

ELDARNIR. ÁSTIN OG AÐRAR HAMFARIR (THE FIRES)

Sigríður Hagalín Björnsdóttir

Analysis by Valérie Tosi

Eco-Fiction, Dystopian Novel

In Sigríður Hagalín Björnsdóttir's dystopian novel *The Fires* (2020), volcanic unrest in south-western Iceland mirrors the professional crisis and emotional turmoil of volcanologist Anna Arnardóttir. In this novel, the volcanoes of the Reykjanes Peninsula are both creators and destroyers, embodying nature's indifference, memory, and renewal. The eruptions reflect buried emotions, cultural identity, and the limits of scientific control in the face of primordial, uncontrollable forces.

Year of Publication	2020
Publication Place	Reykjavík
Editor	Benedikt bókaútgáfa
Entity	Eruption of the Volcanic Systems on the Reykjanes Peninsula

GEOLOGICAL ANALYSIS

Volcanic eruption Eruption of the Volcanic Systems on the Reykjanes Peninsula

LITERARY EVENT

Time	around 2022
Location	Reykjanes Peninsula Iceland
Coordinates	63.810066, -22.711486
Impacted Areas	The Reykjanes Peninsula
Emphasis Phase	Pre-disaster (causes / context), Disaster (phenomenal and social dynamics)
Base/Complex	The Reykjanes Ridge
Volcanic Risk Ref.	Referenced



INDIVIDUAL REACTIONS & AFFECTS

Attitudes

Name	Anna Arnardóttir
Age	Adult
Gender	Female
Native Place	Iceland
Nationality	Icelandic
Reactions	Anxiety Apprehension Discomfort Awareness Distrust In Authorities Acceptance Curiosity Fascination Caution

Name	Kristinn Fjalar Örvarsson
Age	Adult
Gender	Male
Native Place	Iceland
Nationality	Icelandic
Reactions	Calm Fatalism Acceptance Adaptation

Name	Milan Petrovic
Age	Adult
Gender	Male
Native Place	Yugoslavia
Nationality	Yugoslavian
Reactions	Calm Caution

Name	Jóhannes Rúriksson
Age	Adult
Gender	Male
Native Place	Iceland
Nationality	Icelandic

Reactions

Calm

Awareness

Scepticism

Name Elísabet Kaaber 'ebba'

Age Adult

Gender Female

Native Place Iceland

Nationality Icelandic

Reactions

Trust In Authorities

Name Sigríður María Viðarsdóttir

Age Adult

Gender Female

Native Place Iceland

Nationality Icelandic

Reactions

Distrust

Disregard

Denial

Scepticism

Name Tómas Adler

Age Adult

Gender Male

Native Place Iceland

Nationality Icelandic

Reactions

Wonder

Fascination

Reactions

Name Anna Arnardóttir

Age Adult

Gender Female

Native Place Iceland

Nationality Icelandic

Reactions

Fight For Survival

Intervention

Terror

Panic

Despair

Cooperation

Solidarity

Resignation

Name Tómas Adler

Age Adult

Gender Male

Native Place Iceland

Nationality Icelandic

Reactions

Self-Absorption

Cowardice

Terror

Panic

Name

Kristinn Fjalar Órvarsson

Age

Adult

Gender

Male

Native Place

Iceland

Nationality

Icelandic

Reactions

Panic

Passiveness

COLLECTIVE REACTIONS & AFFECTS

Attitudes

Name

Scientists

Reactions

Awareness

Distrust In Authorities

Anxiety

Apprehension

Acceptance

Name

Politicians

Reactions

Distrust

Unawareness

Disregard

Denial

Compensation

Acceptance

Name

The civil defense

Reactions

Anxiety

Apprehension

Distrust In Authorities

Name

Business people

Reactions

Distrust

Disregard

Denial

Unawareness

Compensation

Acceptance

Affects/Reactions

Name

The civil defense

Reactions

Intervention

Cooperation

Rage

Solidarity

Name

Common people

Reactions

Fight For Survival

Terror

Solidarity

LINGUISTIC & STYLISTIC ANALYSIS

Keywords	Sigríður Hagalín Björnsdóttir	Reykjanes Peninsula	Volcanic Unrest
	Emotional Vs Rational Dichotomy	Geocultural Amnesia	Icelandic Identity
	Geological Time	Volcanic Prediction	Seismic Monitoring
	Dystopia		
Metaphors	"the gateway to hell" (Björnsdóttir 25)		
Similes	"as if the gates of hell have opened, as if evil is streaming into Eden unchecked" (Björnsdóttir 40)		
Motifs, Topoi, Mythologemes	Locus Horridus	Hell	Cruel Nature
	Deified Nature	Deities	
	Fire	Hyperdisaster	Civilisation
	Technocracy		
Syntax	Complex Noun Phrases, Hypotaxis		
Punctuation	Multiple Commas, Multiple Stops		

Set in a near-future Southwest Iceland, where seismic activity on the Reykjanes Peninsula heralds a major volcanic crisis, Sigríður Hagalín Björnsdóttir's novel *The Fires* (2020) deals with the lives of geologist Anna Arnardóttir, her family and her professional circle in the six months preceding the catastrophe. Amid personal and sometimes painful memories, family obligations, and professional duties, Anna grapples with existential reflections on nature and love. In this way, the novel interweaves human relationships with geological forces, underscoring how people can be vulnerable to emotional and natural processes that defy their blind faith in reason and its power to predict the course of events in times of crisis.

The opening chapters introduce Anna, professor of volcanology and director of the Institute of Earth Sciences at the University of Iceland, her husband Kristinn, and their two kids, 23-year-old Órn and 8-year-old Saska. Anna and Kristinn's marriage, solid in appearance, has gradually frayed under emotional distance and buried resentments. Anna's beloved father, now deceased, was a geologist who instilled in her a fondness for volcanoes, while her mother, terminally ill with cancer, is a writer who has never been able to give her the love she needed.

At the beginning of the novel, the literary device of personification is used to characterise the Reykjanes Peninsula as a monstrous living being with a "blazing heart", an "insatiable hunger", and "a black tongue that protrudes from [her] red jaw", while human beings are just "insect[s] in her dark, velvety palm". The body earth metaphor emerges also in the chapter "Pavane for a dead princess", where, still a child, Anna tastes grains of lava sand and realises that "they tast[e] of blood" (8). Finally, in the chapter "The European Research Council", the magma is compared to "a fetus at full term, pressing on the membrane encasing it and searching for a way out" (148). These metaphors and comparisons – which shift from the semantic field of monstrosity to that of childbirth – disclose Anna's final realisation that relying on feelings, and reading the earth as a living body not so different from the human body, could have made her better understand the nature and behaviour of the Reykjanes Peninsula.

In Björnsdóttir's novel, volcanoes are not inherently evil entities, embodying instead "the dawn of life and its dusk" depending on geological timescales and ecosystem dynamics. In the chapter "The Door was open", the author quotes Páll Imsland's assertion that "Natural disasters *here* aren't necessarily natural *disasters there*. Natural disasters *now* won't necessarily be natural disasters in ten years" (127, emphasis in original). In the "Explanatory Note I", the author describes the volcano Hekla as "the

virgin princess, the dragon that hovers over the fertile lands in the south of the country, the gateway to hell" (25), drawing on historical and literary sources to depict the setting of the novel. In his 1880 volume *Liber de Miraculis*, Cistercian monk Herbert of Clairvaux, compared Hekla to Etna, calling the latter a "small furnace compared to this enormous Inferno" (Þórarinsson 5); in the 16th century German scholar and physician Caspar Peucer wrote that the Gates of Hell could be found "in the bottomless abyss of Hekla Fell" (5). The personifications and metaphors used by Anna characterise Icelandic volcanoes as geological entities that can either herald life – by originating fertile soils – or function as gateways to the underworld. The ambivalent nature of volcanic phenomena is a theme that permeates the whole novel and contributes to outlining an image of Icelanders as "the progeny of those who survived, with fire, ash, and hunger in [their] DNA" (28). Later, Anna clarifies how "the country's volcanic activity [is] part of [Icelanders'] self-image" (28), an eco-cultural construct that can have drawbacks in terms of risk awareness and mitigation.

When a three-week earthquake swarm off the coast of the Reykjanes Peninsula does not want to stop, the members of the Icelandic Institute of Earth Sciences gather to discuss the situation. As earthquakes and minor volcanic activity are quite common in the region, hardly anyone is worried about the recent seismic activity. Volcanologist Jóhannes Rúriksson, for example, maintains that "The Ridge is shaking, like it's always done" (16), and reads Anna's concern as "hysterics" (16). His view shows how Icelanders' self-image and the prolonged repose time of some of their volcanic systems might hinder their perception of volcanic risk by leading to complacency and reducing alertness to potential eruptions. By contrast, Anna knows that "the Ridge is capable of anything" (17), and when she talks to the media, she points out how "volcanoes don't have a schedule" (35) and it's always difficult to predict their behaviour. Besides cultural beliefs and habits, another factor that could hamper risk assessment and mitigation is poor equipment, as underscored by Júlíus from the Icelandic Metereological Office (36).

In the chapter "Under our feet beats a burning heart", a first submarine eruption occurred in a fissure on the bottom of the ocean off the coast of Kerlingarbás Cove alerts the members of the Institute of Earth Sciences. Anna is recruited to fly over the area, check the phenomenon, and inform the reporters and photographers on the helicopter of the current situation. In this chapter, the author clarifies Anna's rationalist way of thinking: in her view, "Scientists have to stick to facts and scientific conclusions" (22); by contrast, a journalist representative of the public opinion objects that "Mother Nature [...] is pure chaos" (22) and does not follow predictable schemes. During the flyover, Anna describes the geological conformation of the Reykjanes region, explaining that "the eruptions occur in a fracture zone that extends from Reykjanes, around the Svartsengi and Krysuvík geothermal areas, and all the way to the Brennisteinsfjöll Mountains" (20). When a reporter wonders why Reykjavík was built on a volcanic region, Anna states that after the major historical eruptions, people "forgot" (21), and adds: "Human history goes much faster than geological history, we have such short memories" (22). However, in a context where geocultural amnesia hinders risk awareness and preparedness, topography could help people to understand the nature of their country. In this regard, Anna points out how Icelandic toponyms such as Háibruni (High Fire), Óbrennishólmi (unburnt islet) relate to eye-witnessed volcanic events occurred in the thirteenth century. Reflecting on the meaning of these names, Icelanders should be aware of the fact that they live "on the top of a hot spot, over a melt zone in the mantle where magma forms" and that "Under [their] feet beats a burning heart [without which their] country simply wouldn't exist" (22). This latter passage sheds light on the double nature of volcanoes as creative and destructive forces, an aspect that is reiterated also in the chapter "Volcanoes are boring", when Anna tells her daughter that "Everything [on earth] came into being in a volcanic eruption [...] Even the atmosphere around the planet" (71)". When three days later an explosive eruption pours lava, lapilli, and ash on the city of Keflavík, Anna realises that the Iceland Meteorological Office's alert system on her phone came late to arrange successful evacuation plans, and acknowledges that early warning systems can be easily defeated by Mother Nature's 'pure chaos'.

In the chapter "There's no such thing as Eden", when Anna flies a second time over the Reykjanes Peninsula on a Coast Guard's aircraft to monitor the eruption, she comments on the scene with these words:

It's as if the gates of hell have opened, as if evil is streaming into Eden unchecked, and I suddenly feel a primal, gut-level fear wash over me. It surprises me, I've got to get a hold of myself, remind myself

that there's no such thing as creation or hell, that this eruption isn't evil, just a product of the earth, like me and everything else [...] it's simply adhering to the laws of nature (40).

Anna initially reacts with primal fear, using similes to express a vivid, religious imagery that evokes Judeo-Christian symbolism, where natural disasters are read as manifestations of demonic forces. However, she soon rejects this religious framework, denying supernatural constructs such as creation and hell, and grounding her observations in empirical reality. In this passage and throughout the novel, there is a predominance of noun phrases over verb phrases that reflects a deliberate stylistic choice. The use of noun constructions and hypotaxis is coherent with the abundance of descriptive, explanatory and introspective passages that often use symbolism to draw connections between physical elements and internal states. Verbal phrases are functionally central to the rhythm and emotional flow, often expressing a conflict between sensations and rational distancing. On a stylistic level, the high frequency of commas creates a sense of sensory and emotional overload, contributing to express Anna's inner turmoil, while ellipses and fragmentation reflect feelings of disorientation, fear and astonishment.

In one of the following chapters, “The creation of the world – or its destruction”, this tension between Anna's primal feelings and her rational approach is reiterated through the words of Tómas Adler, a photographer who was on the Coast Guard's plane with her. Adler, who took a picture of Anna looking at the eruption, states that such image represents a revelation-like scene: Anna “witnessed the resurrection, the creation of the world—or its destruction” (93). Despite her intelligence and professionalism, she was “spellbound and vulnerable” (93) against the forces of nature, unveiling how every human being is at the mercy of nature's alternatively creative and destructive chaos.

As the earthquakes start up again in the spring, tensions rise between scientists, politicians, the police, and the representatives of Iceland's tourism industry over how to handle the chance of a volcanic disaster. Björnsdóttir dramatizes three main approaches to risk preparedness: scientific, institutional, and financial, presenting a linear model of volcanic eruption management that reveals itself to be flawed in practice. In a linear model, scientists produce evidence that is then presented to policymakers and finally communicated to the public. Björnsdóttir shows how this model is actually “not linear but web-like” (Donovan and Oppenheimer 153), with decisions being interrogated by stakeholders. Furthermore, she unveils how the lack of dialogue between the scientific world, governments, and markets has detrimental effects on disaster risk management. While Anna reads early seismic signals as precursors to a potential eruption and bases her recommendations “on scientific fact and public safety” (85), her warnings are downplayed by bureaucrats, managers, and officials “who're more interested in regulations than in geoscience” (51), prioritizing image and business issues over risk assessment and response planning. The author also focuses on the lack of communication between scientists and industry representatives because of their different languages; if volcanologists and geologists use technical jargon to illustrate volcanic phenomena, businesspeople prefer the market jargon. When Anna hypothesizes a phenomenon of “magma intrusion”, Sigríður María Viðarsdóttir, executive director of the Icelandic Travel Industry Association, states that Anna's explanation is “complicated and jargony” (98), and refuses to learn more about what is happening on the Reykjanes. In her view, “a photogenic volcanic eruption” (98) is always marketable, while a “magma intrusion” is just something that “is going to have a negative market impact” (98). Similarly, the national commissioner of the Icelandic Civil Protection, a corrupted man unable to perform his duties with responsibility, lists a series of “interests at stake—foreign exchange earnings, Iceland's reputation as a tourist destination, the GDP, people's standard of living” (101) as the nation's priorities in times of volcanic crisis. Even though Anna and her colleagues reject to spin a version of the truth that suits the government or interest groups and call for a lift of the preparedness level to the Alert Phase, the commissioner of the Civil Protection decides to maintain the Uncertainty Phase.

The author skilfully merges scientific discourse with poetic and literary language. Scientific sources ground the narrative in empirical reality and reflect the protagonist's professional identity as a geologist, while poetic fragments imbue the narrative with cultural references and emotional depth. This hybrid narrative mode anchors the reader in geological realism while elevating the narrative into a lyrical meditation on nature, memory, and existential fragility. Björnsdóttir builds on scientific texts written by Icelandic volcanologists, geologists, geophysicists and petrologists to present the geological setting of the Reykjanes Ridge, clarify technical jargon regarding the internal structure of

volcanoes, and offer brief descriptions and explanations of different kinds of eruptive phenomena. The mentioned scholars and experts are: Ármann Höskuldsson, Einar Kjartansson, Árni Þór Vésteinsson, Oddur Sigurðsson, Örn Ögmundsson, Páll Einarsson, Freysteinn Sigmundsson, Magnús Tumi Guðmundsson, Sigurður Steinþórsson, Páll Imsland, Kristján Sæmundsson, Magnús á Sigurgeirsson, Einar Gunnlaugsson, and Bryndís Brandsdóttir. Excerpts from their studies are used as epigraphs at the beginning of some chapters, and deal with mantel plumes (15), phreatic eruptions or *tætigos* (29), the structure of the Fagradalsfjall volcanic system (68), the emission of volcanic gases (119), the intervals of volcanic eruptions (133), the composition of volcanic rocks and minerals such as olivine (139), the melt zone in the mantle (155), fissure swarms (163), effusive eruptions (*flæðigos* or *hraungos*) and lava shield eruptions or *dyngjuggos* (201), the dolerite bedrock under Reykjavík (207), Iceland's volcanic fissures (227), the Mid-Atlantic Ridge's faulting (233) and the phenomenon of nuée ardente or “burning cloud” (247). Two epigraphs – the first taken from a lecture by Páll Einarsson at the University of Iceland and the second from an internal memo by Ólafur G. Flóvenz on Iceland Geosurvey – present the theme of unpredictability related to volcanic behaviour: on the one hand, direct experience has taught scientists that also their favourite volcanoes “can turn on a dime and [they] need to be on [their] guard against them”(25); on the other, scientific modelling should be “taken with caution” (185) because it is never wholly reliable. In the chapter “Under our feet beats a burning heart” also Anna maintains that “the Ridge is capable of anything” (17). Flóvenz's consideration is echoed in the words of Anna's father when he told her that simulation models “[a]re no guarantee of anything” (278). While science helps volcanologists to run models, such modes are not ‘scientific’ in terms of precision and infallibility.

Four chapters in the first half of the book are introduced by verses from predominantly Icelandic poets. These epigraphs are excerpts from Anna Akhmatova, Hannes Sigfússon, Matthías Johannessen, and Ingibjörg Haraldsdóttir's poems. Some verses from Akhmatova's “You will hear thunder” open a chapter focused on Anna's difficult relationship with her mother, and disclose one of the main topics of the novel: the connection between natural phenomena and the characters' inner turmoil. Introducing Verðandi, the Scandinavian Norn of fate who forges “shafts of fire” (55), Sigfússon's “Dymbilvaka” (“Fire Signals”) sheds light on how Icelandic cosmogony reflects a “history written in cinders” (55), namely a history of volcanic eruptions recurring at unpredictable intervals over the past millennia and centuries. Through the image of the “mythological fire” (115) mentioned in Johannes's “Glíma við Fjallið” (“Wrestling with the Mountain”), the author introduces a reflection on the clash between contemporary science and past superstition, and underlines how Icelanders, differently from the Italians and the Hawaiians, “never really embraced these mythologies but have approached volcanic eruptions with an ice-cold empiricism” (116). In Björnsdóttir's novel, Anna's ice-cold empiricism turns out to be detrimental to her ability of ‘feeling’ the burning heart of her country. The last four lines of Haraldsdóttir's poem “Kvika” (“Magma”) deal with the theme of forgetting related to volcanic risk. In this poem, volcanic activity is compared to a nightmare, a mountain devouring a man. The event is described as a long-forgotten nightmare, so it is not merely a memory, but a trauma buried deep in the mind that resurfaces like an echo in the subconscious. “Eldgröf” (“Grave of Fire”) by Einar Benediktsson closes chapter “Aesthetics: Plagioclase, Magnetite” (161). In this poem, Hekla is not just an erupting volcano but a personification of Iceland, characterised as a sleeping queen who suddenly turns into a proud warrior, destroying pastures and farms. As previously mentioned, by combining technical jargon with poetry, the novel's hybrid form enriches the reader's understanding of both Iceland's physical and cultural worlds, while situating personal and planetary cataclysms within the same conceptual frame.

As the seismic activity intensifies, volcanologists and meteorologists begin to debate about the origin of the quakes; volcanologists look for magmatic chambers, while the Met officers think that the crustal deformations and quakes are a result of changes in the geothermal systems. Their differing views and inability to offer a coherent interpretation of the geological phenomena on the Reykjanes Peninsula prevent them from changing the preparedness level. As several scholars have observed, the alternance of cycles of volcanic quiescence and periods of unrest

requir[e] inter-disciplinary interaction, and if relationships and procedures are not well established and practiced before, considerable uncertainty can arise in its management due to problems with inter-agency communications, collaborations, and the understanding of each others' roles, responsibilities, and inter-dependencies [...] particularly when under high pressure, short time situations characterized

by high ensuing risk and stress. (E. H. Doyle et. al 76)

In all the circumstances of her professional life, Anna has always rejected to rely on feelings, basing on scientific measurements and data. During the earthquake swarm she asserts that “feelings don’t count” (147) and that volcanologists must read instruments, monitor the data, measure “earthquake amplitude, surface movements, changes in surface tilts, gas emissions” (147). Ignoring her feelings about the magma’s movement under the earth’s crust, she scribbles an equation representing the relationship between shear stress, shear rate, and dynamic viscosity on a scrap of paper, reflecting on the fact that “volcanic activity is simply a matter of time, the pressure exerted on magma, and resistance of the surrounding rock” (148).

Björnsdóttir’s novel illustrates how people often dismiss early warning signs, whether seismic activity or tension in relationships, until a crisis makes them impossible to ignore. This highlights a common human habit of avoiding difficult truths until circumstances demand acknowledgment, mirroring real-world shortcomings in disaster readiness. As the seismic and volcanic activity on the Peninsula increases, Anna falls in love and starts an affair with Tómas Adler. While Anna upholds the scientific method and empirical evidence, Adler embodies the world of art, maintaining that it is poetry that gives human beings a higher purpose, making them able to describe the beauty of the world. Adler argues that “Without poetry, we’re just brute beasts on a trembling earth” (159); by contrast, Anna’s father taught her that “Without science, we’re just animals at the mercy of nature’s forces” (230). Anna finds herself trapped between these antithetical perspectives, unable to balance her feelings and rational arguments.

Volcanoes’ capacity to create life and wreak devastation mirrors Anna’s relationship with Tómas: their love is frequently depicted in volcanic imagery, emphasizing its intense yet destructive nature. Anna herself asserts that “Love is nothing but a natural disaster” (197). In this emotional context, eruptions mark turning points, both literal and metaphorical, reminding characters that life is shaped not only by reason and will, but by elemental, unpredictable, and untameable forces.

Anna gradually realises that the project models created by the Institute of Earth Sciences are deficient and that Reykjanes “will not allow itself to be managed” (174). Only when she truly ‘feels’ her own body by recalling the birth of her children, she has a sort of epiphany:

I drag my fingertips across my stomach and look at the map on the wall above me. Think about red fissure swarms and silver-white stretch marks, life rolling under the surface, and all of a sudden, it’s as though a blinding light flashes before me, I can see it, and yet it can’t be. It defies all logic. (177)

Building on this “feeling that came over [her] totally out of the blue” (179), and some articles written by her father, Anna hypothesizes that the Reykjanes is not a set of small volcanic systems but a big system with many egresses. What triggers Anna’s intuition is a combination of sensations, emotions, and memories rooted in her father’s storytelling. At the beginning of the novel, she revealed that her father “was a storyteller, like all good geoscientists” (57), and later recalls that he described the Peninsula as a “living, bleeding, breathing earth [with] the blood flooding into the heart and out of it again, the veins dilatating and contracting once more” (183). In a nutshell, the ‘poetic’ language of his stories, namely a figurative language that compared the earth to a living body, would allow him to decipher geological signals and explain phenomena that scientific models and formulas could not interpret accurately.

In the last few chapters the events gather pace: a 7.0 magnitude earthquake destroys houses, roads, and facilities in the capital area; new volcanic fissures open on the Reykjanes Peninsula; a phreatic eruption begins at Kleifarvatn Lake; another eruption begins off the coast beyond Kerlingarbás Cove; a new more powerful lava flow forces its way through the fissure swarm and surfaces at the southern end of the Ellíðavatn Lake. Anna finds herself disoriented in an alien wasteland, realising that science’s weapons against the forces of nature can be useless. She “trusted prediction models and called them scientific fact, allowed pride to impede [her] vision, was blinded by foolish, excessive faith in [her] own wisdom” (271) ignoring instead other voices –in her head but also from the past– that tried to warn her.

Anna’s daughter Saska dies in their house during the volcanic catastrophe, suffocated by carbon dioxide while trying to save her degus. This tragic event represents the ultimate failure of Anna’s

attempt to balance her roles as scientist, lover, and mother. Anna's purported death by suicide at the end of the novel is not a mere act of despair but a surrender to the mighty forces she has studied and tried to control all her life. Her lying on the bed next to her deceased daughter and singing Ravel's *Pavane for a Dead Princess* is described in a dreamlike and poetic language that expresses her conscious walk into geological annihilation, a merging with the molten earth, as if returning to its elemental core.

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