and narratively assembled.

For each step, the collected and synthesized data accompanied distant and more interpretive close-reading, focusing on the chapters that stood out from each analytical step. Close-reading enabled more refined interpretation of the data collected so far.

II. Theoretical Framework: Planetary Structures of Feeling

Raymond Williams's concept of "structures of feeling" is particularly useful for explaining the narrative strategies and stylistic organization of *How High We Go*. The connection was made only after the novel's computational analyses and the cross-examination of my hypotheses, to theorize and highlight the novel's episodic structure and the foregrounding of individual narratives. This connection was supplemented by the existing scholarship on *How High We Go* particularly as a disaster and climate fiction. By "planetary" structures of feeling, therefore, I refer to the affective formations through which planetary-scale crises such as climate change or pandemics are registered, anticipated, and narratively mediated at the level of lived experience.[1] Williams uses the term "structure of feeling" to describe complex lived,

affective experiences that are emergent, provisional, and often only partially legible on the level of explicit discourses. In *The Long Revolution* (1961), Williams claims that we can learn about a form or period of society through the arts of the period as these, rather than formal or institutional categories, are where the era's lived experiences appear (64). The structure of feeling, "as firm and definite as 'structure' suggests, yet operating in the most delicate and least tangible parts of our activity … the particular living result of all the elements in the general organization," is a deep, shared sense of present life that is communicated before conscious or formal education (64–65). This formulation anticipates his later conceptualization in *Marxism and Literature* (1977) of certain qualitative social changes as lived experiences and affects which precede formal or institutional articulation in their capacity to structure what people feel and how we live (131-32). These emergent experiences, neither wholly reducible to institutions or ideologies nor completely private, also characterize the affective experiences imagined in *How High We Go*.

Reading Nagamatsu's novel through this lens allows us to see the novel not merely as a narrative about pandemic or environmental crisis, but as a literary articulation of a twenty-first century structure of feeling shaped by the changing presences of global warming, technology, and capitalism. Unlike earlier, twentieth-century disaster narratives which emphasize the goals of containment and survival, Nagamatsu's novel dwells in the ongoing negotiation of life in ruin or in the aftermaths of the pandemic, unfolding its narrative around the collective experiences of loss, isolation, and adaptation that are still being integrated into life. This resonates with Williams's idea that the arts, or the "imaginative literature," express emergent social experience before it becomes fully articulated in other social formations (*Marxism and Literature* 133). Aligning this with contemporary environmental discourse, the novel's structure of feeling resonates with the broader

cultural questions of what it means to live in an era of unprecedented ecological and societal transformation. In “Learning How to Die in the Anthropocene,”[2] Roy Scranton suggests that if we were to learn how to live in the reality of global climate change, we must confront the inevitability of social and ecological transformation and “learn how to die not as individuals, but as a civilization.” He suggests that acknowledging the end of familiar ways of life, and the illusions of the perpetual growth or stability, is necessary to adapt ethically and practically to a future shaped by climate change and systemic collapse (Scranton). The confrontation with mortality, Scranton contends, allows us to face the present and reconceive our relation to crisis. The emphasis on “learning how to die” resonates with Nagamatsu’s chapters, as characters confront the likelihood of civilizational rupture and reconfigure hopes and attachments in a world that cannot be fully contained by existing dominant paradigms of technology or capitalism.

In this light, *How High We Go in the Dark* can be read as one of the imaginative figures of this contemporary structure of feeling — a set of internal relations among impulse, mediated emotion and tone that register our latent fears about the future, the limitations of techno-capitalist solutions, and the persistence of hope under conditions of uncertainty. This affective constellation, while not yet fully articulated in dominant discourses of policy or ideology, is palpable in narrative and cultural forms. Williams’s framework thus enables us to historicize the novel’s themes and affective experiences as those of this cultural moment, where lived senses of environmental and technological transformation constitute literary expression. In *How High We Go*, climate change is not heavily foregrounded, but rather presented as the underlying condition of the novel’s affective pressures. The novel’s representation of climate change gestures toward Rob Nixon’s conceptualization of “slow violence,” “a violence of delayed destruction that is dispersed across time and space, an attritional

violence that is typically not viewed as violence at all" (2). While Nagamatsu does not transform the slow violence into dramatic stories as Nixon calls for (2), but through his storytelling, the intrusion of deep time and planetary processes into everyday life becomes palpable.

Returning to Williams's argument, emergent forms of responses to the catastrophe appears in Nagamatsu's novel, not as strongly oppositional force to the dominant social structures (*Marxism and Literature* 123-24), but through embracing what has been hitherto rejected. The novel's imaginations for future pandemic and climate crisis are structured by dominant formations that extend contemporary technocratic and biopolitical logics of crisis management, care, and affective governance. Alongside these persist residual cultural forms of familial attachment, ethics of care, inherited practices of mourning, while reorganized through the dominant formations under conditions of ongoing catastrophe. In this context, the novel articulates an emergent structure of feeling oriented toward endurance and acceptance—grief is normalized, care is detached from futurity, and new ethics of survival and mourning emerge. In Williams's sense, these emergent meanings are not yet fully conceptualized, but registered in the novel's narrative rhythm, tone, and affective expressions, showing how in the twenty-first century, crisis is lived as something to be anticipated rather than already stabilized in terms of fixed ideology or institution. The crisis is not only what Kaplan and Stephan acknowledge as the climate future, but broader global cultural conditions. Nagamatsu has noted that the novel's funerary towers draw on actual funerary skyscrapers he has encountered in Japan, developed in response to the country's rapidly aging population (Ciabattari). The novel's depiction of these towers as institutionalized yet affectively unfamiliar exemplifies the novels' effort to register a culture still in formation in our time.

III. Methodology

This study adopts a scalable reading methodology that combines computational text analysis with close interpretive work in order to trace planetary structures of feeling across the novel. While the chapters of *How High We Go* foreground individual interiority, this computational layer allows for the detection of systemic transformations in the novel's broader social imagination—particularly the reconfiguration of collective life, institutional structures, and communal responses as the narrative moves through catastrophe and its aftermath.

The corpus was processed and analyzed in *R* (version 4.5.2; R Core Team) using the RStudio interface (version 2025.09.2-418; Posit Team). For computational processing, the e-book edition of *How High We Go* (Bloomsbury Publishing, 2022) was converted into a plain-text corpus and segmented by chapter. All quoted passages and page citations in the following analysis refer to the print edition (William Morrow, 2022) cited in the Works Cited list. The corpus was also tokenized, stopwords were removed, and capitalization was standardized. The stopword list was created based on Voyant auto-detection of standard English stopwords, followed by customization.

After preprocessing and normalization, frequency distributions and smoothed trend lines were generated to examine shifts in thematic emphasis across chapters. Exploratory corpus analysis was conducted with a locally installed version of Voyant Tools (Sinclair and Rockwell), which enabled initial pattern detection at the level of lexical recurrence and distribution.

Topic modeling and clustering were further performed in Orange (version 3.37.0; Demšar et al.) to identify latent thematic constellations emerging across chapters. Chapters were tokenized using a regular expression (Regexp) pattern tokenization.

Lowercasing, English stopword removal, and WordNet lemmatization were applied prior to modeling to unify morphological variants. Term frequency (TF) was used without applying IDF or smooth IDF to maintain stability in the relatively small corpus, preventing extreme weight distortions that could interfere with the latent semantic space. This study adopts Latent Semantic Indexing (LSI) rather than topic modeling approaches such as Latent Dirichlet Allocation (LDA) to highlight semantic overlap and structural entanglements of semantic domains across the novel, which are central to the novel's affective reframing of technology and commerce across narrative phases. The LSI model produces multiple semantic constellations, each represented by a ranked list of terms, while allowing individual terms to appear in multiple clusters. LSI models latent semantic structure as a continuous space of relations, allowing attention to gradients, proximities, and discursive tendencies rather than partitioned topic clusters. While probabilistic topic models such as LDA can also capture thematic overlap, LSI's vector-space representation produces latent dimensions that indicate degrees of semantic intensity and thus support interpretive scaling between computational abstraction and close reading. Furthermore, given the relatively small corpus size, LSI also provided greater stability and interpretive coherence than probabilistic topic models.

Sentiment analysis was performed in *R* using lexicon-based scoring, with preprocessing tailored to maintain affect-bearing lexical units while minimizing noise. Statistical processing and visualization were carried out through the RStudio interface (version 2025.09.2-418; Posit Team). Chapter-level sentiment scores were computed using the default *syuzhet* lexicon within the *syuzhet* package. This lexicon assigns continuous polarity values to individual words, enabling aggregation into chapter-level sentiment measures. Rather than using raw summed scores, which are sensitive to variation in chapter length, sentiment was normalized by chapter length. Specifically,

the total polarity score for each chapter was divided by the number of tokens in that chapter, yielding a mean polarity per token. Chapter lengths ranged from 2,465 to 10,017 tokens (M = 6,348), making length normalization necessary to prevent sentiment scores from merely reflecting textual volume rather than affective intensity. Thus, normalization controls for differences in chapter length and allows more reliable cross-chapter comparison.

To identify recurring affective and thematic structures across the novel, this study constructed a series of custom dictionaries grounded in theoretically defined semantic fields using *R* (*quanteda* package). The selection of semantic domains was informed by critical readings of dominant emotions and themes such as catastrophe, kinship, governance, and commercialization, aligning computational categorization with an interpretive framework.

IV. Exploratory Findings and Interpretations

1. Word Frequency: The Dominance of Relational Language

Voyant Tools was used to examine word frequency distributions, trends across chapters, and collocations. The Cirrus result, however, challenged my hypotheses about a dominance of disaster and death-related terms, along with technological and commercial vocabulary. Instead, relational vocabulary, such as family, friends, and neighbors, dominates the word cloud (see Picture 1).[3] As mentioned previously, this disparity between my reading experience and the statistical representation called for a further examination of other computational analysis results, to investigate whether differences remain throughout computational analysis or is a result of the limitations

of simple frequency counts. It is precisely this interpretive gap between the word-frequency analysis — which highlights family and relational intimacy — and my expectations for dominant feelings of anxiety surrounding technology and commercialization that motivates the methodological framework adopted in this study, which seeks to account for the tension between surface lexical prominence and the deeper affective structures shaping the narrative.

〈Picture 1〉 Voyant Cirrus result across chapters (top 150 frequency terms; key terms highlighted by the author)

This does not simply indicate that *How High We Go* is a purely family-centered narrative. Rather, the dominance of relational terms can be interpreted as an indication of how disaster ("plague") in this novel is registered through relationships collapsing and being reassembled. A closer look at co-occurring high-frequency terms supports this view. Alongside relational nouns — "mother," "father," "family,"

“friend,” “daughter,” etc. — appear words that register death, such as “plague,” “lost,” “death/dead/died,” “sick,” “hospital,” “virus,” and words that register mourning, such as “goodbye,” “remember,” “memory.” Within this context of loss and mourning, words that register emotions, such as “love,” “sorry,” “shit,” “crying,” should be understood relationally. The constellation of words suggests that in the novel, death is not foregrounded as a singular event, but mediated through relational loss, memory, and care. More future-oriented words such as “hope,” “imagine/imagined,” “possibility,” also appear frequently, indicating the novel’s orientation toward rebuilding and recovery.

While the result did not highlight words that can be immediately registered as references to technology or commercialization, this relative absence called for a more refined methodology for registering the novel’s discussion of technology and commercialization. In other words, it prompted a search for interpretive methods capable of explaining how technology and the commodification of mourning operate within the novel. The words highlighted in blue in <Picture 1> hint at the ways in which the novel’s engagement with technology and commercialization can be foregrounded. Words such as “system,” “service,” “robo” can be recognized immediately as commercial or technological terminologies, but “ride,” “city,” and “laughter” need to be contextualized to be understood as indicators of commercialization and technology. For example, in Chapter 2 of the same title, “City of Laughter” refers to a theme park designed to provide euthanasia services to terminally ill children. Children suffering from the virus come to the park to spend their final moments on its rides, accompanied by families who wish to make one last happy memory for their children and provide them with a more dignified death. That seemingly mundane and innocuous words as these may indicate commercialized response to catastrophe, and that albeit commodified, the park’s services do help

these families cope with grief, suggest that to fully comprehend the novel's use of language, thematic and contextual identifications are required.

2. Topic Modelling: Entangled Semantic Fields

To move beyond exploratory patterns and examine larger semantic organization, I turned to Orange Data Mining for topic modeling and document-level clustering. Using a chapter-based corpus, I applied latent semantic indexing (LSI) to see how the novel's vocabularies cluster. The topic coherence score of 0.443 indicates a moderate level of semantic consistency, which is expected given the overlapping themes and small size of the novel corpus. Five clusters were produced considering the relatively small corpus (14 chapters). The clusters are as follows:

1) time, mother, life, family, body, help, father, child, friend, light
2) baba, mother, pig, lab, father, time, neighborhood, planet, star, earth
3) park, dog, child, parent, ride, baba, pig, lab, osiris, wife
4) pig, dog, planet, son, earth, star, life, ship, daughter, lab
5) dog, pig, lab, baba, robo, wife, dean, heart, paw, owner

Among the clusters produced, I selected two constellations for discussion: those that illuminated how relationship, death, technology, and commerce intersect. I titled the clusters as "relationship" and "institutionalized death and mourning."

Relationship: time, mother, life, family, body, help, father, child, friend, light

This constellation foregrounds kinship, intimacy, and shared temporality. Notably, the appearance of "body" and "light" calls for close reading, as bodies are depicted

in the novel as a site of sickness and death, in the context of the plague. Alternatively, “light” is most often connected to the idea of space travel according to the collocates result, combined with “years,” “time,” “travel,” or “earth” most frequently. The inclusion of these terms within this cluster supports the idea that catastrophe is narrated relationally, and that collective hope for a future is negotiated through temporal interconnectedness, suggesting that human resilience emerges from the continuity of relationships across space and time.

> Institutionalized Death and Mourning: park, dog, child, parent, ride, baba, pig, lab, osiris, wife

This constellation blends mortality with institutional and commercial language, framing death within serviced, managed environments. Many of these words come from Chapter 2, “The City of Laughter,” where terminally ill children spend their final day with family at the eponymous euthanasia theme park. “Laugheteria” is the park’s cafeteria. Osiris, or the “Chariot of Osiris,” is the park’s final ride where children are put to death during its most exhilarating inversions. The narrator, Skip, works at the park wearing a mouse costume to keep the illusion of merriment for the customers. Death, grieving, and commerce intersect in the City of Laughter. Notably, the cluster also includes “cadaver” which appears mostly in Chapter 7, “The Songs of Your Decay,” indicating that the theme of death, while not apparent in other words in the cluster, is relevant and highlighted nonetheless.

Rather than being discrete categories, these clusters show that the themes of technology, commercialization, and death/mourning create overlapping constellations, while relationality is the overarching theme that appears in all clusters. I interpret them as evidence of the novel’s underlying logic, in which technology, commerce, and relationality all contribute to mourning and recovery in the face of collective

crisis. Mourning unfolds through systems of mediation and exchange, suggesting that recovery is structured through technological and institutional infrastructures.

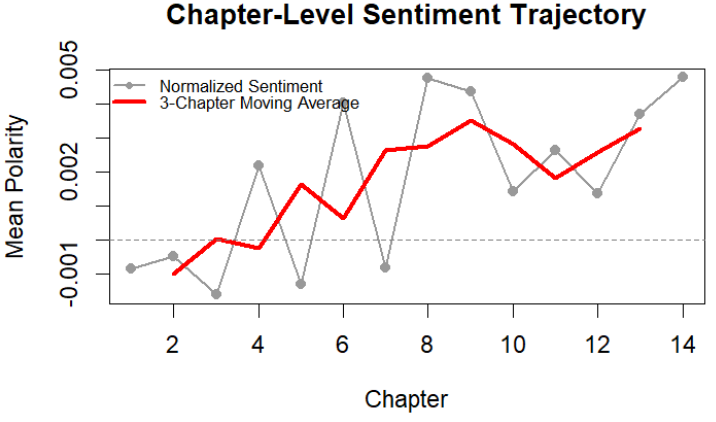
3. Sentiment Across Chapters

1) R syuzhet package

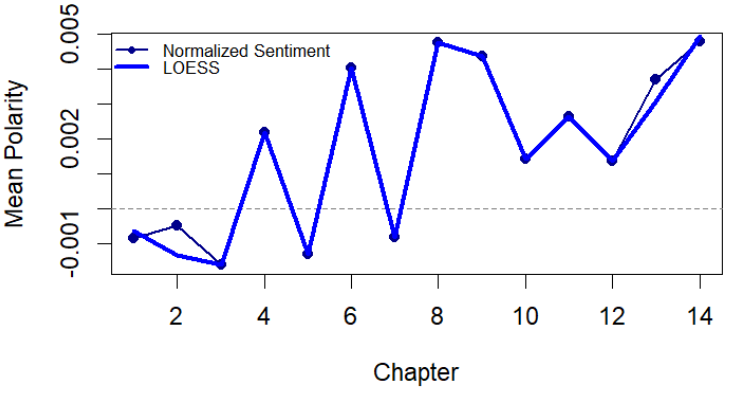
I used R package to experiment with narrative-scale sentiment trajectories (see Picture 2). After normalization, the resulting mean polarity values range from −0.001607 to 0.004772, indicating a discernible affective fluctuation across the narrative (see Appendix 1). Importantly, the normalized scores confirm that these variations are not reducible to differences in textual volume but instead reflect shifts in emotional density across the narrative structure. A LOESS (locally estimated scatterplot smoothing; non-parametric smoothing technique) curve with a span of 0.4 was applied to the chapter-level normalized sentiment scores to capture overall trends. The LOESS closely matched the raw normalized values, indicating that affective shifts indeed reflect consistent tonal modulation across the narrative. To visualize broader affective tendencies across the narrative, a three-chapter rolling mean was applied. This moving average reduces local volatility and reduces extreme fluctuations. However, given the relatively small number of chapters and the episodic structure of the novel, smoothing substantially reduces and sometimes even reverses polarity shifts. Therefore, both normalized and smoothed values are presented, but the later interpretation focuses on the normalized scores. The smoothed curve serves as a visualization of broader tendencies rather than as evidence of a continuous emotional trajectory.

The sentiment arc shows one early dip into negative territory around Chapter 3

followed by an overall rise and higher late-chapter values. This firstly confirms the novel's narrative trajectory where in earlier chapters, the pandemic breaks out and humanity struggles to cope with the deadly, unknown virus and mass deaths. Later chapters articulate vocabularies of memory, togetherness, and care, as humanity discovers a cure to the virus and seeks ways to move on.



〈Picture 2〉 R syuzhet normalized and 3-chapter rolling mean sentiment arcs



〈Picture 3〉 R syuzhet normalized and LOESS

The early chapters oscillate around neutral sentiment, opening with a register of affective suspension rather than immediate negative emotions (See Picture 3). Chapter 1, "30,000 Years Beneath a Eulogy," introduces the beginning of the outbreak, as a team of scientists discover the virus in the melting permafrost in Siberia (hence known as "the Arctic plague"), but the chapter's presentation of death remains affectively ambiguous. Both the narrator, Cliff Miyashiro's grief over his daughter Clara's death, who was part of the research team that discover the virus, and the looming threats to earth — the ancient virus and global warming — are mediated through the narrator's recollections of his daughter, without either one being overemphasized. The team's discovery of the mummified body of a girl who carried the virus, which becomes the starting point for the global pandemic, and fragmented details of Clara's life, a father's personal eulogy, are woven together in the opening chapter. The eulogy, however, communicates love as well as sorrow, and the narrator's newfound understanding of his daughter's work and life. The chapter ends not with despair at the prospect of an epidemic, but the language of love and hope amidst uncertainty:

> We keep telling ourselves we're going to complete our work and go home— some days I even believe this. I put on my daughter's snow gear, take the dogū figurine with me, and walk out onto the tundra, picture Clara there beside me beneath the aurora. … I imagine the virus and anything else the ice has kept hidden from us being sucked into the figurine, its stone belly filled with all that can harm us. I tell my daughter I love her and throw the dogū into the crater, waiting for all that has been unburied to be retaken into the earth. (29)

The final scene anticipates the novel's overarching affective and thematic tensions in a ritualized gesture. The team's and the father's reiteration of wishful words establishes a future-oriented narrative direction, while it is simultaneously undercut by uncertainty. This oscillation between belief and disbelief characterizes the novel's affective suspension throughout the chapters. Images of death, loss, infection, and corpses accompany the images of love, memory, nostalgia, and hope, linked loosely through people who inhabit the moments. In the chapter, the narrator and Clara's team create a new relationship in Clara's absence, mourning but also moving together toward a future. The dogū figurine, as an archaeological object, becomes a speculative vessel for this movement neither completely forward nor completely backward, making violence, disease, and historical residue becoming momentarily graspable. Following Stephan's argument, Cliff's loss — one of many examples from the novel — makes the catastrophes of an unthinkable scale, such as the global pandemic or climate crisis, narratively and affectively palpable: "While the pandemic within Nagamatsu's novel is global in scale, in these chapters the protagonists react as if these are local traumas" (Stephan 430). In other words, the narrative situates catastrophic events within lived emotional and mnemonic frameworks for greater relevance. The novel's following chapters tell the stories of individuals who gradually learn to live and die within the global crises.

The notable dip in Chapter 3, on the other hand, suggests the limitations of the computational method, as the chapter does offer hope and futurity toward its end. However, it can explain the chapter's spatial and temporal suspension that can be responsible for the overall negative mood. Chapter 3, "Through the Garden of Memory," features the narrator Jun, who wakes up in an unidentified, dark space with strangers. The liminal, abstract space is assumed to be a limbo for those who are in comatose states from the Arctic Plague. The chapter's key emotions are loss, confusion, and ontological uncertainty, while toward the end, the narrator decides to send a child through the sky, the only likely exit from this space. The baby's "smell of innocence and youth" (82) symbolizes the hope and kindness of humanity, as the chapter's upward motion to reach the limbo's exit point echoes the novel's title, "How High We Go in the Dark." In Chapter 4, "Pig Son," the virus outbreak has become even more serious, and the narrator, David, has already lost his son Fitch, before completing his study of artificial human organ transplants. The loving and caring relationship he builds with one of his test animals, "Snortorious" the pig who grew sentient over time, does not last long, as Snortorious begins to understand that he must give up his organs to save the lives of children like Fitch. In the episode, the cruelty of Snortorious' choice is mitigated by the presence of a talking pig and his loving character, but grief, loss, and mourning are distinctly registered alongside love and hope.

The dramatic jump between chapters 7-8 signals an overlap in these two roles, which result in ambivalence and anxiety in chapter 7 and hope and anticipation in chapter 8. In chapter 7, "Songs of your Decay," the narrator works at the forensic body farm researching the mutation of the virus: "Most medical doctors in the plague wards are working toward the goal of keeping their patients alive, intact. It's my job to study how we fall apart" (145). Her work is marked by the stench of these

corpses: “Out here, the smell digs into your pores. Two showers, three. I’ve never gotten used to it” (152). However gruesome and gloomy her work environment, Aubrey nonetheless has hopes that her work will contribute to saving people as well: “We treat each body with care ··· Every single one is here to help us find the answer to a question” (152). The chapter has heavy allusions to death and decay, while the narrator, Aubrey, goes through difficult break-ups with the ones she loved. The chapter’s low sentiment score reflects the pervasive presence of death, loss, and failure, indicating a sustained somber tone. The pandemic, much like our own experience during COVID-19, provides a sense of suffocating confinement to people’s daily lives, so that “the lack of space, being trapped together like that all the time, apart from the hours we spent at work, everyone afraid, with no place to go” changed the relationship between the narrator and her husband (Nagamatsu 146). Or “the end table overflowing with utility bills, letters from family notifying us of relatives who’d died of the plague” (147). Lingering behind all these events is also the threat of global warming, which appears in several chapters as the sea level rises and certain cities are lost.

The narrative arc does not simply indicate that things get better in the later chapters, but that after the pandemic, the survivors increasingly articulate vocabularies of meaning—love, memory, togetherness, hope. Thus, this arc shows that characters reorganize relation and memory toward the end and in the aftermath of catastrophe. Importantly, this trajectory supports the claim that technology shifts its roles, from managing death in early chapters to mediating mourning, and enabling recovery later on. Chapter 8, “Life around the Event Horizon,” is where scientists make a breakthrough discovery of “the singularity,” which would enable intergalactic travel and thus offer a possibility of searching for an alternative to Earth. In this chapter, news about potential cure to the virus also spreads. In Chapter 9, it is year 2037, and

humanity has managed to find the cure to the virus. Spaceship U.S.S. Yamato is launched, with the mission to find a new planet for humanity. The chapter is largely committed to depicting how characters on Yamato try to preserve their memories in the form of mural paintings inside the spaceship, as they travel across time and space to find an inhabitable planet. Chapter 14, titled "The Scope of Possibility," presents a speculative race of world builders whose responsibility is to design and observe planets. The narrator, a builder of Earth, travels across centuries in different life forms on Earth to witness and engage with its growth. The narrator's hopes of reuniting with her daughter, and her love toward her and all of her creations, make the chapter a highly speculative, but also anticipatory one, a pattern reflected in the sentiment curve. Reading the R-generated sentiment graph alongside chapter-by-chapter plot summaries allows these emotional peaks and narrative anticipations to be linked to specific story developments, highlighting how moments of hope emerge within the novel's overall somber and muted atmosphere.

2) R quanteda Package: Customized Dictionaries-Based Analysis

This step allowed for themes to be operationalized through custom dictionaries. To complement the LSI constellations and simplified sentiment analysis, the research also used customized dictionaries that can better articulate the novel's use of terms related to technology, mourning, and commerce. Using *quanteda* enables systematic, reproducible analysis of lexical patterns across the chapters, while remaining compatible with interpretive literary analysis. Four categories were selected: death, memory & mourning (titled "memory"), technology, and commercialization (titled "commerce"). Dictionary-based counts were then extracted via a document-feature matrix and normalized by the number of tokens in that chapter to compare each

category's thematic intensity within the chapters. These normalized signals were subsequently visualized across chapters to trace the diachronic distribution and interaction of thematic domains, making visible how these themes of death, memory/mourning, commerce, and technology fluctuate and intersect over the narrative arc (see Picture 4 and Appendix 1).

The shift from a general, built-in dictionary to a customized one allows for a more refined thematic examination of the novel's chapters. For example, the customized dictionaries allowed for terms unique to the text, such as *City of Laughter*, *shamisen*, or *robo-*, to be included in the database. The "memory" dictionary includes archival and mediating objects such as journal, letter, photo, in addition to cognitive verbs (*remember*, *recall*) and affective vocabulary (*grief*, *sorrow*, *mourn*). The dictionaries were particularly useful for the two features I intended to examine further in the novel, technology and commercialization. The "commerce" dictionary foregrounds the institutionalization and commodification of experiences through terms such as *service*, *package*, *customer*, as well as spatial markers specific to the novel such as *hotel*, *tower*, and *funerary complex* that signal commercial infrastructures of death and mourning. The "technology" dictionary also captures both generic and mediated technological objects through items such as *machine*, *device*, *robot*, *VR*, alongside biomedical and experimental terminology such as *transplant*, *euthanasia*, and *experiment*.

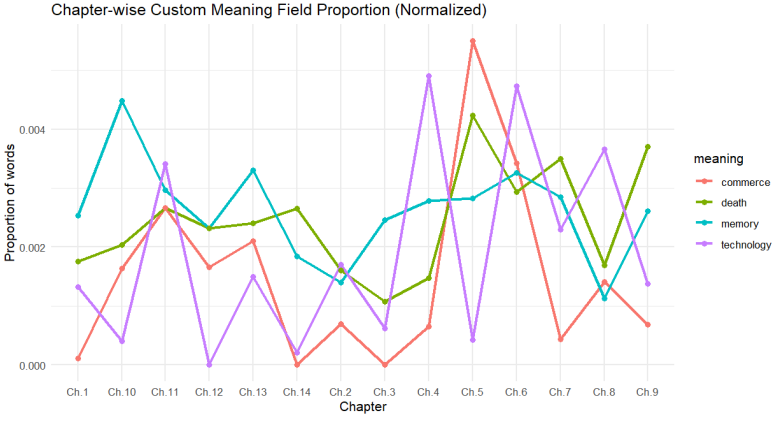
There remain still, however, some interpretive and methodological limitations. The selection of keywords reflects analytic decisions that privilege certain semantic associations over others, and the resulting signals do not provide exhaustive representations of each thematic domain. The dictionaries cannot contain, and may overlook, more implicit articulations of feelings or practices, and certain words that have broader or multiple meanings in different contexts were not included in the dictionary. For example, "Yamato," the name of the spaceship which is more often

used in Chapter 9, is also a name of the scientist whose discovery provided a major clue to developing its engine (168). “Bodies,” while used to refer to dead bodies in the novel, were excluded due to its general usage in other contexts. Nevertheless, it offers a transparent and theoretically controllable framework for tracing affective tendencies across extended narrative structures. In this study, custom dictionaries were constructed in alignment with conceptually defined semantic fields, ensuring interpretability and consistency with the study’s theoretical commitments. Alternatively, recent machine-learning approaches, including transformer-based models, provide context-aware classification and higher predictive accuracy; in future studies, especially with larger corpora, may benefit from using such methods of analysis. Yet, the present study seeks not fine-grained emotional labeling but the mapping of structural modulation over narrative time. For this purpose, a theory-driven lexical approach offers methodological coherence while remaining open to future comparative integration with machine-learning models.

The customized dictionaries-based signals support some of my initial reading of the novel, as well as representing overarching structural characteristics of the text. Taken together, the four dictionary-based signals suggest a pattern that closely mirrors the novel’s episodic structure and its shifting affective and institutional registers (see Picture 4). Even as the chapters progress chronologically, we see that the signals fluctuate across chapters, reinforcing the novel’s formal logic as a constellation of loosely connected, while thematically resonant, narratives. The novel’s episodes do not accumulate a single affect or theme along its trajectory, but instead operate through intersection and contestation of multiple discourses. The steady appearance of relevant words demonstrates that *How High We Go* moves beyond a straightforward disaster narrative and alternatively foreground languages of catastrophe, death, memory, mourning, technology, and capitalism to imaginatively contain the structures of feeling at the time of planetary crises such as the pandemic

or global warming.

Across the full graph, commerce and technology emerge as the most dynamic categories, showing pronounced peaks and drops, while death remains relatively stable throughout the chapters in lower frequency. This steadiness suggests that death functions as a pervasive, underlying condition in the novel's world, while commercialization and technology are focalized in certain narrative settings. Further, the intersection of affective vocabulary (death, memory and mourning) and the systemic, institutional vocabulary (technology, commercialization) demonstrates how the novel presents varying personal and systemic coping mechanisms throughout and after the pandemic, such as the euthanasia theme park, elegy hotels, bonding with a donor pig, playing with robo-pets, or turning corpses into art pieces. Personal memories, institutionalized or technologized mourning, death management and biopolitics occur alternately, and at times simultaneously in these chapters.



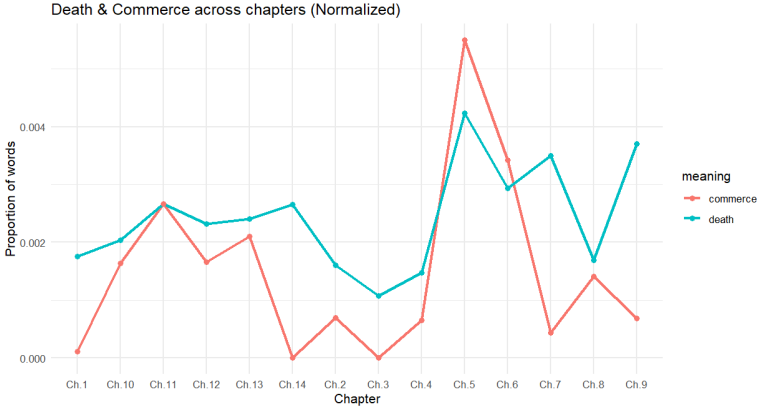
〈Picture 4〉 Custom dictionary-based signals across chapters

Some of the strongest couplings appeared in the combination of memory, mourning

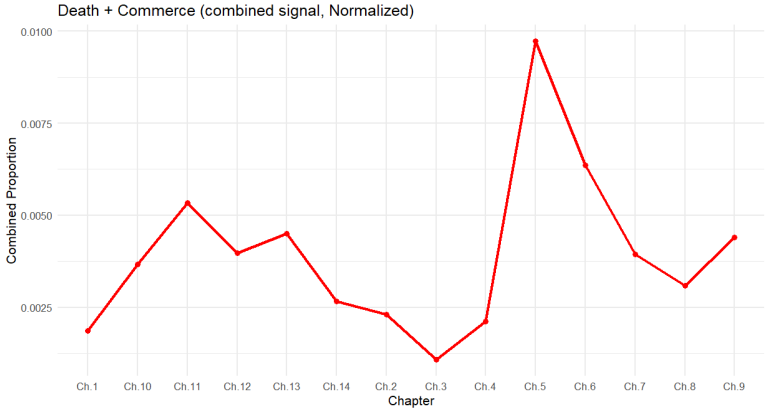
and technology (Chapter 6), and in the combination of death and commercialization (Chapter 5) (see Pictures 5, 6, 7, 8). The results align with the chapters' dominant infrastructures. In Chapter 5, "Elegy Hotel," the narrator, Dennis, works at one of the elegy hotels that have become commonplace as the pandemic persists. The elegy hotel exemplifies the institutionalization of grief and mourning during the pandemic, as these hotels provide exclusive memorial services during which customers can stay with the dead in prolonged periods of mourning and farewell. Dennis's experience as a worker and eventually a customer — purchasing a service for his deceased mother — is confused and ambivalent, as he is simultaneously skeptical of the premises of these commercialized services, critical of their capitalistic drive, and yet deep down, drawn to the idea of love and care they sell. The narrator's skepticism is a more dominant feeling in the episode, who had taken the job at the elegy hotel to avoid confronting his families: "Some of my colleagues had naive ideas about saving the world, but really we were just glorified bellhops for the mountains of Arctic plague victims awaiting cremation, for the families who wanted to curl up in a suite beside the corpses of their loved ones and heal" (103). Through Dennis's voice, Nagamatsu also depicts how capitalistic drive has shaped the world in *How High We Go,* as he realizes that the plague had been harsher for the vulnerable, such as the homeless or the poor:

> When I reached Union Square, I sat and watched the city pretend to be what it used to be, realized it had been years since I'd seen a homeless person napping on a bench, panhandling outside a restaurant. No doubt, we failed them, too—did they die in shelters? In the street? Did we burn or bury them en masse? … Outside the mall across the street, an LED billboard thanked everyone for doing their part: LIFE MUST PREVAIL. SPEND YOUR FUNERARY TOKENS ON THE LIVING. (117)

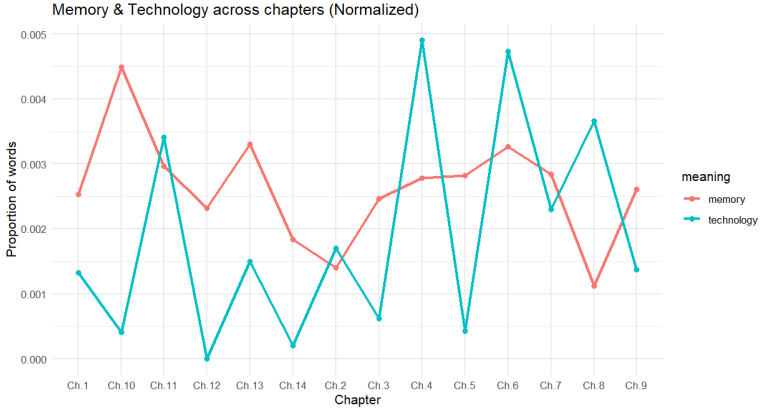
In a world where, much like our own experiences in the early 2020s, dignified death and grieving have become more expensive and exclusive, Dennis's skepticism belies his fear over how he may die, or encounter death of his loved ones: "I listened to a canvasser for a rival death hotel making his pitch — Sleep with your loved ones on their way to eternal slumber! I guess it didn't sound so horrible if you had someone to grieve, if you knew people would be grieving for you" (117). Ultimately, the chapter suggests that even commercialized and institutionalized practices of mourning can be part of life in the times of crisis, offering a way to navigate through loss.



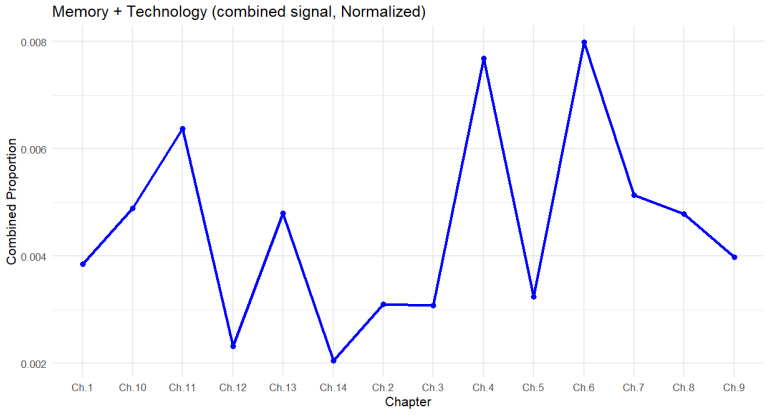
〈Picture 5〉



〈Picture 6〉



〈Picture 7〉



〈Picture 8〉

The strongest coupling of technology and memory/mourning was found in Chapter 6, “Speak, Fetch, Say I Love You,” an episode centered around robo-pets that preserve recordings of deceased owners, and handed down to those who loved and remember them. In the graphs (Pictures 7, 8), we see that grief is mediated through technological objects and service infrastructures. Mourning appears as a practice of recording, preserving, and simulating our loved one’s voices or messages, often organized through client relationships and commercial frameworks. Toru, a Buddhist monk, presides memorial services that the narrator holds for robo-pets who he can no longer fix. The chapter introduces robo-dogs as such a companion-gadget, reflecting Nagamatsu’s own experience of owning one named after Italo Calvino (Baumeister).

This logic is echoed in the Virtual Reality memorial spaces where remembrance becomes navigable through technology and services. In Chapter 11 “Melancholy Nights in a Tokyo Virtual Cafe” and Chapter 13 “Grave Friends,” VR-mediated relationships both with the dead and the living appear, presenting VR technology as one of the defining technologies of mourning. In “Melancholy Nights,” Akira spends hours in the VR world to meet people and feel the sense of belonging, to escape

from his loneliness. Yoshiko, whose daughter suffers from continued plague symptoms, preserves a figure of her daughter as a virtual model, who will laugh, dance, and speak as she used to do before the plague (233). The chapter suggests that these mediated mourning cannot always help people overcome grief but may even exacerbate the sense of alienation: "My daughter is still in pain and can't communicate with me. No one can help" (233). However, in times of crisis, technology or commercialized means of mourning provides solace to people. In "Grave Friends," VR memorial services allow the narrator to see her deceased grandparents in peaceful reunion, the whole family reproduced in holograms.

> On the twenty-second floor in suite 38B, my mother tapped her phone against a sensor in a wooden pedestal that stood in the center of the room. A holographic cherry blossom tree sprouted from the cold linoleum floor and Baba appeared sitting on a stone bench, staring up at the petals as they danced throughout the room. The urn arrived shortly afterward, emerging from a trapdoor, coming to rest on the pedestal. ··· The barren floor was now a garden populated by stone lanterns, meticulously raked sand.
>
> "She wanted to see the world that she missed out on," my mother said. "Before the world was sick. Before the oceans rose, when the city was as it used to be hundreds of years ago—no concrete walls over our shoulders, no funerary towers."
>
> I walked around the room to stand before every ancestor and prayed to them, let the light of their images wash over me. (272)

Imagining a notably more positive role of technology, the chapter proposes that technology can provide a means with which relationships are recovered and preserved. Whereas the VR café services attract lonely and desperate people who relegate themselves to the virtual reality, the funerary towers allow for relationships

to continue beyond death and life. The funerary suite's holographic environment is no longer representative of the artificiality and futility of virtual images, but embody Baba's dreams and the family's lasting love, a new language of care in the post-pandemic world.

4. Contextual Check: Collocates

Lastly, I return to Voyant to contextualize the novel's use of certain key vocabularies. Lexical collocations were particularly useful for highlighting the novel's treatment of death, a theme which is less pronounced in the R *quanteda* lexical assessment result. I interpreted the reason for its relative absence firstly as the novel's formal strategy to foreground relational narratives, but secondly, I also hypothesized that the result indicates the novel's mediated languages. The word "plague," as well as related words such as "virus" and "pandemic," was excluded from the *death* dictionary to focus the analysis on responses to death rather than on narratives of illness or caregiving.

Term	Collocate	Count (context)
plague	died	7
plague	wards	6
plague	ward	4
plague	patients	4
plague	japan	3
plague	hit	3
plague	war	2

〈Table 1〉

Term	Collocate	Count (context)
funerary*	Towers	7
funeral*	tokens	6
Funerary*	remembrance	4
Funerary*	Post	4
Funerary*	life	3
funerary	Japan	2
funerary	complex	2

〈Table 2〉

Term	Collocate	Count (context)
body	bags	5
body	tiny	3
body	laird	3
body	farm	3
body	away	3
body	wanting	2
body	waiting	2

〈Table 3〉

1) Collocates of *plague* (Table 1)

The collocational pattern surrounding *plague* is dominated by institutional and categorical terms such as *wards* and *patients*. This suggests that disaster is initially processed administratively in the novel, organized through medicalized and institutionalized frameworks that categorizes people and manage the crisis.

2) Collocates of *funeral/funerary* (Table 2)

Here, *funerary* collocates primarily locate the term within spatial and economic vocabulary such as *tower*, *complex*, *tokens*, marking a shift from affective response to infrastructural organization of these affects. Rather than as a personal, intimate emotional practice, mourning becomes an infrastructural and transactional practice. Grief here becomes infrastructure subject to market logics. This finding connects back to earlier *R/quanteda* and Orange analyses, which similarly position mourning within regimes of service and commodification. Together, these results support an argument about the repeated construction of mourning as an industrialized, serviced, and spatially regulated practice.

3) Collocates of *body* (Table 3)

Body is a seemingly neutral and descriptive terminology, but dominant collocates surrounding the term—*bags, farm*—locate it directly within the context of the plague response. Rather than referring primarily to individual identity, *body* is repeatedly framed through biopolitical practices of containment, transport, disposal, and forensic/pathological examination. Body farms are created for forensic specialists to study the spread of the virus in dead bodies in Chapter 7 “Songs of Your Decay,” indicative of the organized and institutionalized efforts to find the cure.[4] As a forensic pathologist, Aubrey studies cadavers at the body farm to examine the virus; one of the cadavers, nicknamed “Alice” by the narrator, is held down by ankle weights in an artificial pond, for forensic students to study the rate of decay in water, “sits peacefully … her arms raised toward the sky as if in deep prayer” (151). Together, these associations indicate a semantic shift in which the human body is

abstracted from personhood and reconstituted as an administrative unit within crisis governance. This pattern underscores how the novel registers death both as an affective event but also as a target of management through infrastructural and bureaucratic means.

V. Conclusion

This article adopts scalable reading as a methodological framework that moves between different levels of analytical resolution, synthesizing literary interpretation and computational analysis. Rather than pursuing generalizable patterns across a large corpus through a distant reading methodology, the analysis remains centered on a single novel, using word frequency, topic modeling, sentiment analysis, customized dictionary analysis, and collocational patterns to trace the novel's thematic and affective elements. Computational results function as heuristic prompts that draw attention to moments of affective concentration, semantic association, and tonal modulation, which are recontextualized through close reading. The use of multiple computational methods was not intended to produce exhaustive or definitive measurements of the text, but to render more visible patterns of affect, emphasis, and association that may go otherwise unnoticed through close reading alone.

This methodology, aligned with Raymond Williams's concept of structures of feeling, gestures toward the novel's underlying context of climate crisis, which, while not dominant, shapes the novel's overall mood and imagination. In a fragmented, omnibus narrative that stages crises across temporal and spatial horizons and through individual experiences, scalable reading mirrors the genre's own epistemological movement between micro-level human experience and macro-level systemic

transformation. The customized dictionaries operationalized thematically informed categories, tracing the responses to catastrophe in the novel through the themes of death, mourning, technology, and commercialization that cannot be classified definitively into existing systems in their differentiated representations across the chapters. Sentiment analysis also functioned as a heuristic for identifying shifts in affective intensity and tone across episodes, while word frequency analysis mapped the novel's lexical prominence, enabling relational patterns to be highlighted. The discovery provided a needed revision to approaching the novel's thematic representations. Collocational analysis further revealed how affective experiences of death are repeatedly incorporated into administrative and infrastructural frameworks.

The interpretive results suggest that the novel's engagement with technology and commercialization is most legible not in isolated terms or momentary emotional shifts, but in the ways these infrastructures are normalized as part of mourning, care, and the navigation of uncertainty. As Matthias Stephan's suggestion, the novel's structures of feeling do not stop in its anxieties about the slow violence that surrounds our environment, but registers hope and anticipation: "working through iterations of trauma, even in (speculative) fiction, allows us a means to confront our anxieties—climate, environmental, social—and provides a roadmap to move from the arresting notion of fear towards a more productive call to action" (438). In Lincoln Michel's words, the novel suggests that we could react to the Anthropocene through *mourning* (Michel).

These methods support a scalable yet theoretically grounded engagement the novel's representation of planetary crisis. While situating affect not as a purely personal response but as a patterned and socially organized experience, the novel's representation of these infrastructures is ethically ambivalent because they are simultaneously systems of control and a practical condition of endurance. The

findings make it possible to grasp as articulating a distinctly twenty-first-century structure of feeling, one that is shaped by anticipatory loss, infrastructural mourning, and the ongoing negotiation between human vulnerability and enduring hope.

Notes

1) Rather than fully articulating a planetary consciousness, the novel translates global crisis into intimate, human-centered affect. What emerges is not a planetary structure of feeling in a strict ecological sense, but a post-pandemic configuration of mourning and attachment shaped by shared vulnerability and the commodification of grief. The text gestures toward interdependence beyond the human, yet ultimately returns to fragile, personal forms of care, revealing the limits—and the necessity—of human-centered meaning-making within late-capitalist systems.

2) The term Anthropocene—even after its rejection as a formal geological epoch by the International Commision on Stratigraphy (ICS) in 2024—remains a powerful cultural prism for understanding human impact on the planet and its existential risk, precisely because it the term refers to a felt sense of deep environmental change and uncertainty, as well as a sense of ethical responsibility, rather than a settled scientific category (Jan Zalasiewicz et al.).

3) In one of the stopword tests, I have removed relational nouns such as ‘father,’ ‘mother,’ ‘friend,’ along with names of individual characters, but after comparing several test results, I concluded that the relational nouns were not mere “noises” but an indicator of the novel’s narrative trend. While removing these terms highlighted disaster-related terms, the relational nouns helped make sense of the novel’s dominant feelings and symbols.

4) “Laird” is a name of a patient who donates his body to allow the forensic scientists to study the virus on both a living and dead subjects.

Works Cited

Armaselu, Florentina and Andreas Fickers, editors. *Zoomland: Exploring Scale in Digital History and Humanities*. De Gruyter, 2024.

Ciabattari, Jane. "Sequoia Nagamatsu on Writing the Grief and Connections of an Enduring Pandemic." *Literary Hub*, 25 Jan. 2022, lithub.com/sequoia-nagamatsu-on-writing-the-grief-and-connections-of-an-enduring-pandemic/.

Demšar, Janez, et al. *Orange: Data Mining Toolbox in Python*. Version 3. 37. 0, University of Ljubljana, Bioinformatics Laboratory, 2024, orange.biolab.si.

Drucker, Johanna. "Why Distant Reading Isn't." *PMLA,* vol. 132, no. 3, 2017, pp. 628-35.

Finch, Cameron. "A Cosmic Wade Through Uncertainty: Talking with Sequoia Nagamatsu." *The Rumpus*, 3 Jan. 2022. therumpus.net/2022/01/03/a-cosmic-wade-through-uncertainty-talking-with-sequoia-nagamatsu/.

Jänicke, S., et al. "Visual Text Analysis in Digital Humanities." *Computer Graphics Forum,* vol. 36, no. 6, 2017, pp. 226-50.

Jeon, Bomi. "James Joyce's Dublin and Park Taewon's Jyungseong: Sentiment Analysis and the Representation of Colonial Urban Space." *In/Outside: English Studies in Korea,* no. 56, 2024, pp. 57-90.

Kaplan, E. Ann. "Coda: Climate Trauma Reconsidered." *Languages of Trauma: History, Memory, and Media*, edited by Peter Leese et al., U of Toronto P, 2021, pp. 384-95.

Michel, Lincoln. "In a Virus-Stricken Future, Humanity Endures Amid the Grief." *The New York Times,* 18 Jan. 2022,

www.nytimes.com/2022/01/18/books/review/sequoia-nagamatsu-how-high-we-go-in-the-dark.html.

Mueller, Martin. "Shakespeare His contemporaries: Collaborative Curation and Exploration of Early Modern Drama in a Digital Environment." *DHQ: Digital Humanities Quarterly*, vol. 8, no. 3, 2014.

Nagamatsu, Sequoia. *How High We Go in the Dark*, William Morrow, 2022.

Piper, Andrew. "Think Small." *PMLA,* vol. 132, no. 3, 2017, pp. 651-58.

Posit Team. Version 2025.09.2.-418, Posit Software, 2025, posit.co.

R Core Team. Version 4.5.2, R Foundation for Statistical Computing, 2016, www.r-project.org.

Scranton, Roy. "Learning How to Die in the Anthropocene." *The New York Times*, 10 Nov. 2013. archive.nytimes.com/opinionator.blogs.nytimes.com/2013/11/10/learning-how-to-die-in-the-anthropocene/

Sinclair, Stéfan, and Geoffrey Rockwell. *Voyant Tools*. Version 2.6.19. Computer software. McGill University, 2026. voyant-tools.org/. Local installation.

Stephan, Matthias. "Memory, Identity and Nostalgia: Facing Life Loss at the End of Days." *Parallax,* vol. 30, no. 4, 2024, pp. 426-41.

Williams, Raymond. *The Long Revolution*. Penguin Books, 1965.

_____. *Marxism and Literature*, Oxford UP, 1977.

Zalasiewicz, Jan et al. "The Meaning of the Anthropocene: Why it Matters Even Without a Formal Geological Definition." *Nature,* no. 632, 2024, pp. 980-84.

Chapter-wise Meaning Field Proportion (Normalized)

doc_id	memory	death	technology	commerce
Ch.1	0.002529975	0.001759982	0.0013199868	0.0001099989
Ch.2	0.001399580	0.001599520	0.0016994902	0.0006997901
Ch.3	0.002460781	0.001076592	0.0006151953	0.0000000000
Ch.4	0.002781414	0.001472513	0.0049083770	0.0006544503
Ch.5	0.002822467	0.004233700	0.0004233700	0.0055038103
Ch.6	0.003262643	0.002936378	0.0047308320	0.0034257749
Ch.7	0.002844017	0.003500328	0.0022970904	0.0004375410
Ch.8	0.001125809	0.001688714	0.0036588798	0.0014072615
Ch.9	0.002608457	0.003706755	0.0013728720	0.0006864360
Ch.10	0.004486134	0.002039152	0.0004078303	0.0016313214
Ch.11	0.002965159	0.002668643	0.0034099333	0.0026686434
Ch.12	0.002315581	0.002315581	0.0000000000	0.0016539861
Ch.13	0.003300330	0.002400240	0.0015001500	0.0021002100
Ch.14	0.001840491	0.002658487	0.0002044990	0.0000000000

〈Appendix 1〉 Normalized dictionary-based mentions

국문초록

종말의 시대와 행성적 감정구조:
『우리는 어둠 속에서 얼마나 높이 닿을까』의 디지털 독해

신 정 주
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본 연구는 세콰이아 나가마츠의 SF 소설 『우리는 어둠 속에서 얼마나 높이 닿을까』(2022)를 디지털 인문학과 문학비평을 결합하여 분석하며, 이 작품이 재난, 죽음, 애도를 기술적으로 매개되고 제도적으로 조직된 과정으로 그려내는 방식을 고찰한다. 레이먼드 윌리엄즈의 개념을 이론적 바탕으로 하여, 본 논문은 이 소설이 미래에 대한 예기된 상실에 의해 형성된, 21세기의 새로운 감정구조를 드러낸다고 주장한다. 소설은 전지구적 팬데믹이 일어난 가상의 근미래와, 지구온난화라는 잠재적 위협을 배경으로 하고 있다. 본 연구는 어휘분석과 감성분석을 결합함으로써 텍스트 내부의 정서적, 의미적 분포를 추적하고자 한다. 소설 속 팬데믹과 기후위기에 대한 상상은 위기관리, 돌봄, 감정통치에 관한 현대의 기술관료적·생명정치적 논리를 확장하는 지배적 가치체계에 의해 구조화되어 있지만, 동시에 가족적 유대, 돌봄의 윤리, 상속된 애도 관행과 같은 잔존적 문화형식들이 지속적인 재난상황 속에서 재구성된다. 이러한 맥락에서 소설은 인내와 수용을 지향하는 새로운 감정구조를 드러내며, 여기서 애도의 일상화, 돌봄의 현재화를 통해 생존과 애도에 관한 새로운 윤리가 형성된다.

주제어: 『우리는 어둠 속에서 얼마나 높이 닿을까』, 세콰이아 나가마츠, 디지털인문학, 감정구조, 애도, 재난

논문접수일: 2026.1.15
심사완료일: 2026.1.30
게재확정일: 2026.2.08

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