

*Written Part*  
*Summer Semester 2024*

*University of Applied Arts Vienna*  
*Institute of Design / Graphic Design*  
Mentoring:

Univ.Prof. Oliver Kartak  
Mag. Katharina Uschan  
Mag. Sabine Dreher  
Mag. Christian Schlager

*Mirjam Lingitz*

*Never One*



# *I Abstract*

In the age of individualism and growing discontentment with society, many seek escapism in a romanticised idea of nature – often viewed as a more straightforward alternative to the complexity of interpersonal relationships. However, nature itself is a deeply entangled network of organisms working together to survive; a truth mirrored best in the symbiotic microcosm of the lichen.

*Never One* asks itself the question of what humans may be able to learn from lichens in regards to community, perseverance and queerness, detailing the similarities between the lichens' symbiotic nature and societal interdependence.

Through the medium of the graphic novel these parallels are introduced to a teenage audience, seeking to deepen their connection to nature and their understanding of collectivism as a source of optimism and agency.

The story follows a disillusioned teen seeking to escape a world they are unable to connect with by running away to the woods. There, they are drawn into the vibrant, dreamlike world of lichens, meeting an unlikely companion and embarking on a journey that both challenges and strengthens their idea of togetherness.

*Never One's* overarching themes are ones of forging and maintaining community, enduring hostile environments through mutual aid, as well as the importance of chosen family as a foundation for queer perseverance and societal change.

The following chapters introduce the underlying concept in detail, provide an overview of lichen biology, further highlight similarities between lichens and human society, as well as detail the artistic project communicating these findings in illustrative form.



## II Contents

1	<i>Introduction</i>	1
2	<i>Concept</i>	2
3	<i>Research</i>	4
	3.1 <i>A brief introduction to Lichen Biology</i>	4
	3.2 <i>Learning from Lichens</i>	8
4	<i>Illustrative and Narrative Interpretation</i>	18
	4.1 <i>The Characters</i>	18
	4.2 <i>The World</i>	22
	4.3 <i>The Story</i>	24
	4.4 <i>The Visuals</i>	28
5	<i>Prospects</i>	35
6	<i>Conclusion</i>	37
	<i>Acknowledgements</i>	39
	<i>Bibliography</i>	41



# *1 Introduction*

The seedling idea for this project was conceived in a damp, autumnal forest in Bogesundlandet Naturresevat, Sweden. I had already done some reading on lichens long before that trip, having arrived at the fairly niche topic of lichenology by way of my interest in fungi. However, beyond a purely aesthetic appreciation for their manifold shapes and colours whenever my eyes grazed them on hikes, I had never spared them much thought.

With my feet sinking into the dense carpet of deer lichen covering the forest floor and my eyes snagging on every wonderfully new alien lichen form nestled into the craggy granite boulders, only one thought came to mind: There must be a way to convey this alien beauty, this feeling of profound wonderment I was feeling, to an audience.

Through the process of reading multiple books and papers and articles about lichens by (and occasionally about) the people who were, like me, ensorcelled by them, I made the decision on what my project was going to be: A graphic novel.

## 2 *Concept*

A graphic novel allows for the communication of complex information in an approachable way by wrapping it up in a story that is mostly told in dialogue and images. Additionally, it enables me to illustrate the world of lichens in all its fantastic colour and shape diversity without being limited by the in part minuscule scale of my subjects, nor the temporal restraints in showing their often decade-spanning life cycles.

The story itself follows a teenage protagonist seeking to escape a world in which they find neither belonging nor agency by running away to the woods. There they get to experience the same wonder I had felt in that Swedish forest and gain a new understanding of community, perseverance and queerness through the interaction with the very authority on these concepts: Lichens.

This protagonist also represents my target audience: Teenagers living in a world that seemingly doesn't care for or represent them, a world plagued by a myriad of issues that no-one is taking on; a world that weighs heavily on the shoulders of those that ostensibly hold no real power to change any of it.

I chose this audience in part because I know it well – having been such a teenager – and in part because I believe it is essential to offer a gateway to understanding nature's intricate beauty to a demographic that tends to feel disconnected from it<sup>1</sup>.

My belief is that the symbiotic nature of lichens, their ability to thrive even in hostile conditions as well as their utterly queer existence in a seemingly heterosexual, binary world offers a multitude of connection points to a young person that feels alienated from society. By using lichens' unique attributes as a metaphor on how to forge connections and weather away hostile environments, I hope to inspire both a deeper connection to the small, overlooked parts of nature, as well as our own human ecosystem.

1 *Joelene Hughes et al. »Age And Connection to Nature: When Is Engagement Critical?«, *Frontiers in Ecology and the Environment* 17, no. 5 (April 1, 2019): 265–69, <https://doi.org/10.1002/fee.2035>.*

As lichenologist Trevor Goward succinctly states:

*»The lichen by its very nature exists  
at a portal, a doorway.«<sup>2</sup>*

2 *Erica Gies. »Naturalist Trevor Goward Helps to Overturn a 150-Year-Old Truth of Science«, Scientific American, June 1, 2017, <https://www.scientificamerican.com/article/naturalist-trevor-goward-helps-to-overturn-a-150-year-old-truth-of-science/>.*

## 3 *Research*

### 3.1 *A brief introduction to Lichen Biology*

They grow nestled into the shady crooks of our backyard trees, hidden away in the shallow cracks in our pavement, huddled between bricks on the facades of our houses: From inconspicuous grey dustings to flamboyantly yellow clusters, lichens have us surrounded wherever we go.

Like many other things they escape our notice in their ubiquity, fading into the abundance of textures we observe every day – rugged tree bark, overgrown forest trails, weathered concrete– without garnering much attention. Depending on where they have settled they may be confused for moss or for algae, for mushrooms or for plants.

But lichens are neither plant nor fungus nor bacteria – they are miraculously more.

### 3.1.1 Teamwork makes the dream work

*»We now know that lichens are a symbiosis, two or more organisms in one. The bulk of a lichen is a fungus, the mycobiont, embedded within the fabric of which are tiny photosynthesizing cells of algae and/or cyanobacteria, the photobionts.«<sup>3</sup>*

This »Dual Hypothesis of Lichens« was first introduced by Simon Schwendener, a Swiss botanist, at the Swiss Natural History Society's annual general meeting on September 10<sup>th</sup>, 1867. Based on his findings he proposed the yet unconfirmed theory that lichens are not autonomous organisms, but composed of fungal hyphae (the cell networks most fungal growth is made of) growing on algae.<sup>4</sup>

The Dual Hypothesis was widely controversial among lichenologists at the time, throwing into question the classical taxonomical process and what was known about symbiotic relationships at the time, but is by now almost universally accepted as a biological principle.<sup>5</sup>

3 *Robert Lücking and Toby Spribille. The Lives of Lichens: A Natural History (Princeton University Press, 2024). 6.*

4 *Honegger, Rosmarie. »Great Discoveries in bryology and lichenology – Simon Schwendener (1829–1919) and the Dual Hypothesis of Lichens«. The Bryologist 103 (2) (2000): 307–13.*

5 *Merlin Sheldrake. Entangled Life: How Fungi Make Our Worlds, Change Our Minds And Shape Our Futures (Random House Trade Paperbacks, 2021). 77–79.*

In their symbiotic relationship, the mycobiont essentially provides the lichen's body whereas the photobiont provides the cells that give the lichen the ability to photosynthesise. At its budding discovery this relationship was thought by Schwendener to be unbalanced in the fungal partners favour, with the algae essentially being a »slave« to the domineering fungus.<sup>6</sup>

However, research since has put the partners on a more equal footing, with their relationship being seen less as one of subjugation and more one of mutually beneficial »quid pro quo«, described by German surgeon and mycologist Anton de Bary as a »lichen economy«.<sup>7</sup>

*»Dass sie einander nicht ernstlich schaden,  
können wir mit Sicherheit allerdings sagen,  
denn wenn das der Fall wäre, würden die  
betreffenden Einrichtungen nicht existiren  
[sic] können.«<sup>8</sup>*

*(»However, we can say with certainty that they do not seriously harm each other, because if that were the case, the institutions in question would not be able to exist.«)*

In fact, the reciprocal nature of their union would be what inspired the conception of the term »symbiosis« by Albert Frank, and became the gateway into our understanding of non-parasitic relationships in nature.<sup>9</sup>

As it stands the interdependent nature of lichens has given us a new outlook on the entangled workings of the natural world from its very discovery, and there is many a parallel that may be drawn to our own human symbioses.

6 *Lücking and Spribille. The Lives of Lichens. 6, 24.*

7 *Lücking and Spribille. The Lives of Lichens. 24.*

8 *Bary, Anton de. Die Erscheinung Der Symbiose: Vortrag, Gehalten auf der Versammlung Deutscher Naturforscher und Ärzte zu Cassel, 1879. 19.*

9 *Sheldrake. Entangled Life. 78-79.*

### 3.1.2 *Improvise, Adapt, Overcome*

When looking at the rocky coastlines on the precipice between land and sea or the weathered layers of granite that reveal themselves under cushions of moss on alpine trails, we will also inevitably find a hardy patchwork of lichen steadfastly growing on them.

In fact, lichen have a penchant for thriving in places where few other things can survive. There are dozens of lichen species that have settled on rocks in the Antarctic, the Himalayans, and the Namibian and Attacama deserts, where no other life could endure the extreme temperatures and rugged terrain. No matter how remote the area, chances are lichens have already colonised it.<sup>10</sup>

In fact, they are so hardy that they have been chosen as test subjects in ongoing research on the habitability of Mars<sup>11</sup>.

Lichens' abilities as a pioneer species derive entirely from their symbiotic nature. Neither fungi nor algae could survive in previously mentioned terrains by themselves; it is the union of their traits that makes them extremophiles. Through their symbiosis they are able to extract water from the air<sup>12</sup>, allowing them to live off of fog and humidity, and to photosynthesise carbohydrates from the sun to fuel their growth<sup>13</sup>. If conditions are altogether too unfavourable, lichens are known to go dormant and endure in a desiccated state for long periods of time<sup>14</sup>. This ability gives them a crucial edge on other life forms which are not able to take such »breaks« when environmental circumstances aren't in their favour.

While these aspects of the lichen's biology guarantees its own survival, lichens are also crucial to their environment. Most lichens engage in a process called »weathering«, the erosion of their substrate. In order to extract minerals from the rock it grows on, a lichen will both mechanically and chemically corrode it. Mechanical weathering describes the way in which lichens will grow into small cracks and grooves in stone, forcing the material to break up under the force of their hyphal penetration. Chemical weathering on the other hand happens through the deployment of natural acids, which will dissolve the rocky substrate.<sup>15</sup>

10 *Lücking and Spribille. The Lives of Lichens. 89.*

11 *De la Torre Noetzel, Rosa et al. »The BIOMEX Experiment on-board the International Space Station: Biomolecular- and Bio-geochemical changes of lichens exposed to space- and to Mars-like conditions.« 2018.*

12 *Lücking and Spribille. The Lives of Lichens. 194.*

13 *Lücking and Spribille. The Lives of Lichens. 76.*

14 *Lücking and Spribille. The Lives of Lichens. 74.*

15 *Sheldrake. Entangled Lives. 85.*

By successfully spreading on surfaces that would be too barren for plants to grow on, lichens also leave behind a legacy once they come to the end of their life cycle. By decomposing, they themselves become a new layer of substrate, literally laying the ground work for more delicate growth.

## 3.2 *Learning from Lichens*

In the poignant words of lichen enthusiast and curator of the lichen collection at the University of British Columbia, Trevor Goward:

*»Lichens tell us things  
about life.«<sup>16</sup>*

What Goward summarises in this one sentence is what he refers to as the »lichening rod effect«: lichen's way of allowing us a novel and more profound understanding of familiar concepts.<sup>17</sup>

This lichen-charged comprehension doesn't have to halt at the borders of academia and stay confined to ecological research papers. Just as lichens have upended our understanding of interaction between organisms on a micro scale, we can allow it to upend what we presume to know about our anthropological macrocosmos – society.

### 3.2.1 *Community*

It has become a trend over the last decade or so to fantasise about leaving society entirely; to buy a tiny cabin in the woods and just never have to deal with other people ever again. It is been the dream of doomsday preppers and isolationists, tiny-home owners and homesteaders alike: Life off the grid.

<sup>16</sup> *Sheldrake. Entangled Life. 86.*

<sup>17</sup> *Sheldrake. Entangled Life. 86.*

In recent popular culture this fantasy has been represented by the Cottagecore internet aesthetic, which entices its disciples with its focus on a dreamy, self-reliant, rural life far away from capitalist stressors, societal pressure and ever-present consumerism.

The dream of returning to nature, and the uncomplicated life it seemingly offers, is not a strictly modern phenomenon. Ancient Greece had Arcadia, a rural utopia representing an untainted, benign vision of nature and a spiritual haven to those living in filthy cities plagued with disease and squalor. Edwardian England heavily championed the pastoral genre in its Renaissance poetry, drawing on visuals of humble shepherds on wide, golden pastures in a land of endless summer. Even Marie Antoinette had her own little hamlet, the Hameau de la Reine, on the grounds of Versailles, where she used to »escape« her royal duties and pretend to live a more »simple« life in the nurturing lap of Mother Nature.<sup>18</sup>

Naturally, the Cottagecore aesthetic has found a devoted following among young people, and more interestingly so, young queer people.<sup>19</sup>

It is an appealing thought: No longer having to be beholden to a patriarchal society with queerphobia, right-wing extremism and capitalist »grindset« culture constantly on the rise. How nice it would be, to only have to care for your own survival on your own little secluded patch of land, far away from societal expectations.

Ultimately though, Cottagecore, like many other aesthetic movements, is a symptom of our recent societal strive for individualism: The desire to live life not as a small part of a bigger whole, but as a fully realised, unique entity. This trend towards individualism may be affected by several factors, including but not limited to contemporary online culture, capitalism and identity politics, but its effect is a simple one: We are mostly focused on ourselves and our own self-actualisation.

18 Halley, Catherine. »Cottagecore Debuted 2,300 Years Ago«. *JSTOR Daily*, November 11, 2020. <https://daily.jstor.org/cottagecore-debuted-2300-years-ago/>.

19 White, Ro. »What Is Cottagecore and Why Do Young Queer People Love It?«. *Autostraddle*, June 27, 2023. <https://www.autostraddle.com/what-is-cottagecore-and-why-do-young-queer-people-love-it/>.

20 *Encyclopedia Britannica*. »Henry David Thoreau | Biography, Civil Disobedience, Walden, Books, Beliefs, & Facts«, accessed April 11, 2024. <https://www.britannica.com/biography/Henry-David-Thoreau/Move-to-Walden-Pond>.

Moreover, it is worth noting that much of rural escapism is presented and perpetuated, both historically and contemporarily, by those with socioeconomic privilege; namely, affluent white people.

One of the more famous examples for a person that lived out the escapist fantasy of the »cabin in the woods« presents itself in American writer Henry David Thoreau; Thoreau left behind society to live in a wooden hut of his own making from 1845 to 1847, assuming a more straightforward, self-sufficient approach to life – his thoughts on which he detailed in his book »Walden«. The plot of land Thoreau constructed his hut on was owned by his close friend Ralph Waldo Emerson.<sup>20</sup>

Thoreau's standing as a well-educated young white man without a family to care for, as well as his access to a »sponsor« willing to let him live on his property free of charge, is what allowed him to pursue his isolationist dream – something that would have been impossible to his contemporaries of colour. The ability to escape society, or to even consider it as a viable option, has always been a privilege.

Many of »Walden«'s themes indubitably still strike a chord today – a dissatisfied young man, seeking to find purpose and guidance by returning to nature; an inquiry into the individual's moral and societal duties; a struggle for independence.<sup>21</sup>

However, tempting as it may be to eschew the challenges of modern society in favour of total autonomy, the answer is not a cabin in the woods.

*»[...] Cabin narratives have the tendency to deny what may be the most politically important implications of a sort of agricultural, 'natural' rebellion against capitalism: solidarity and community; the sharing of skills, resources, and knowledge; liberation beyond the isolated, privileged individual [...].«<sup>22</sup>*

21 Thoreau, Henry David and Cramer, Jeffrey S. »Walden: A Fully Annotated Edition«. Yale University Press, 2004. xv

22 riverselkie. Tumblr, »i am seeing a lot of posts that are increasingly critical of the ~cottage aesthetic...«, February 28th, 2019. <https://leaf-rust.tumblr.com/post/183111799339/riverselkie-i-am-seeing-a-lot-of-posts-that-are>.

In fact, those who run away to the woods in a bid to be alone conversely will find themselves learning a different truth entirely. Nature is a deeply codependent web of symbiotic relationships; something humans are not exempt from. Even within our own bodies we are dependent on other beings: the bacteria that live in and on us.

The term »individual« literally roots in the Latin »individuus«, meaning »indivisible«<sup>23</sup>, something which cannot be separated or split apart. As we ourselves cannot be split from our gut bacteria and survive, these symbiotic relationships must be recognised as part of our »individual«. There is no independent survival, not even for us. There are no individuals in nature.<sup>24</sup>

Nowhere is necessity for symbiosis and collaboration for survival as obvious as with lichens. From their marriage of fungal and algal/bacterial traits emerges a wholly new life form, something that can do things neither fungus nor algae could do by themselves. This life form can thrive in extreme climates and settle on inhospitable surfaces, endure for exceedingly long periods of time and go dormant if necessary, just to be revived at a later date. Through their collaboration they have grown into something bigger than the sum of their parts; just like humans can accomplish action beyond the scope of a single human by organising into unions.

In human society it is easy to become exhausted with existing structures of power, especially as part of a marginalised community. However, it is my firm belief that if we want a better society, we must stay to make a better society. Lichen accomplish structural change by attaching themselves firmly to an inhospitable environment and slowly wearing it down, so eventually new, beautiful, fragile things may grow from it. By banding together they achieve what neither symbiotic partner could by themselves, just as humans have done for as long as we have existed.

Nothing in nature survives alone, and nothing in society changes by itself.

23 "Individual." In *Merriam-Webster Dictionary*, Last Updated May 21, 2024.  
<https://www.merriam-webster.com/dictionary/individual>.

24 Gilbert, Scott F. et al. »A Symbiotic View of Life: We Have Never Been Individuals.«  
*The Quarterly Review of Biology* 87, no. 4 (2012): 325–341.  
<https://doi.org/10.1086/668166>.

As mycologist Merlin Sheldrake states:

*»Whenever it was that lichens occurred for the first time, their very existence implies that life outside the lichen was less bearable, that together they were able to sing a metabolic ›song‹ that neither can sing in isolation.«<sup>25</sup>*

Togetherness is never easy or straight-forward; much of it takes tremendous, consistent effort, and even then it may not work out. However, both in the world of lichens as well as in human society, fostering community accomplishes what cannot be done alone. And as such it is always worthwhile.

### *3.2.2 Perseverance*

Lichens have perfected the art of settling in for the long haul. Even where other organisms cannot find purchase, lichens will have settled into cracks and crevices, ready to endure for what may well be the next several hundred years. Slowly but surely altering their environment, softening tough stone and cushioning sharp edges: The study of lichens is a masterclass in perseverance.

Humans too, in a more metaphorical sense, have mastered the art of attaching themselves to an unyielding environment and wearing it down over time. Similar to the circumstances of lichens in remote areas of the world, the fight for legal and social recognition has been a centuries long endurance test for marginalised people. From social justice movements over several waves of feminism to the fight for queer liberation, activist movements have settled into the unyielding fabric of our society, and have been hard at work steadily eroding prejudices and dismantling outdated policy. Like lichens, disenfranchised people have come together as a quasi-symbiotic unit, leveraging power they wouldn't have as individuals to weather the metaphorical stone of our rigid social system. And like lichens, who in the wake of their own decomposition leave behind fertile substrate for new life to grow on, dedicated communities' unrelenting efforts and enduring legacy is what softens our social environment and paves the way for future generations to live more freely.

25      *Sheldrake. Entangled Life. 93.*

Another lesson to be taken away from lichen's modus operandi is the strategy of dormancy to conserve energy and resources to ensure prolonged survival.

The social media age has greatly amplified the ability to partake in socio-political discourse and to push for global change, but it has also brought with it a seemingly never-ending barrage of bad news and cascading political and social issues.

»Doomscrolling«, a term that rose to great prominence in 2020 during the COVID-19 pandemic, refers to the action of obsessively consuming this negative online content <sup>26</sup>. Depending on user preference and interaction, a single person's digital timeline may quickly fill up with post after post detailing the many ways in which injustice is happening across the world, and demanding immediate action in the face of these ongoing global emergencies. The feeling of overwhelm, guilt, and helpless anxiety after being confronted with these endless calls to action over a significant period of time bears its own name: Activism fatigue.

However, activism burnout does not only affect those reckoning with the effects of »doom scrolling«, but most of all those working tirelessly behind the scenes organising protest marches, overseeing fundraisers, providing educational materials and much more. In the words of long-term activist Paul Gorski:

*»Activists have this sense of urgency about dismantling these huge systems of power, and when that comes up against how slow change can be and all the barriers that pop up along the way, it can cause burnout.«<sup>27</sup>*

26 Leskin, Paige. »Staying up Late Reading Scary News? There's a Word for That: »doomscrolling.« Business Insider, April 22, 2020. <https://www.businessinsider.com/doomscrolling-explainer-coronavirus-twitter-scary-news-late-night-reading-2020-4>.

27 Solis, Marie. »When Dismantling Power Dismantles You Instead.« Vice, December 7, 2018. <https://www.vice.com/en/article/3k95kk/when-dismantling-power-dismantles-you-instead-v25n4>.

Activism work is often thankless, with the effort being put into the organisation of grassroots movements often going unnoticed and unacknowledged. Activists frequently face discrimination even within their own ranks, especially where different demographics and movements intersect. Combined with what often amounts to minimal amounts of progress, many a protest movement initially burns hot but eventually fizzles out.<sup>28</sup>

Here lichens can teach us an important lesson: Survival in harsh conditions sometimes necessitates not expending all your energy at once. Though it may feel like defeat to take breaks from advocacy, it is vital to remember that society does not change over the course of a couple months, or even several years. Being a constant, tenacious presence not only works for lichens in weathering their environment, but also provides a more measured approach to activism. It must be possible to practice social and political consciousness without over-extending oneself, though finding that balance may prove to be a challenge in itself. Sometimes the actual work may just be the endeavour to give each other comfort and initiative through shows of solidarity and mutual aid. As stated by activist and educator Victor Narro:

*»In every activist campaign there's a human element. Whether or not you succeed, you've formed relationships, strengthened connections. And you'll take those to your next effort.«<sup>29</sup>*

While persistent action is necessary to drive societal change, it should not come at the expense of those that care enough to make a difference.

28 Solis. *»When Dismantling Power Dismantles You Instead«.*  
29 Solis. *»When Dismantling Power Dismantles You Instead«.*

### 3.2.3 *Queerness*

When it first became apparent that lichen were not a singular organism, but more so a multi-organism assemblage, it caused great upheaval in one scientific field in particular: taxonomy. Up until that point, assigning beings to their respective biological kingdoms was a fairly clear cut process; a plant was a plant, a fungus was a fungus.

Confronted now with an organism that wasn't just one individual, but a collaboration of multiple, it drew into question the whole taxonomic process; the categories that living things were to be sorted into were not as clearly defined as everyone had thought. To draw comparison to human society, similar reexaminations of long held beliefs have become more commonplace in regards to our human understanding of gender.

Gender was long widely considered to be neatly bisected into two distinct opposites: male and female, as defined by the markers of biological sex. This notion has been challenged throughout human existence, not only by the lived experience of generations of queer people but also by academia.

It is also worthy of note that non-binary gender identity has long been a staple of many indigenous cultures around the world, with concepts like the Osage people's »mixu'ga« (»moon instructed«) and the Samoan people's »fa'afafine« (»like a woman«) allowing for a more fluent interpretation of the societal self<sup>30</sup>.

Recent surveys of U.S. citizens show that there has been both an uptick in people acknowledging the existence of more than two gender identities, as well as in young people identifying beyond the male-female binary<sup>31</sup>.

Like lichen, who blur the divide between the fungal, bacterial and plant kingdoms, us humans blur the lines of our own rigid classification systems.

Beyond such more symbolic parallels to human queerness, lichens have established themselves as queer beings in their own biological right. Much of heteronormativity hinges on the idea that life is only possible through a sexual union between male and female, so that genetic material from two lineages may be combined to create a new individual. According to the Darwinian theory of evolution, this merging of discrete lineages is what allows for the prolonged survival of a species through vertical inheritance.

30 *McNabb, Charlie. Nonbinary Gender Identities: History, Culture, Resources. Rowman & Littlefield, 2017. 33,41,45.*

31 *Twenge, Jean M. »How Gen Z changed its views on gender.« TIME, May 1, 2023. <https://time.com/6275663/generation-z-gender-identity/>.*

However, this reductive interpretation of evolution does not allow for life that produces and reproduces without heterosexual intercourse. It was evolutionary biologist Lynn Margulis who championed and advanced the theory of »symbiogenesis«, which proposes that long-term symbiotic relationships can lead to evolutionary change. Lichen did not acquire their ability to photosynthesise through evolutionary mutation, but through long standing symbiosis.<sup>32</sup>

Therefore, the mingling of advantageous trades is not exclusively possible through heterosexual reproduction.

As David Griffiths states in his paper »Queer Theory for Lichens«:

*»Lichens are not anomalies but are rather illustrative of the fact that life and nature are found, if anywhere, in the complex and queer cobbling together of multispecies relationships. [...] this decenters heterosexual biological reproduction and vertical inheritance as the only way that life produces and reproduces and challenges a restricted and restricting view of human sexual reproduction.«<sup>33</sup>*

For human society, lichen can also offer an interesting avenue into further exploring our perception of self. As stated previously, like lichens, humans cannot survive without their symbiotic partners, blurring the line between where one individual begins and ends. Thus it may be worthwhile pondering the implications this vital multiplicity of the »individual« has for which singular pronouns are considered »normal« in our society.

32 Griffiths, David. »Queer Theory for Lichens.« *Undercurrents* 19 (October 2015): 36–45. <https://doi.org/10.25071/2292-4736/40249>.

33 Griffiths. *Queer Theory for Lichens*. 38.

In the English speaking world there has been longstanding, heated discourse over the use of they/them as gender neutral pronouns for singular persons. One of the main arguments leveraged against such usage is the alleged grammatical inaccuracy of applying a so taught »plural pronoun« to an individual, who should be referred to by appropriate singular he/she/it pronouns. Disregarding that the use of »they« as a gender neutral pronoun has been in practice for multiple centuries<sup>34</sup>, the idea of life being inherently symbiotic (»We have never been individuals<sup>35</sup>«) turns on its head our understanding of a »singular pronoun«. Since, if we are all just assemblages of organisms reliant on each other, should we not all be using plural pronouns? Does this not inherently justify the existence of the singular »they« to encompass all our symbiotic partners when we refer to »ourselves«? If there are no individuals, why is there a need for individual, »singular« pronouns? Is it not reductive to refer to ourselves simply by »she«, »he« or »it«, when this implies that we are a discrete entity entirely separate from other »she«, »he« and »it«s?

Though presented here in a slightly humorous fashion, the underlying sentiment remains a valid one: Queerness is considered a deviation from what is »normal«, but the defining characteristics of this normalcy are inherently arbitrary. Lichens have proven again and again that we are not beholden to what rigid understandings we have come to in the past, be it in regards to taxonomy, evolution, gender identity or grammar.

In our human desire to categorise, define and standardise, it is all too easy to dismiss what does not fit into our pre-established systems as nonsensical or far-fetched.

But like lichens, one need not conform to society's (or biology's) preconceptions to thrive in this world. Being wholly understood is no condition for prosperity, and eventually society (and science) will catch up.

34 Baron, Dennis. »A Brief History of Singular ›They.« *Oxford English Dictionary*, accessed May 20, 2024. <https://www.oed.com/discover/a-brief-history-of-singular-they/?t=true>.

35 Gilbert et al. *A Symbiotic View of Life*. 325.

# 4 *Illustrative and Narrative Interpretation*

## 4.1 *The Characters*

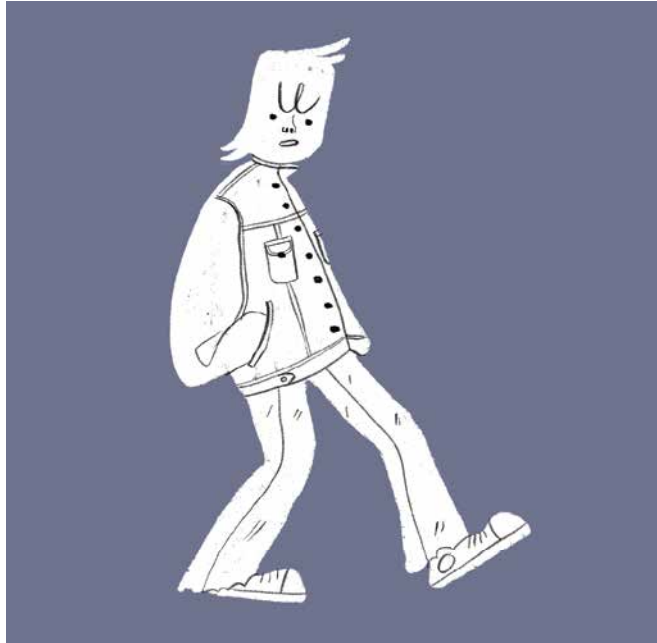
The comic features two primary characters, the protagonist by the name of »Spuds«, and the fungal spore, which is lovingly referred to as »Spore«.

### 4.1.1 *The Protagonist*

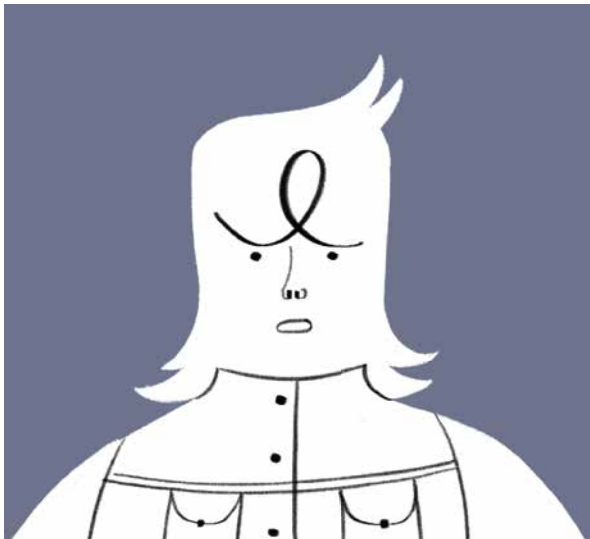
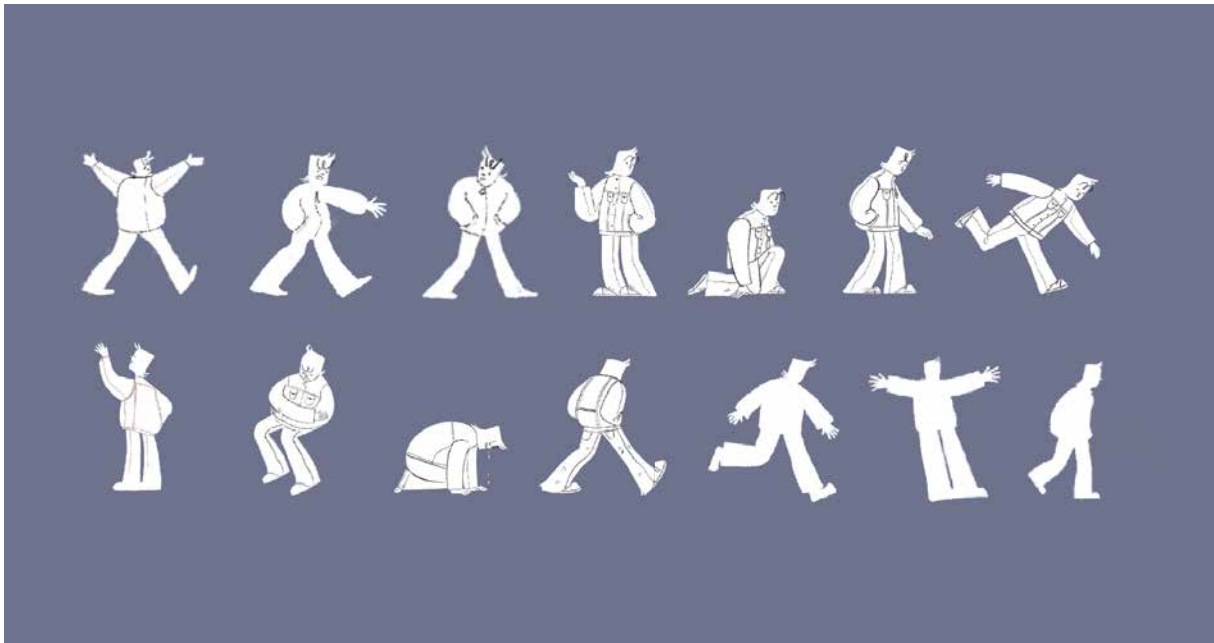
The story's protagonist is an angsty queer teen using gender neutral pronouns. Their hair is styled in a choppy mullet, their outfit made up of an oversized jacket and ratty jeans. Though they appear to be quite lanky and tall, they have a tendency to slouch and overall assume a defensive pill-bug posture and scowling expression. However, they occasionally will remove their hands from their jacket pockets to gesture in agitation.

Their pessimistic tone of voice is rambling and peppered with occasional bursts of profanity, venting to the audience about their frustrations with the world and how they cannot find any way to connect with those around them. Through their ranting monologues we discover that they feel helpless in the face of global warming and overconsumption, hassled by the grown-ups in their life that expect them to conform to a more feminine beauty standard, push their own heteronormative views on them, and don't respect their gender identity, alienated by a society that doesn't echo their grievances, and overall full of contempt for their fellow human beings, which they perceive as ignorant and apathetic.

Ultimately though their anger only masks their fatigue at fighting a losing battle all by themselves. They wish to find a sense of agency and community, but are unable to see the world beyond their own frustrations. Through their journey with the fungal spore they learn to adopt a more optimistic outlook on community, and re-emerge into their own world as a more determined, settled person.



*Fig.: Final design of Spuds*



## 4.1.2 *The Fungal Spore*

The fungal spore is the protagonist's companion in the world of lichens.

It has only just floated down from the sky and is not overly thrilled with its hostile surroundings, but its brimming enthusiasm about finding its perfect algal partner endows it with an intrinsic motivation our protagonist lacks.

In the drab dormant lichen world it sticks out as a bright yellow dot with an expressive demeanour, which also manifests itself in it waxing and waning in size according to its moods. It will rhapsodise at length about »back home«, which refers to the lichen collective that it is a reproductive spore of.

Its greatest wish is to find an alga to form its own lichen collective with. When talking about this future as part of a happy symbiotic relationship, it sizzles and sparks with exuberance. In their movement and overall demeanour the spore reflects an utter lack of self-consciousness, moving much like a little kid would; unbothered by what others think of it.

Compared to our protagonist it has a rather dreamy outlook on community, with its goal being first and foremost to find a symbiotic partner to form a relationship with. It drags our moping protagonist along on its search, with its eagerness to find others to connect with eventually rubbing off on the main character.

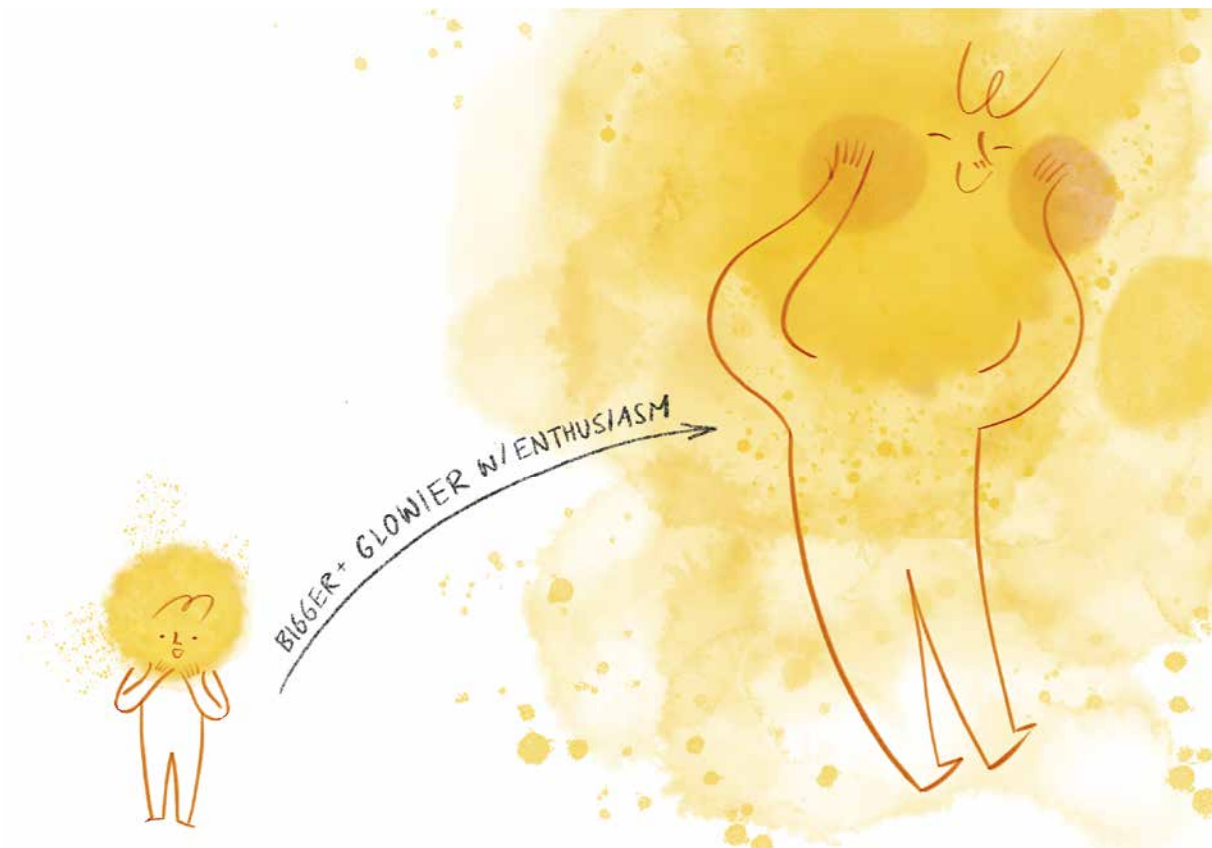
However, finding a fitting partner turns out to be more challenging than anticipated.



*Fig.: First sketches of Spore*



*Fig.: Final design of Spore*



## 4.2 *The World*

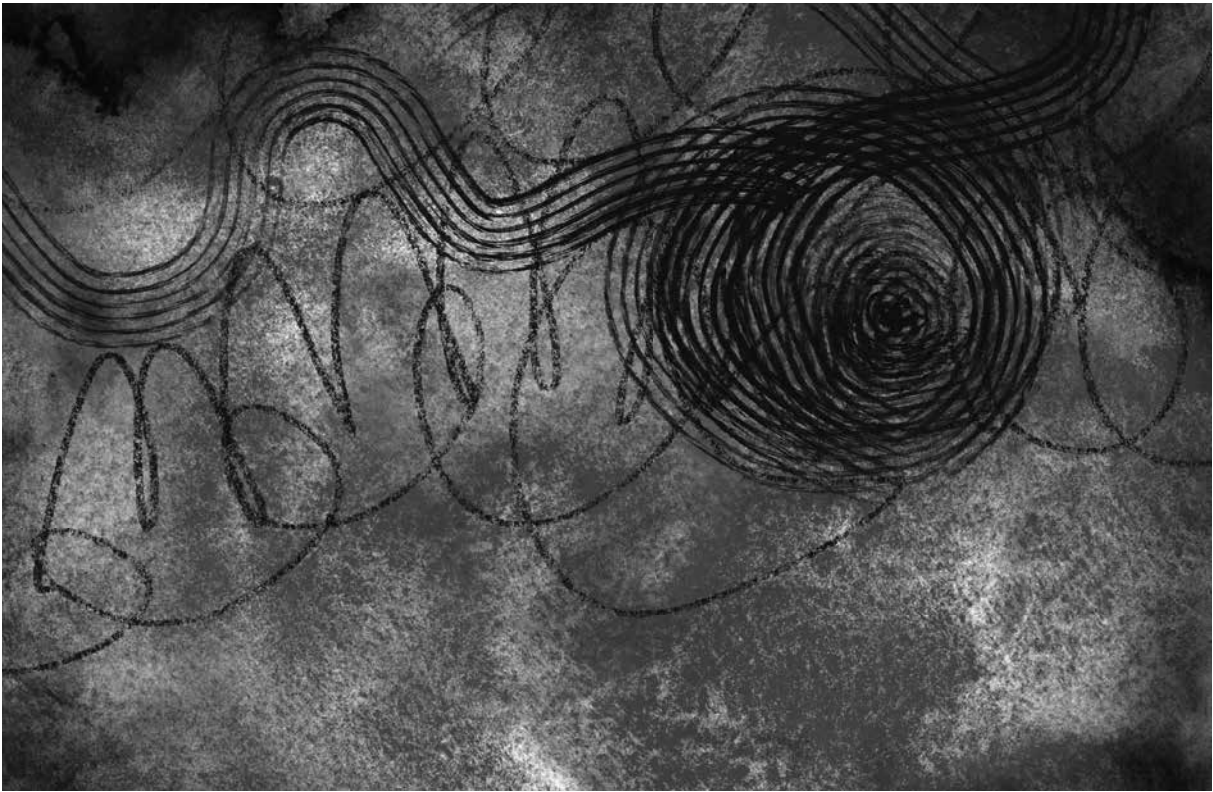
The story is bisected into two drastically different worlds: Our protagonist's »home« world and the world of lichens.

The »home« world is dark and gloomy, vignettted by the protagonist's own spiralling dark thoughts. Other people are depicted only as expressionless shadows, with the main character sticking out as the lone bright spot. What architecture we see is rectangular and uninspired.

In stark contrast, the world of lichens is lush and colourful upon the protagonist's arrival. The lichens offer a veritable abundance of shapes and textures, ornamental and delicate. It is a world seemingly made of aliens, an aspect the main character immediately connects to. However, as the world of lichens eventually goes dormant again, shrivelling into a dull, seemingly lifeless shadow of its active state, our protagonist is once again disillusioned.

This new world seems to have revealed itself to be no less hostile than the world they left behind. But whereas their own world felt like a suffocating void incapable of fostering colourful, healthy life, this unfamiliar realm looks more like a blank slate; a rocky surface yet to be populated with life.

*Fig.: Spud's home world*



*Fig.: Lichen world*

### 4.3 *The Story*

The story's title »Never One« summarises the overarching motif of no great deed being accomplished by one lone individual. It is also a play on the term »no one«, essentially changing its meaning to the opposite by swapping the prefix with a different »negative« word.

The story roughly follows the narrative model of the »Cinderella Story« (according to Vonnegut<sup>36</sup>), wherein the protagonists starts out at a low point in their life.

The audience gets an introduction into the many frustrations that lead to their pessimistic and defeated outlook on life, which eventually cause them to retreat from society entirely.

In a bid to no longer have to observe their tiring everyday life, they escape to the woods, where they lay down in the moss and eventually fall asleep.

They wake up in a world that evokes in them an instant feeling of awe and elation. Everything that surrounds them is colourful and ornamental, intertwined and thriving. Like Cinderella getting to experience high society at the prince's ball, the protagonist gets a glimpse of a world they would be happy to live in.

36 Troilo, Staci. »Basic Plots: Vonnegut's Cinderella.« *Story Empire*, February 12, 2021. <https://storyempire.com/2021/02/12/basic-plots-vonneguts-cinderella/>.

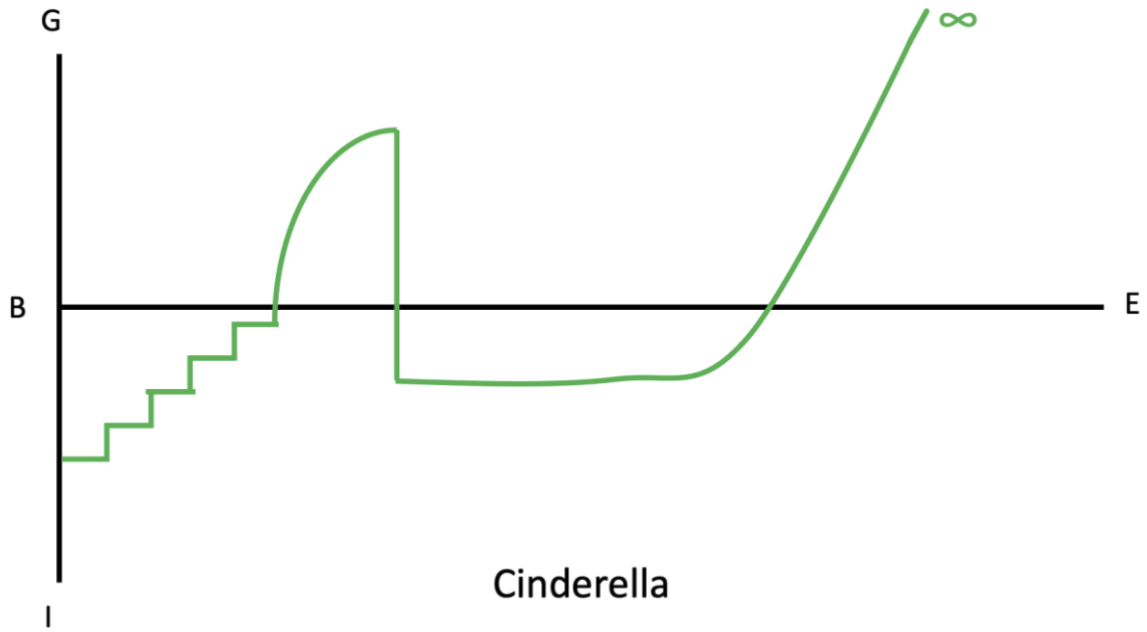


Fig.: Classic Cinderella Graph

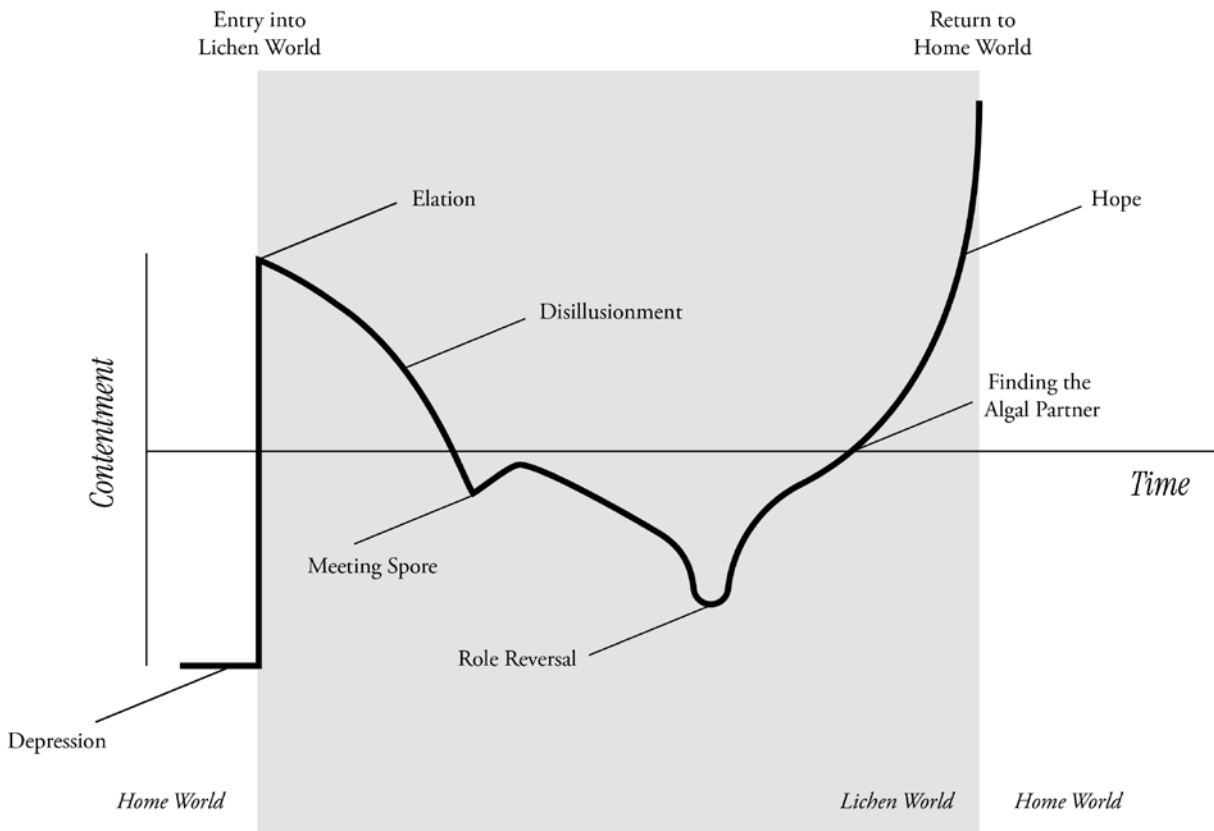


Fig.: Graph adapted to my story

However, their mood immediately plummets again once the lichen world goes dormant once more; though not as low as at the beginning of the story. Having had a glimpse of a world in which they feel belonging and optimism, they now have a seedling motivation in them to get it back.

As they wander off, sulking and feeling affirmed in their belief that there is no good in the world, what little remained of the fantastical lichens of before drops off to mere crumbs and dustings.

They are halted in their self-pity only by a bright yellow dot floating down from above, coming to rest in their outstretched palm: A sole fungal spore.

The fungal spore reveals itself to be no inanimate lump of cells, but a little creature brimming with emotion. Though initially able to fit in the palm of the protagonist's hand, it quickly grows in size, seemingly bolstered by its own enthusiasm, until it stands tall enough walk by itself alongside the main character. The spore has a very clear ambition: Find others to connect and settle down with. Their cheerful spirit convinces the protagonist to join them on their journey, and the two set off.

As they wander through the barren lichen world the spore regales them with the many stories it has heard of the beauty of community before it was sent off from its »home«. It is convinced that once it finds its perfect match, it will find fulfilment in working within the ecosystem its symbiotic relationship will produce. It is sure that it will know when it has found this perfect partner: like they are both singing the same song.

The two eventually happen upon their first other sign of life, a dying patch of lichen which's symbiotic relationship is dissolving; the partners not having been able to make their relationship work. Rattled by this they move on quickly.

Yet as they continue to meet cyanobacteria and algae, none of them strike that special cord in the fungal spore, which is growing more and more disillusioned and hopeless. It slowly shrinks down in size until back to its original scale, weak and exhausted – unable to continue on by itself and ready to give up.

The protagonist though, having mulled over the spore's rhapsodical musings on lichens and belonging, is not ready to admit defeat yet. Over the course of their journey they had come to the silent conclusion that they may have abandoned the dormant lichen ecosystem prematurely. Now unhappy to see the formerly spirited spore so downtrodden and crushed, they decide to reciprocate the fungal spore's kindness: They scoop up the little spore and set off once again.

After a while, the weak spore picks up on snippets of a familiar voice: Their algal partner is calling for them, just as they thought. They two eventually arrive at a patch of algae that happily welcomes the fungal spore. The protagonist and the spore exchange a tearful goodbye, with the protagonist accepting that the fungal spore has found its new home. The spore assures them that they will always be there for the protagonist in some capacity, them having forged their own connection.

The protagonist continues on alone once more, wistfully pondering their new-found desire to find their own symbiotic partners as around them the world the fungal spore had fantasised about comes into being. They can now hear a chorus of voices around them, both squabbling with and affirming each other, the voice of the fungal spore occasionally mixed in.

They witness as lichens burst with life and go dormant again, eventually dying off so new plants can grow on the soil they leave behind; and the protagonist comes to a realisation: They should return to their own home. Beautiful as the world may be around them once again, they recognise that they can't contribute to it the way that they long for; not like the fungal spore could.

In an echo of their entry into the world of lichens, they lie down in the moss once more and go to sleep; cradled by the lush greenery, the fungal spore's voice in their ear.

They awake back in their own world. It is still gloomy, but no longer as volatile in its negativity, the spiralling dark abyss around them gone. Getting up to face the world once more with renewed vigour, they notice something in their hand: A little crusty piece of colourful lichen.

And as they gaze about at the vast world that surrounds them, they start to notice that they are not the only one.

## 4.4 *The Visuals*

I spent a fair amount of time testing out different visual approaches, doing sketches both in analogue and digital mediums. Due to the more streamlined process, I decided on illustrating the book digitally in Procreate.

### 4.4.1 *Style*

The style marries impressionistic watercolour with simple, minimalist character design. The world of lichens is portrayed in loving detail and rendered in bright, bold colour, representing the flowering, diverse tapestry of the queer community, while the characters themselves are kept as simple abstractions of anthropomorphic figures.

The protagonist is drawn as a stark white silhouette with a few defining features, like their jacket and face, scribbled in in simple black lines. They are intended as a stand-in for the reader, leaving ample room for the audience to see themselves in them. Their design is purposefully kept simplistic, like a sketch – they are but a teenager yet, with a long way to go until they truly understand themselves. An early idea of what's to come, not quite fleshed out yet.

The fungal spore is depicted in a similarly plain style, with the body rendered only in outlines– allowing the head to keep its spore-like character. As the main character's counterpart in the world of lichens, the spore is depicted as humanoid, giving the protagonist a companion they can relate to.





#### 4.4.2 *Typography*

To give the comic a more adolescent, personal look, as well as to match the analogue, painted feel of the illustrations, all text is handwritten. For better legibility only capital letters are used and the letters overall are kept utilitarian and clean.

To compliment the chatty tone of the novel, use of periods is kept to a minimum, lending a more airy, open-ended quality to the dialogue.

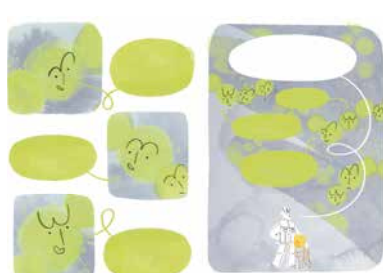


### *4.4.3 Colour Script*

The book follows a clear colour script. The first act of the book is fully rendered in greyscale, depicting the protagonists dark and cynical world view. Black scribbles represent the protagonists disjointed, dark thoughts and their spiral into depression.

Colour and light only come into play with Act 2, once they have crossed over into the world of lichens. Vibrant tones bookend this act: Once when they first enthusiastically explore this new and exciting world, and once when they have finally found the spore's new family and watch them grow into a similarly lively lichen colony. Though long stretches of Act 2 appear drab and colourless, we do not return to the dark appearance of Act 1. This reflects the fact that the protagonist »has seen the light«, allowing for a less claustrophobic view on their surroundings. To them, their home world was dark and suffocating, but the lichen world is more like a blank sheet of paper waiting to be written on.

Act 3 marks the return of the protagonist to their own reality, with the color once again draining to a lacklustre grey. However, it is now interspersed with other people's dabs of light and colour, reflecting the protagonist's ability to finally see the good in the world around them.





## 5 *Prospects*

To be able to bring *Never One* to an international audience, partnering with a comics publisher would be of the essence. When considering my ideal options, I paid close attention to individual publishers' catalogues, taking note of any overarching themes in topic and visuals, as well as the overall effort put into their production. As such I have identified two preferred publishers:

UK based publishing house *No Brow* focuses on environmentally conscious production and features a wide range of books intended for the tween and teen market. Their catalogue already boasts several graphic novel with narratives addressing nature themes in a wide range of styles, which *Never One* would fit into seamlessly. They publish exclusively in English, but feature authors from all over the world.

Germany based publisher *Rotopol* produces and distributes comics and graphic novels with a focus on innovative storytelling and unique visuals, while also centring high quality production. Their range of books also includes a wide selection for the teenage market, with their line-up being overall outstanding in its wide and varied offering of visual styles. They publish both in German and English, opening up an avenue to a potential german translation of my original english text.

Overall, next steps in *Never One's* journey will include getting into contact with publishers focusing on sequential media in order to bring it to its target demographic, as well as further refining several of the more elaborate illustrations.

Though I made the decision to write *Never One* in English in order to cater to an international readership, I would also like to eventually translate the text into German.



## 6 *Conclusion*

By drawing comparisons between the microcosmos of lichens and the macrocosmos of human society in three key areas (community, perseverance and queerness), this project tells a story of overcoming feelings of isolation and insignificance by changing one's understanding of what community can and should be. Lichens only exist because two different organisms came together to create something greater than the sum of their parts; humans too are only able to achieve true feats of greatness by banding together with likeminded companions. Lichens are capable of colonising inhospitable terrain and making it more liveable for those that come after them; humans too can weather hostile conditions to wear down pre-established systems so that future generations may live easier. Lichens continuously challenge our understanding of nature and force us to adapt our world views accordingly; humans too are in a constant state of reinventing themselves, and transcending rigid categorisation.

»Never One« seeks to deconstruct the myth of the individual by sending its protagonist on a journey through a foreign world that is, like their own, dependant on togetherness – though they are only able to notice this parallel once they return home at the end of the story. By literally being taken by the hand and guided through an immersive lesson on open-mindedness, endurance, and togetherness, they are able to ascend from their pessimistic downwards spiral and return to their own world as someone invigorated to find their own »symbiotic« partners.

The main take-away for the reader should be that community is not perfect or utopian, neither in nature nor in society, but is still something worth striving for. Society's challenges can only ever be overcome by relying on others and banding together to persist in the face of adversity. Community is what gives us the strength to stay and make society a better place. And finding those we can imagine building a new »home« with starts with the realisation that no being is truly independent.



## *Acknowledgements*

I would like to give thanks to a host of dear friends who were vital in the creation of this project: Maximilian Bauer for sharing my enthusiasm in this project and standing in for my target audience, Agnes Widensky for making sure my academic work passes muster, Lukas Thüringer for just being all around energizing, and Sebastian Lou for suffering with me.

Lastly, none of this would have been possible without my parents: Thank you to my mom for fostering my love for comics and raising me to be an artist, and thank you to my dad for being a steadfast supporter of my nonsense and enabling my lichen macrophotography career.



# Bibliography

Baron, Dennis. »*A Brief History of Singular ›They.*« Oxford English Dictionary, accessed May 20, 2024. <https://www.oed.com/discover/a-brief-history-of-singular-they/?tl=true>.

Bary, Anton de. *Die Erscheinung Der Symbiose: Vortrag, Gehalten auf der Versammlung Deutscher Naturforscher und Ärzte zu Cassel*, 1879. p.19

Noetzel, Rosa & Ortega, M. & Ramirez, M.R. & Miller, Ana & Bassy, Olga & Granja, C. & Cubero, B. & Jordao et al. *The BIOMEX Experiment on-board the International Space Station: Biomolecular- and Bio-geochemical changes of lichens exposed to space- and to Mars-like conditions*. 2018

Encyclopedia Britannica. »*Henry David Thoreau | Biography, Civil Disobedience, Walden, Books, Beliefs, & Facts*«, accessed April 11, 2024. <https://www.britannica.com/biography/Henry-David-Thoreau/Move-to-Walden-Pond>.

Gies, Erica. »*Naturalist Trevor Goward Helps to Overturn a 150-Year-Old Truth of Science.*« Scientific American, June 1, 2017. <https://www.scientificamerican.com/article/naturalist-trevor-goward-helps-to-overturn-a-150-year-old-truth-of-science/>.

Gilbert, Scott F., Jan Sapp, Alfred I. Tauber, Handling Editor James D. Thomson, and Associate Editor Stephen C. Stearns. »*A Symbiotic View of Life: We Have Never Been Individuals.*« The Quarterly Review of Biology 87, no. 4 (2012): 325-341. <https://doi.org/10.1086/668166>.

Griffiths, David. »*Queer Theory for Lichens.*« Undercurrents 19 (October 2015): 36-45. <https://doi.org/10.25071/2292-4736/40249>.

Halley, Catherine. »*Cottagecore Debuted 2,300 Years Ago.*« JSTOR Daily, November 11, 2020. <https://daily.jstor.org/cottagecore-debuted-2300-years-ago/>.

Honegger, Rosmarie. »*Great Discoveries in bryology and lichenology – Simon Schwendener (1829–1919) and the Dual Hypothesis of Lichens.*« The Bryologist 103 (2) (2000): 307-13.

Hughes, Joeline, Mike Rogerson, Jo Barton, and Rachel Bragg. »*Age And Connection to Nature: When Is Engagement Critical.*« Frontiers in Ecology and the Environment 17, no. 5 (April 1, 2019): 265-69. <https://doi.org/10.1002/fee.2035>

»*Individual*«. In Merriam-Webster Dictionary, Last Updated May 21, 2024. <https://www.merriam-webster.com/dictionary/individual>.

Leskin, Paige. »*Staying up Late Reading Scary News? There's a Word for That: ›doomscrolling‹*«. Business Insider, April 22, 2020. <https://www.businessinsider.com/doomscrolling-explainer-coronavirus-twitter-scary-news-late-night-reading-2020-4>.

Lücking, Robert and Spribille, Toby. *The Lives of Lichens: A Natural History*. Princeton University Press, 2024. pp.6-194

McNabb, Charlie. *Nonbinary Gender Identities: History, Culture, Resources*. Rowman & Littlefield, 2017. pp.33-45

riverselkie. Tumblr, »*i am seeing a lot of posts that are increasingly critical of the ~cottage aesthetic...*«, February 28th, 2019. <https://leaf-rust.tumblr.com/post/183111799339/riverselkie-i-am-seeing-a-lot-of-posts-that-are>.

Sheldrake, Merlin. *Entangled Life: How Fungi Make Our Worlds, Change Our Minds And Shape Our Futures*. Random House Trade Paperbacks, 2021. pp.76-98.

Solis, Marie. »*When Dismantling Power Dismantles You Instead*«. Vice, December 7, 2018. <https://www.vice.com/en/article/3k95kk/when-dismantling-power-dismantles-you-instead-v25n4>.

Thoreau, Henry David and Cramer, Jeffrey S. *Walden: A Fully Annotated Edition*. Yale University Press, 2004. p.xv

Twenge, Jean M. »*How Gen Z changed its views on gender*«. TIME, May 1, 2023. <https://time.com/6275663/generation-z-gender-identity/>.

White, Ro. »*What Is Cottagecore and Why Do Young Queer People Love It?*«. Autostraddle, June 27, 2023. <https://www.autostraddle.com/what-is-cottagecore-and-why-do-young-queer-people-love-it/>.