

Leena Romu: Dystopian comics as cautionary tales about the future of the Arcticⁱ

Introduction

Melting glaciers have become a recurring motif in the imageries of climate change and a dominant way to depict the effects of global warming. This chapter examines how the images of melting glaciers are used in dystopian comics that imagine grim futures for the Arctic region. The chapter examines how representations of Arctic nature intertwine with the dystopian rhetoric of the narratives, the chosen examples being cautionary tales that warn about the consequences of contemporary society's problems.

In the chapter, I analyse two Finnish graphic novels, *The Sands of Sarasvati* (2008), an adaptation of the novel by Risto Isomäki, and *Scandorama* (2018), a collaboration between writer Hannele Mikaela Taivassalo and artist Catherine Anyango Grünwald. Isomäki's *The Sands of Sarasvati* (originally published in Finnish as *Sarasvatin hiekkaa* in 2005) is regarded as one of the most notable ecological dystopias in contemporary Finnish literature (Lahtinen 2018, 79).ⁱⁱ The graphic novel adaptation by Petri Tolppanen and Jussi Kaakinen follows the basic plot of the novel: in the 2020s, environmental researchers notice that the rapidly increased melting of the Arctic glaciers will cause an imminent threat to humankind. They begin a desperate journey to prevent the disaster, but the measures come too late and an enormous tsunami wipes out most of the world's population. Published ten years later, *Scandorama* draws inspiration from the transnational boom in dystopian fiction and imagines a future where the Nordic countries of Finland, Sweden, Norway and Denmark form a utopian state called Neoscandia. Despite the state's utopian ideals of beauty and cleanliness, the reality is built upon the oppression of people and exploitation of the environment.

I approach comics as a medium with certain affordances and restrictions for storytelling. The formal qualities of comics have already fascinated classical narratologists (see e.g. Chatman 1978), but in recent years, the area of narratological comics studies has developed further, taking into consideration not only the interaction of words and images, but also the importance of the usage of space and drawing style (see Gardner & Herman 2011; Mikkonen 2017). My methodological point of departure is to consider the spatial aspects of comics storytelling (Groensteen 2007) in relation to rhetorical narratology's idea of storytelling as a communicative act where the resources of texts are used to accomplish certain aims and provoke reactions from the audience (Phelan 2017, 5–6). By focusing on the spatial aspect of comics storytelling, I will be able to point out how the usage of space is a significant device for affecting and persuading the reader, and how this medium-specific aspect functions when the narrative's aim is foremost to warn the reader.

In the Nordic countries, the Arctic environment has been a subject for several comics artists – or at least Arctic nature has provided a backdrop for their stories. For example, polar night is the theme of the anthology *Longest Night – Pisin yö* (2014), which introduces artists from both the Nordic and Baltic countries. In *Ivalu* (2019), the Danish Morten Dürr and Lars Horneman situate their story in contemporary Greenland and use representations of Arctic nature to emphasize the story's grim and heavy theme of incest. Both the history and future of the Arctic region have inspired comics artists. In *Tunturien yöpuolta – Vanhoja tarinoita* (2018), a group of Finnish comics artists present stories of the mythological and magical Lapland adapted from the work of the Finnish ethnographer Samuli Paulaharju. The ongoing societal debate about climate change has inspired a group of Swedish comics artists to share their views on the matter in the anthology *Jag vill inte göra slute* –

Serier för klimatet (2019). In this article, I concentrate on comics that imagine the future of the Arctic to be able to consider the medium's affordances and possibilities for visualizing the future.

In the 2000s, grim visions of the future have become common imagery in contemporary Finnish literature, and the interest in imagining future scenarios is evident also in the field of comics. Dystopian comics have grown into an increasingly more salient genre that covers topics typical of dystopian fiction, such as the collapse of social systems, ecological catastrophes, apocalypses, post-apocalyptic scenarios, and problems regarding gender inequality. The dystopian comics show us individuals and societies functioning in a reality that we recognize as undesirable and – in some cases – possible. Like literary fiction, Finnish dystopian comics often locate the story and its events geographically to a future Finland, where people, for example, struggle to survive in a Helsinki damaged by a natural disaster or try to find a way of living in the city of Turku where anarchy has replaced social stability. Catastrophes are by no means a recent topic in Finnish comics, since Tove Jansson's first Moomin comic *Moomintrollet och jordens undergång* (1947, 'Moomintroll and the End of the World') made the inhabitants of the idyllic Moomin valley fear the fall of a comet. Unlike the overtly fictional Moomin story, contemporary dystopian fiction often envisions grim futures that take place in known societies. In this regard, dystopian fiction works with the 'what if' logic that prompts us to find similarities and differences between the depicted world and our actual world (Isomaa & Lahtinen 2017, 8).

One of the central characteristics of dystopian fiction is its ability to warn readers about the negative consequences of current actions, thus functioning as "a prophetic vehicle" (Baccolini & Moylan 2003, 11). According to this idea, dystopian fiction helps aware readers grasp the harmful tendencies in our current society, and idealistically, it could work as a possible catalyst for social transformation (ibid.). By representing monstrous consequences in the future, dystopian fiction asks the reader to recognize the sources of the harmful development in present society (Gottlieb 2001, 13). Comics scholars have noted that dystopian comics may arouse awareness of real-world problems, such as gender inequality (Kirkpatrick 2017), the influence of corporate power and neoliberal politics (Sharp 2017), individual's opportunities to change totalitarian society (Moffett 2017), the dynamics of world risk society (Cortiel & Oehme 2015), and the long-term consequences of certain political choices or ideologies (Wallin Victorin & Nordenstam 2017). In this regard, dystopian comics use future-related anxieties and fears as their material, but they may also offer the hope of transformation and change (Sharp 2017, 413) or work as potential sites of resistance – as "a call to arms and action", as Ellen Kirkpatrick (2017, 137) writes.

Space and place in comics storytelling

According to James Phelan (2017, 6, 10), storytelling is a communicative act where the form serves the purposes of the text, since the author can utilize textual elements – such as words, images, techniques, structures, forms, dialogic relations, and genres and their conventions – to affect readers cognitively, affectively, ethically, and aesthetically. The ways in which comics aim to persuade the reader are multimodal, since comics usually combine word and image to tell stories. In addition to multimodality, the storytelling of comics is dependent on how the visual and verbal elements are arranged spatially. Thierry Groensteen's influential book *The System of Comics* (2007, published originally in French as *Système de la bande dessinée* in 1999) introduced the idea of comics storytelling as a network consisting of spatially arranged, interdependent elements.ⁱⁱⁱ In other words, each element inhabits a place or certain coordinates in the spatial layout of a comic,

and it gains its meanings in relation to its surroundings. Groensteen's (2007) method of examining spatiality in comics consists of three categories: 1) the sequence of individual panels, 2) the layout of the page or double page, and 3) the spatial organization of the whole work. On the one hand, it is important to analyse how elements are juxtaposed closely together, and on the other hand, it is equally relevant to examine what kinds of larger networks they create inside the whole work, for example, due to repetition.

Since Groensteen's landmark study, comics researchers have increasingly explored the ways in which the spatial organization of the elements contributes to the reading, understanding, and interpretation of comics. Most dramatically, the importance of spatial arrangement shows in the convention of page-turn, where a cliff-hanger persuades the reader to turn the page in order to see the continuation of the dramatic events. Turning the page creates a pause in the narrative progression, since the reader can only infer what comes next. However, the spatial arrangement of the elements on the page can also affect how we construct the story and its temporal relations (Hatfield 2007, 48; Mikkonen 2017, 48–49), understand the characters' embodied experiences (Kukkonen 2013), and interpret the interplay of words and images (Miodrag 2013, 77–78).

When thinking about comics storytelling as a narrative act, the author can use spatial arrangement for many purposes depending on what kinds of responses are hoped from the audience.^{iv} Whereas Groensteen concentrates on the spatial choices regarding the narrative proper, Charles Hatfield (2005, 58), among others, has pointed out that also the material qualities, such as the size and shape of the book, contribute to the experience of reading comics. Comics often include several kinds of paratexts, which according to Gérard Genette (1987, 1) are verbal and visual information that surrounds the narrative by preceding and succeeding it. For this reason, I will extend my spatial analysis of the narratives to the cover images, inside covers, and title pages.

Space and place as technical terms of comics storytelling differ from how the concepts are understood in cultural studies, where the so-called spatial turn has resulted in a growing interest in representations of places and spaces in literature and other cultural texts (see Tally 2012, 11–12; Tally 2018, 5). In this regard, place and space are something to be mediated, presented, represented, remembered, sensed, and narrated in cultural and artistic texts (Lyytikäinen & Saarikangas 2013, ix). Consequently, questions of how texts contribute to our understanding of places, or space more generally, become relevant (ibid.) given that the real and imagined spaces of literature "reflect, shape, and transform the real and imagined spaces and places of the world" (Tally 2018, 6). Representations of the Arctic environment in comics differ from each other depending on the artist's background, genre, purpose, and target audience of the work. In adventure comics, Arctic nature may provide only a backdrop for fantastic quests. For artists living in the Arctic region, the environment is not an abstract product of fantasy, but a concrete place that has its material and ordinary characteristics or connections to local mythologies (for a good example, see Burns 2016). Furthermore, historical comics, informative comics, and humorous comic strips all have their specific purposes for representing the Arctic environment, such as a realistic milieu for historical events, a geographically remarkable place, or a home to endangered animals, like polar bears.^v

Environmental critic Lawrence Buell (2005, 63) notes that we can approach the concept of 'place' from at least three directions: firstly, by concentrating on the physical markers and materiality of a place; secondly, by regarding places as constructs of institutionalized social arrangements; and thirdly, by pondering the subjective and affective bonds between people and their environments. Comics in general may function as a medium that might help the reader to grasp and possibly even rethink places and spaces, since the comics form plays with framing space into panels and forming

spatial layouts with grids and gutters (Davies 2019, 4). In this regard, the medium-specific qualities – i.e. the affordances and restrictions – of comics can contribute to how we think about places. Next, I will move on to the analysis, where I will take a closer look at how the formal qualities of the comics form affect how the Arctic is represented in *The Sands of Sarasvati* and *Scandorama* as a material, socially constructed, and emotionally experienced place.

Representing scale: maps and aerial projections

The Sands of Sarasvati and *Scandorama* represent different subgenres of dystopian fiction, the former being an eco-dystopia that plays with a combination of fiction and scientific plausibility, the latter drawing its imagery and tropes, such as totalitarian regimes and rebellious individuals, from classic canonical dystopias. The works differ from each other also stylistically: whereas *The Sands of Sarasvati* utilizes a style that builds realism with naturalistic proportions and clear lines, *Scandorama* experiments with the comics form in an avant-garde manner. Their different points of departure manifest already in the books' front covers: with its realistically drawn submarine, the former book's front cover invites readers to participate in an underwater quest in the Arctic Ocean, whereas the latter book's cover is more symbolic and introduces a white cat trapped in a dark, ominous, and cage-like structure. The covers invite us to familiarize ourselves with the style that sets the mood for the whole narrative. In the case of *The Sands of Sarasvati*, we are invited to join an exciting and scientifically motivated journey, whereas the abstract cube on *Scandorama's* cover arouses anxiety with its claustrophobic ambience.

Despite their differences, the works are similar in the way they situate the narratives in real locations – familiar cities and existing countries – so the reader can easily imagine the future of the northern part of the world. Both books begin with a map that introduces the settings of the story visually. Comics scholar Elisabeth El Refaie (2012, 158) has pointed out that many non-fictional comics utilize maps and other documentary evidence to highlight the authenticity of the story. The efficiency of maps relies on their function to provide “clear, unambiguous links between locations in a narrative and actual places in the real world” (ibid.). Maps are culturally constructed devices to make sense of material places and their geographical scale, which makes them attempts to conceptualize the material world. However, Robert J. Tally Jr. (2013, 25) highlights the fact that map-making is always ideological and tied to the knowledge, goals, and needs of the cartographer. Although *The Sands of Sarasvati* and *Scandorama* are works of fiction, the cultural significance of maps as geographical documents invites the reader to situate the fictional events in real locations and, furthermore, to compare the fictional world and reality. I will first take a closer look at the map included in *The Sands of Sarasvati* and later come back to the map in *Scandorama*.

The Sands of Sarasvati begins and ends with a map of the Northern hemisphere, a polar projection that shows how the Arctic Ocean connects the northern areas of Finland, Norway, Greenland, Canada, and Russia. As it shows the world from the Arctic perspective, the map differs from the usual projections that place the Equator (and often Europe) at the centre of the map. The composition of the map focuses attention on the Arctic region as one of the key locations of the story, but since the graphic novel discusses climate change, the map also refers to the geopolitical and global importance of the Arctic. The Arctic region is not detached from the rest of the world, and what happens locally has global consequences.

Global and local scales might be hard to grasp without visualization. However, comics scholar Laura Perry (2018, 3–4) argues that comics and graphic novels have surprising affordances that help

readers to think about spatial and temporal relations. According to Perry, the spatial quality of comics enables the representation of the relationship between human and geological activity in terms of time and space, and thus the comics form might help readers to understand the age of the Anthropocene. According to this idea, often intangible or incomprehensible problems – for example, global warming – can be visualized in the space of the page by juxtaposing the immense with the very small (ibid.).

Juxtaposition as a spatial strategy is used in *The Sands of Sarasvati* when we are shown one of the protagonists examining the disappearance of an Arctic lake (*The Sands of Sarasvati*, 23; Figure 1). A group of four panels form a chronological sequence that conveys the passing of time and the gradual disappearance of the lake. Besides the above-mentioned usage of maps, these kinds of aerial projections persuade the reader to view the narrative as a credible and possible scenario of the near future, since they emulate the conventions of satellite images that are commonly used to observe and report on environmental changes. For example, NASA visualizes the consequences of climate change by using satellite images to make visible the changes in the mass of Arctic ice sheets. The main characters of the story are researchers who are interested in geographical and environmental changes. Thus, the embedded documents, such as maps and satellite images, work intradiegetically as objects for their inquiries. For the rhetorical purposes of the narrative, the embedded documents function as appeals to the reader to think about the spatial scale and relations between local and global actions.

The geographical scale of the lake is not specified for the reader, instead, the reader is asked to ponder the scale on a more metaphorical level. The shape of the vanishing Arctic lake resembles a foetus, which creates a strong visual metaphor where the loss of nature's diversity is compared to a miscarriage or a child's death.^{vi} The visual metaphor reiterates the old trope of anthropomorphized nature and emphasizes nature's vulnerability. For the protagonist examining the satellite images, the scientific information is far more relevant than the revelation that the form of the lake creates a visual metaphor. However, for the reader, the metaphorical message is made even clearer by juxtaposing the satellite images with an image of Sarasvati, the Hindu goddess of knowledge, music, art, wisdom, and learning. Together, the religious and metaphorical imageries create connotations of Arctic nature as sacrosanct and in need of protection.

<FIGURE 1 HERE>

Like *The Sands of Sarasvati*, *Scandorama* begins with a map of the North, but a reader with geographical knowledge soon notices that the places are renamed as Neoscandia (Scandinavia), Helsingy City (Helsinki), Stohome City (Stockholm), Oldslo City (Oslo), Newslo City (–), Cophan Town (Copenhagen), and Neuropa (Europe). This renaming hints that the map does not represent the actual world as we know it currently, but it is rather a possible, alternative, or future version of it, since the title of the book, *Scandorama*, combines the words Scandinavia and futurama – i.e. a view or vision of the future. Neuropa, in this sense, could refer to a scenario where Europe has turned into a place that is in chronic distress or disorder. Under the map are stylized representations of famous buildings located in Stockholm, such as Aula Medica (Karoliniska Institutet), Globen, City Hall, and the Waterfront. For a reader who is familiar with the architecture, the buildings function as indicators of actual places.

Scandorama's scope of representing Arctic nature is far more local compared to *The Sands of Sarasvati*: the events are located mainly in the urban landscapes of utopian Stohome City and dystopian Helsingy City. The contrasting cities bring forth the tension between utopia and dystopia, which Erika Gottlieb (2001, 8) sees as a key feature in classical dystopias that show how an originally utopian promise has been "abused, betrayed, or, ironically fulfilled so as to create tragic consequences for humanity". In *Scandorama*, the push and pull of utopia and dystopia is accentuated by including several symbols of dualism, such as the twin cities of light and darkness and, later, twin characters. Arctic nature itself is represented only briefly in the narrative, when the protagonist travels to the Arctic Ocean in order to rescue twins fleeing from the dystopian regime. The geographical location is not specified, but the reader is expected to imagine the Arctic ('Arktis') as a place somewhere north of Sweden and Finland, where big cargo ships sail among melting icebergs. The Arctic as a destination for a quest is familiar from adventure comics. For example, in Hergé's *L'Étoile mystérieuse* (1942), Tintin travels with an expedition team to the Arctic Ocean to find a fallen meteorite, and in Don Rosa's story 'The Crown of the Crusader Kings' (2001), Scrooge McDuck tries to find Christopher Columbus' logbook left behind by the Finnish Arctic explorer Nils Adolf Erik Nordenskiöld. In expedition stories, the Arctic environment represents the great unknown, a wilderness that can be explored and, in this way, put under control. As I will show, in both *Scandorama* and *The Sands of Sarasvati* the relation between humans and the Arctic environment is more complex and tied to their dystopian rhetoric.

Framing as a device for controlling space

In persuading the reader to imagine a dystopian future, *Scandorama's* rhetoric relies much more on the reader's imagination compared to that of *The Sands of Sarasvati*. Although *Scandorama* begins with a map of Scandinavia and introduces recognizable buildings that connect the story to the contemporary urban landscape, the narrative itself provides very few visual cues for the reader to 'see' the future in detail. The few visual cues function mainly as reminders that the dystopian society takes place in an actual setting. Considering the cautionary function of dystopian texts, the placement of the story in Scandinavia indicates that the narrative could criticize sociopolitical tendencies typical of Scandinavian countries, which are generally known for income equality, relatively good economics, functioning infrastructures, security, and clean nature. In Sweden, for example, several contemporary comics artists have used dystopian visions to criticize and satirize the politics of the neoliberal government, whose actions they consider a threat to the Swedish welfare state (Wallin Victorin & Nordenstam 2017, 211–212).

The welfare state is defined as being built upon "the principles of equality of opportunity, equitable distribution of wealth, and public responsibility for those unable to avail themselves of the minimal provisions for a good life" (*Encyclopaedia Britannica* 2019). Both in Sweden and Finland, the idea of the welfare state includes a strong societal and political responsibility to maintain a social safety net for all and to protect vulnerable individuals. In *Scandorama*, these ideals and goals have been abandoned. Instead, the state of Neoscandia celebrates the utopian ideals of beauty and cleanliness, and the narrator promotes the state as the most beautiful and cleanest place imaginable. To maintain these ideals, entry into the country is strictly controlled by the state and one can enter the 'dream home' only after the state has considered the merits of the incomers. Immigrants may enter the state on the condition that they prove their usefulness and permit their bodies to be used in genetic experiments. However, if the experiments fail or the test subjects prove to be social misfits, they are gotten rid of or deported. The similarity between the narrator's wording

of 'dream home' ('drömhomet') and the Swedish concept of the People's Home (*folkhemmet*) might persuade the reader to view the narrative as a warning of the collapse of the welfare state.^{vii} However, the societal critique of the narrative is implicit, which requires the reader to question what possibly harmful tendencies in today's society might lead to the dystopian vision.

In addition to the story level, the logic of inclusion and exclusion is portrayed in *Scandorama* in the spatial layout by using the frame as a metaphorical device. In comics, frames are a device of control, since they mark the border between what has been included in the panel and what is left out, unrepresented (Groensteen 2007, 40). Frames can also be used as a device for catching the reader's attention to stop and scrutinize what is represented (ibid. 54). To understand the story, the elements inside the frames are far more important than the frames themselves. However, frames can also have an expressive function that affects the interpretation of the narrative. In *Scandorama*, the expressive potential of frames is utilized to emphasize the dystopian state as a society of control. First, the dystopian world is introduced by using a grid of symmetrical panels, but later, the layouts change to become more unconventional and experimental. For example, the panels are organized on top of a larger background that invades the panels, blurring the distinction between the foreground and background and the inside and outside of the panels.

In contrast to the excessive use of frames on several pages, the graphic novel also uses a lack of frames as an expressive device. Although the dystopian state has colonized its northern parts to function as a permanent repository for nuclear and biohazard waste, the northern environment is, at the same time, beyond control. Two characters flee from the dystopian state to the Arctic Ocean, which the melting of ice has made "so unpredictable. Hard to control. Falling to pieces." (*Scandorama*, 23–24; see Figure 2) It is possible to interpret the double page as a sad representation of the Arctic environment as a victim of global warming. In the context of the dystopian narrative, however, it represents the forces of nature as something that do not obey humankind's attempts at control. The characters that we see amidst the snowy landscape are genetically modified twins who try to escape from the monstrous practices of the state, and for them, the uncontrollable Arctic nature represents a sanctuary beyond the reach of the officials.

<FIGURE 2 HERE>

The spatial layout of the double page supports the representation of the Arctic as a place where the dystopian society's need for control eventually fails. Unlike on the majority of the pages in *Scandorama*, the framing as a device is left unused on the double page, and the scenery of the Arctic Ocean stretches all the way to the edges of the pages, thus emphasizing the vastness of Arctic nature. Moreover, the watercolours do not follow the contours, but bleed over the linework, supporting the representation of Arctic nature as being out of control. Instead of systematic clarity, the double page plays with the tension between background and foreground. On the one hand, the Arctic scenery provides a background, a milieu for action and plot, but on the other hand, the lavish use of watercolours brings the snowy scenery to the foreground in a way that makes the characters almost disappear or blend into the scenery. The unconventional play between foreground and background emphasizes the relationship between nature and humans, making the latter's agency secondary in relation to the former.

The idea of Arctic nature being ungovernable is a focus of *The Sands of Sarasvati* but, differently from *Scandorama*, it does not utilize the device of framing as ostentatiously. Instead, as I will next demonstrate, it utilizes the space of the page to convey the destructive forces of nature.

Page layouts, page-turns, and comics as a network

Isomäki's original novel has been described as an eco-dystopia that tries to persuade the reader to acknowledge real environmental threats by using the characters as mouthpieces for scientific reasoning (Lahtinen 2018, 84). However, in persuading the reader, the emotional aspect of storytelling is no less important than the didactic lectures about science. As James Phelan (2005, 20) notes, readers engage with narratives not only by using their reason to put the pieces of the puzzle together; they also react to the events and characters on ethical and emotional levels. In this regard, although *The Sands of Sarasvati* aims to persuade the reader to consider the possibilities of environmental threats by basing its arguments on scientifically plausible cases, it also tries to touch the reader on a more emotional level by showing the characters in danger.

The aim of affecting the reader emotionally shows in dramatic scenes where page layouts are constructed to enhance the characters' embodied experiences. As Karin Kukkonen (2013, 51) proposes, by reading and interpreting the story elements of a graphic narrative in relation to their spatial arrangement, the reader may deduce how the characters feel or react physically to the events in the story world. This interaction between spatial layout and the representation of the characters' embodied experiences shows in one of the most dramatic scenes in *The Sands of Sarasvati*. A researcher and a journalist investigate the disappearance of an Arctic lake on a glacier when suddenly the glacier starts to collapse, almost causing the researcher's death. To accentuate the dramatic action, the page layout utilizes the possibilities of placing the elements vertically, reiterating the movements of the characters in the story world. Narrow panels imitate the menace of falling into the black abyss of the collapsing glacier, and the suspense is emphasized with the vertical placement of a sound effect, conveying the sound of the cracking glacier ('BRAKKMMRMMMM'). The sound effect pierces through the panel borders, continuing from the upper left corner to the lower right corner of the page, imitating the glacier's collapse and highlighting the risk of the characters falling with it (*The Sands of Sarasvati*, 34; Figure 3). In a graphic novel that uses special effects (including sound effects, symbols, movement lines, and emanata) relatively sparingly, the huge sound effect catches the reader's attention and emphasizes the destructive power of the natural forces.

<FIGURE 3 HERE>

In the dramatic events of the collapse of the glacier, the spatial layout of the page creates suspense in the reader and makes her fear for the characters. Later, when the tsunami finally hits and first wipes out the researchers working near the Arctic glaciers, the comic aims to affect the reader emotionally by portraying the human characters and human-made machines almost as miniatures in comparison to the huge forces of nature. The scale is emphasized by the wordlessness of the pages, which, in my view, indicates that the loud noise caused by the natural forces is beyond human comprehension.

Compared to *The Sands of Sarasvati*, the plot of *Scandorama* does not involve such dramatic events. The rescue of the runaway twins is more of an inconvenience for the protagonist rather than an exciting or dangerous adventure. The experimental style, the minimalist representation of the story world, and the rather flat characters estrange the reader from the story itself; the reader is not asked to fear that much for the characters but for humanistic values, including human rights and respect for life, which the dystopian future seems to have abandoned. This is where we can see most clearly the differing functions of the Arctic representations in the two graphic novels: whereas *The Sands of Sarasvati* aims to show how the Arctic region is a real and tangible place, *Scandorama* utilizes the imageries of ice and snow to support the narrative's more abstract and thematic purposes. In *Scandorama*, the reader is asked to test constantly the conceptual and ethical border between dystopia and utopia. The book is full of symbols of dualism, such as the above-mentioned twin cities of Stohome and Helsingy and the mysterious twins who, in the end, symbolize mankind's possibilities for either salvation or destruction. In this dualistic structure, the uncontrollable Arctic nature represents the opponent of humanity's need for control and, as such, it represents metaphorically an alternative to a human-made totalitarian society.

The dualism is better explained by using Groensteen's (2007) concept of braiding to illustrate how the graphic novel builds dualism gradually with the help of colouring. According to Groensteen (2007, 148–149), repetition of an element carries with it all the meanings that have been attached to it in previous occurrences, but at the same time, the element gains new meanings depending on its new surroundings. In this regard, braiding describes the phenomenon where iconic resonances bridge dispersed panels (Miodrag 2013, 110), which can create implicit symbolism where the recurrent symbols and motifs "may be left for the reader to observe (or not) him or herself, without commandeering attention or deferring the forward thrust of the narrative action" (Fischer & Hatfield 2011, 82). Unlike *The Sands of Sarasvati*, *Scandorama* does not use colour to emphasize realistic rendering of the story world. Instead, it is executed in grayscale using Prussian blue to accentuate details or backgrounds in the images. The blue colour is first introduced in the narrative as the colour of the utopian state in its beauty and purity. Soon the colour connects with the more dystopian aspects of the society, such as the brutal human experiments at the genetic institute. Later in the story, blue is used for representing the Arctic Ocean, and finally it appears to visualize humanity's possibilities to either rebel against the totalitarian society or to resign itself to the regime. Prussian blue is a repetitive element that is weaved into the dystopian rhetoric by keeping both the negative and positive connotations of the colour. Furthermore, the cultural history of the colour emphasizes the dualism: on the one hand, the components for making Prussian blue have been used as a medicine against heavy metal poisoning (Berrie 1997, 201), and on the other hand, the colour has a sad history tied to the Second World War, genocide, and extermination camps.^{viii}

Conclusions

In this chapter, I have analysed the kinds of medium-specific affordances comics and graphic novels have in terms of spatiality. My aim was to use spatial analysis combined with narrative analysis in order to ascertain how the different aspects of spatiality (panel, page, double page, whole work) affect the rhetorical purposes of comics. I chose two dystopian graphic novels as examples since dystopian narratives share the purpose of warning the reader about possible future scenarios. This cautionary function of dystopias requires the reader to build connections between the depicted story worlds and our actual world. My aim was to show what kinds of strategies dystopian graphic novels use to guide the reader to think about the represented Arctic region as real and actual places.

Furthermore, I sought to reveal the other strategies graphic novels use in persuading the reader to accept their cautionary rhetoric.

The chosen works represent different subgenres of dystopian fiction, *The Sands of Sarasvati* being an eco-dystopia and *Scandorama* a depiction of a totalitarian society. Moreover, the works differ from each other stylistically, with the former using a realistic style and conventional page layouts, while in the latter, the artist experiments with water colours and innovative page layouts. Next, I will sum up the results of my comparative analysis.

My analysis began by noting the importance of the paratexts for the interpretation of the works. In this regard, my analysis differs from Groensteen's model and connects his ideas to research that pays attention not only to the spatial aspects of the narrative proper, but also to the materiality of graphic narratives released in book form. In addition to the covers, other paratexts – such as images on the inside covers or title pages – affect the orientation of the reader towards the narrative. As my analysis revealed, both *The Sands of Sarasvati* and *Scandorama* aim to persuade the reader to draw a connection between the depicted and actual worlds by using maps of the Arctic region. Whereas *The Sands of Sarasvati* uses the map to represent the Arctic region as a part of the actual world as we know it, *Scandorama* uses a map of Scandinavia as a starting point for the reader to imagine a possible dystopian world. To enhance the connection between the depicted and actual world, *The Sands of Sarasvati* includes embedded documents, such as aerial projections and satellite images, whereas *Scandorama's* minimal visual hints of the future world push the reader to use her own imagination.

Although *The Sands of Sarasvati* aims to persuade the reader with rationality by showing the researcher characters debating scientific facts, it also tries to touch the reader on a more emotional level. The scales of human activity and natural forces are illustrated, firstly, with a visual metaphor drawing from an old tradition of comparing nature to a mother; secondly, by using the space of the page to convey the characters' embodied experiences during a natural disaster; and, thirdly, by using silent pages to create suspense and enhance the depiction of the destructive forces of nature.

In *Scandorama*, the structural possibilities of page compositions and particularly the element of framing are used to enhance the theme of control over people and the environment. More than the action-based *The Sands of Sarasvati*, *Scandorama* requires the reader to ponder formal choices in relation to the story, since the plot is rather secondary to the graphic novel's function of persuading the reader to think about the relationship between utopia and dystopia. This persuasion relies on the extensive usage of frames that emphasize the relationship between inclusion and exclusion. Moreover, the repetitive symbolic dualism and the recurring colour of Prussian blue encourage the reader to weigh up the dystopian and utopian aspects of the depicted story world and humankind's potential to do both bad and good.

Representing Arctic nature as melting glaciers in dystopian narratives could reiterate the power structure in which nature is an object of human actions. As my examination has proven, comics and graphic novels have spatial affordances that enable them to represent different aspects of the Arctic as a material, socially constructed, and emotionally experienced place. Both the examined graphic novels depict the Arctic as a place affected by human actions, but also as a place that is unconcerned about humanity's future. In this regard, the dystopian graphic novels push us to think about our attitudes towards the environment.

References

- Baccolini, Raffaella, and Tom Moylan. 2003. 'Introduction. Dystopia and Histories.' In *Dark Horizons: Science Fiction and the Dystopian Imagination*, Tom Moylan, and Raffaella Baccolini (eds). New York: Routledge, 1–12.
- Berrie, Barbara H. 1997. 'Prussian Blue.' In *Artists' Pigments. A Handbook of Their History and Characteristics. Volume 3*, Elisabeth West FitzHugh, (ed.). Washington: National Gallery of Art, 191–217.
- Buell, Lawrence. 2005. *The Future of Environmental Criticism – Environmental Crisis and Literary Imagination*. Malden: Blackwell.
- Burns, Nicholas (ed.). 2016. *Arctic Comics*. Canmore: Renegade Arts Entertainment Ltd.
- Chatman, Seymour. 1978. *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca: Cornell University Press.
- Cortiel, Jeanne, and Laura Oehme. 2015. 'The Dark Knight's Dystopian Vision. Batman, Risk, and American National Identity.' *European Journal of American Studies* 10 (2): 1–25. doi: 10.4000/ejas.10916
- Davies, Dominic. 2019. *Urban Comics. Infrastructure and the Global City in Contemporary Graphic Narratives*. New York: Routledge.
- El Refaie, Elisabeth. 2012. *Autobiographical Comics. Life Writing in Pictures*. Jackson: University Press of Mississippi.
- Encyclopaedia Britannica 2019: 'welfare state.' Accessed 26 February 2019.
<https://www.britannica.com/topic/welfare-state>
- Fischer, Craig, and Charles Hatfield. 2011. 'Teeth, Sticks, and Bricks. Calligraphy, Graphic Focalization, and Narrative Braiding in Eddie Campbell's *Alec*.' *SubStance* 40 (1): 70–93. doi: 10.1353/sub.2011.0010
- Gardner, Jared, and David Herman. 2011. 'Graphic Narratives and Narrative Theory.' *SubStance* 40 (1): 3–13. doi: 10.1353/sub.2011.0002
- Genette, Gérard. 1987. *Paratexts. Thresholds of Interpretation*. Translated by Jane E. Lewin. Cambridge: Cambridge University Press.
- Gottlieb, Erika. 2001. *Dystopian Fiction East and West. Universe of Terror and Trial*. Montreal: McGill-Queen's University Press.
- Groensteen, Thierry. 2007. *The System of Comics*. Translated by Bart Beaty and Nick Nguyen. Jackson: University Press of Mississippi.
- Hatfield, Charles. 2007. *Alternative Comics. An Emerging Literature*. Jackson: University Press of Mississippi.
- Isomaa, Saija, and Toni Lahtinen. 2017. 'Kotimaisen nykydystopian monet muodot.' In *Pakkovaltiosta ekodystopiaan. Kotimainen nykydystopia*, Saija Isomaa, and Toni Lahtinen (eds). Helsinki: Helsingin yliopiston Suomen kielen, suomalais-ugrialaisten ja pohjoismaisten kielten ja kirjallisuuksien laitos, 7–16.
- Isomäki, Risto, Petri Tolppanen, and Jussi Kaakinen. 2008. *The Sands of Sarasvati*. Translated by Lola Richards and Owen F. Witesman. Helsinki: Tammi Publishers.
- Jahlmar, Joakim. 2017. 'Dystopian Chaos, Dystopian Order. Differing Ideological Reinterpretations of the Masked Vigilante in Miller's *The Dark Knight Returns* and Moore and Lloyd's *V for Vendetta*.' In *Visions of the Future in Comics. International Perspectives*, Francesco-Alessio Ursini, Adnan Mahmutovic, and Frank Bramlett (eds). Jefferson: McFarland & Company, 136–151.

- Kirkpatrick, Ellen. 2017. 'You Need to Learn to See Yourself through the Father's Eyes': Feminism, Representation, and the Dystopian Space of *Bitch Planet*.' *Feminist Review* 116, 134–142. doi: 10.1057/s41305-017-0051-1
- Kukkonen, Karin. 2013. 'Space, Time, and Causality in Graphic Narratives: An Embodied Approach. In *From Comic Strips to Graphic Novels. Contributions to the Theory and History of Graphic Narrative*, Daniel Stein and Jan-Noël Thon (eds). Berlin: De Gruyter, 49–66.
- Lahtinen, Toni. 2018. 'The Tale of the Great Deluge. Risto Isomäki's *The Sands of Sarasvati* as Climate Fiction. In *Nordic Narratives of Nature and the Environment. Ecocritical Approaches to Northern European Literatures and Cultures*, Reinhard Hennig, Anna-Karin Jonasson, and Peter Degerman (eds). Lanham: Lexington Books, 79–95.
- Lyytikäinen, Pirjo, and Kirsi Saarikangas. 2013. 'Introduction. Imagining Spaces and Places.' In *Imagining Spaces and Places*, Saija Isomaa, Pirjo Lyytikäinen, Kirsi Saarikangas & Renja Suominen-Kokkonen (eds). Newcastle upon Tyne: Cambridge Scholars Publishing, ix–xx.
- Mikkonen, Kai. 2017. *The Narratology of Comic Art*. New York: Routledge.
- Miodrag, Hannah. 2013. *Comics and Language. Reimagining Critical Discourse on the Form*. Jackson: University Press of Mississippi.
- Moffett, Paul. 2017. 'U for Utopia. The Dystopian and Eutopian Visions in Alan Moore and David Lloyd's *V for Vendetta*.' *Journal of Graphic Novels and Comics*, 8 (1): 46–58. doi: 10.1080/21504857.2016.1233894
- Perry, Laura. 2018. 'Anthroposcenes. Towards an Environmental Graphic Novel.' *C21 Literature: Journal of 21st-century Writings* 6 (1): 5: 1–24. doi: 10.16995/c21.37
- Phelan, James. 2005. *Living to Tell about It. A Rhetoric and Ethics of Character Narration*. Ithaca: Cornell University Press.
- Phelan, James. 2017. *Somebody Telling Somebody Else. A Rhetorical Poetics of Narrative*. Columbus: Ohio State University Press.
- Sharp, Cassandra. 2017. '"Fear" and "Hope" in Graphic Fiction. The Schismatic Role of Law in an Australian Dystopian Comic. *International Journal for the Semiotics of Law*, 30, 407–426. doi: 10.1007/s11196-017-9503-3
- Taivassalo, Hannele Mikaela, and Catherine Anyango Grünwald. 2018. *Scandorama*. Helsinki: Förlaget.
- Tally, J. Robert. T. 2018. 'Introduction: The Map and the Guide'. In *Teaching Space, Place, and Literature*, Robert T. Tally Jr. (ed.). London: Routledge, 1–9.
- Tally, J. Robert. T. 2012. *Spatiality*. London: Routledge.
- Wallin Victorin, Margareta, and Anna Nordenstam. 2017. 'The Future in Swedish Avant-Garde Comics, 2006–2014.' In *Visions of the Future in Comics. International Perspectives*, Francesco-Alessio Ursini, Adnan Mahmutovic, and Frank Bramlett (eds). Jefferson: McFarland & Company, 211–228.

ⁱ The article was written as a part of the research project 'Darkening visions – Dystopian fiction in contemporary Finnish literature', funded by Kone Foundation (Tampere University, 2015–2019).

ⁱⁱ The graphic novel was first published in Finnish bearing the title *Sarasvatin hiekkaa* (2008), but in this chapter, I refer to the English translation, *The Sands of Sarasvati* (2008), translated by Lola Richards and Owen F. Witesman.

ⁱⁱⁱ Spatial analysis of comics has been an important part in French comics studies ever since the 1970s, when e.g. Pierre Fresnault-Deruelle introduced his ideas about comics and spatiality. However, the translation of Groensteen's book enabled the ideas to spread widely also to the Anglo-American field of comics studies.

^{iv} Of course, the responses of the audience can vary depending on the readers. Following Phelan's model of rhetorical narratology, I understand readers as an authorial audience, as ideal readers who are able to reflect on the relations between the mimetic, synthetic, and thematic aspects of the narrative (Phelan 2005, 213).

^v For further reading, see Luke Healy's *How to Survive in the North* (2016), a historical graphic novel about an Inupiat woman, Ada Blackjack; Frozen-Ground Cartoons, informational online comics made by artists Heta Nääs and Noémie Ross in collaboration with researchers; and Alex Hallatt's *Arctic Circle*, a humorous strip featuring animals familiar from the Arctic and Antarctic, such as polar bears and penguins.

^{vi} The conceptual metaphor of nature as a vulnerable mother is not activated in the original novel by Isomäki. As mentioned in an email to me from Jussi Kaakinen, the artist of the graphic novel, the shape of lake was not specified in the graphic novel manuscript and he chose to draw the lake by imitating the shape of a real Arctic lake found in a Google Earth satellite image. While making the new edition of the graphic novel (published in 2017), the scriptwriter Petri Tolppanen decided to elaborate the metaphor and made it more explicit. A new, added page reveals how the characters discuss the lake and one of the characters (ironically) mistakes the satellite image of the lake for an image of a foetus. (Personal communication 25.11.2019.)

^{vii} The narrator's description of Neoscandia as a 'dream home' ('drömhemmet') creates an intertextual link to a Swedish dystopian classic, Karin Boye's *Kallocain – Roman från 2000-talet* (1940), where a totalitarian state practices painful or humiliating human experiments on individuals who have no other opportunities in a strictly hierarchical society. The state calls the individuals volunteers (Frivilliga), and they live in an institution called Home (Hemmet).

^{viii} During World War II, the cyanide-based pesticide Zyklon B was used in gas chambers and due to a chemical reaction, and it stained the walls of the chambers Prussian blue. The cultural history of Prussian blue and its connections to the genocide have been explored, for example, in Yishai Jusidman's series of paintings called *Prussian Blue: Memory After Representation* (2013).