

Introduction

Children are sitting on the ground in front of their national parliaments or town halls. In Stockholm. Bern. Kathmandu. New York. Kabul. Manaus. Berlin. They are striking for the climate and for their future, in city squares and online. And they are calling attention to a democratic mistake: the rainforests are burning and being cut down. The banks are investing in the fossil industry. Across the world, democracies need to be transformed, and a new way of living together globally needs to be found – and they, as children, have no say in this, even though it affects their lives the most. So now they are sitting there, refusing to accept this any longer.

How should we react to this? I ask myself this question in August 2018, when I leave the rooms where I teach at Stockholm University and go for the first time to meet Greta Thunberg and her fellow strikers, who are sitting outside the parliament. When I meet them on one of the first days of the strike, I know a lot about the climate crisis, but in fact, it becomes clear in the next weeks that I know astonishingly little. I understand the crisis, but still not really. And so I decide early on, when Fridays For Future is just being formed, that I will come back every Friday for the seven hours that the young people spend striking at the edge of Stockholm's Old Town. I don't want to play along anymore: this strike is an emergency brake, interrupting work and university life. Therefore, I follow their call for non-cooperation with the "fossil society"; at least for one day every week.

These encounters with the regulars at the school strikes in Mynttorget – the square close to the parliament – will change all our lives. Very soon, we'll be meeting the most important climate researchers in the world. I'll be getting to know the children's way of thinking and seeing grief and despair, but also great empathy and excitement about the growing global network which is a constant work in progress, and which will go on to make history as #FridaysForFuture/Climate Strike (FFF). Mynttorget in Stockholm will become

the hub of the global movement. And gradually I will try to help bring together a worldwide movement in the world of adults, beyond FFF. Mynttorget is where we will cofound Scientists For Future, and from there we will organise the Week For Future, with 8 million participants.

One task is central throughout these weeks. We need to develop and carry out a plan to make the world sustainable, fair and democratic within around ten years. We shouldn't simply be patting the young people of FFF on the shoulder. As a society, we must react to what they want and give them a secure future. And in that sense, their story is also ours. It is the story of our shared future.

This story has two sides. On the one hand, it is a sad story. Probably the saddest story imaginable. It is the story of hundreds of species which are being eradicated, forests that are being razed and burnt, hundreds of thousands of people who are fleeing drought and floods (Wallace-Wells 2019). And above all, it is the story of children and young people everywhere in the world getting information from social media and worrying every day, dreading conflicts over water and food, a kind of panic which never quite disappears. What will it look like for us, they ask themselves, when we're as grown up as those two-legged creatures who belong to the same species as us – the ones who are in charge? In a world that is two, three or four degrees warmer, with the danger of irreversible tipping points and feedback loops in the climate system (Lenton 2019), life will be hell for many people, especially those in the regions known as the Global South. This is also the story of established NGOs working in parallel, which have tried many things and still not managed to change policy. And it is the story of politicians and highly specialised scientists who know all this but who barely do anything because they seem to be in a state of paralysis.

But that is not the whole story. If we look more closely, a window opens to a positive mission, maybe the biggest challenge we can picture. It has just begun, or rather, it began in an unbearably warm week in August 2018. That is when a few children and teenagers from various suburbs of Stockholm decided to join Greta – the teenager they had read about in the news; the child armed with a sign reading "School Strike for the Climate", between the huge stone blocks of the Swedish parliament, on strike. At that moment, a story starts which only develops slowly at first, with very little happening for weeks and months, but then, led by the Swedish "gang of rebels", grows to become one of the biggest ever international youth movements for the environment. Six months later, on the 15th of March, 1.6 million children leave their classrooms in protest against the world of adults. Then in September, eight million young people and adults

come together across continents and to some extent across generations to go on strike together.

It's like something from a storybook, as one of the regular Stockholm strikers says. Not the widespread narrative about a single child fighting alone, but the story of different groups to which the young people belong. A story which has not yet been told; one which is also about friendships, about solutions to political and activist challenges, which brings together young people from all corners of the world. And it may be the story of a group of young people, but it is also about their attempt to wake up the adults, to work together with them, and to make their task clear to them, not least the scientists who have gradually joined together in the huge network of Scientists For Future. It is the story which we now have to tackle together and which we have to translate into reality in the next fifteen years across the world: the story of a global democratic transformation in all areas of life, in which we all help to create a life worth living with enough resources for all and without going beyond the limits of the planet: global heating, loss of biodiversity, pollution and acidification of the oceans.

But it is also a story with a long, complicated backstory, including the indigenous peoples who have long been fighting for their way of life and for the protection of nature, despite constant repression from governments and financial interests. In particular, it is also the story of emancipatory grassroots movements, the fight against colonialism, protests by the women's movement over the last century, and the struggle of workers and BIPOC communities (Black, Indigenous and People of Color), who want justice and the protection of human rights for everyone. Without these civil disobedience movements and the fight for human rights and for a democratic approach to one another (as well as to nature and its value), this adventure would not now be conceivable. This backstory is explicitly part of the young people's frame of reference when they decide to sit down and go on strike.

It is important to understand this story. Now a new chapter can begin: that of the adults coming together across the world, beyond Fridays For Future. There have been suggestions as to how this chapter of organised protest by adults might look – with the "Week For Future" and the COP meeting of the UN in Madrid, which are discussed in this book. There, young people have begun to connect with grassroots groups to become a unified global movement.

But the politics have not changed, and nor have the rules, the thinking and the economic orientation which plague and threaten nature and humanity. Despite the Paris Agreement, the UN says that the promises made by govern-

ments, with their NDCs (national plans to reduce emissions), will still lead to almost three degrees of global heating – even if these promises are kept, which is hardly likely (Chestney 2021). And there it is again, the sad story. An earth which is three degrees warmer will be unbearable for hundreds of millions of people (and billions of animals); ultimately it will be unbearable for the majority (Xu et al. 2020). And that world will become reality within the lifetimes of the main characters in this story, if we do not immediately enact “far-reaching and unprecedented changes in all aspects of society” (IPCC report, 8th of October 2018). Diffuse fears about this future world shape children’s lives like nothing else. We can resolve those fears if we treat the crisis as a crisis. We humans can look ahead and plan with the help of science and the imagination. And when those two work together well, there is probably no stronger force on this planet.

On the making of this book – its structure and the people who worked on it, science and politics

The narrative form used in the first part of this book is hopefully more fitting than a purely factual text when it comes to explaining the facts and problems faced so far by the young people and us scientists, and those which now define our task.

Between the first strike day and the first global uprising of the 15th of March, with 1.6 million children, there were 26 Fridays in Mynttorget in Stockholm, a complex social fabric was woven and became the basis for the global network. This is where arguments with politicians take place, and where the most famous scientists gather. More and more cameras appear, along with people from the media. This is where placards are painted and comments by politicians are discussed. This is the place to which the young people return after their travels to the WEF in Davos and the COP in Poland, full of their adventures. And this is where friendships are forged and trust is built: a core group emerges, one that wants to change the world. Altogether, there will be more than 250 Fridays in the small square at the edge of Stockholm’s old town, but also via the internet and the phone; five years with the most active young people and scientists across the world, who soon join, in Swiss towns, in Uganda, Australia, Brazil and Canada. Thousands of decisions must be made at this site of democratic experiment: what should the movement be like in the first place and how can a global network be knitted together? Which aims are

the most important? What is the role of science? And above all: when might the strike end? When would the world be a place where young people could feel comfortable and safe?

This narrative insight into the history of the climate movements (as well as the sister movement Extinction Rebellion) is told from my subjective perspective as a lecturer at Stockholm University who grew up in Sweden and Switzerland and knows both cultures. In that sense, this is a book about the role of science and education in relation to political activism. The focus is not on a single discipline such as environmental science or climate science, but on the attempt to approach that subject together with other university subjects: philosophy, political science, economics, psychology, and education, for example.

During these months, I also try to incorporate my experiences in Mynttorget into my teaching at the university as senior lecturer in drama education and youth studies. I use the young people's speeches in my seminars on social and ecological sustainability, education and democracy, and together with the students I try to use role play and other research methods drawn from the arts in order to understand what is scientific, and what is true. For instance, I ask them to write plays about the legal cases brought by children across the world against their own governments, because they are doing too little to prevent the climate crisis.

What exactly is the role of the university in this shared history? In terms of method, this book might be seen as a kind of auto-ethnographic study, reflecting on the development of the new movements for climate justice and on university life. In the spirit of post-qualitative research, the central insight is that we as scientists are also entangled in problematic power relations and that we have to expose them and respond to them actively, rather than pretending to be neutral (Leavy 2009). Instead of making the young people the object of a traditional empirical sociological investigation, my approach starts by trying to work together with them to ask how society could be changed and a global sustainable democracy created.

This story is then followed by a collective view of the past and future, reflecting many conversations with Loukina Tille and Isabelle Axelsson, from Sweden and Switzerland, two of the young activists at the centre of the global climate movement. What is the movement about, and what are its demands? What does "climate justice" mean, and what about "Listen to the science?" And finally: what role do all of us have, and what is our task?

From the beginning, reflections on what had happened at high speed were an important part of the movement. The Sweden-Switzerland axis was crucial

in that context, and so were the ideas and initiatives of Loukina Tille and Isabelle Axelsson. When they begin to strike, they are still school pupils who have suddenly left their classrooms. Now they are studying politics and human geography at university in Zürich and Stockholm. Loukina Tille, from Lausanne, helped build the climate movement in Switzerland. Already very early on, she was in contact with Isabelle and the other Stockholm activists, and she regularly led global meetings of all strikers, organised the first international meeting of four hundred young people at the University of Lausanne, and was one of the organisers of the global strikes. At around the same time, Isabelle Axelsson joined the Stockholm strike. Together with Loukina, she planned and carried out trips to the European Parliament in Strasbourg, built up the global organisation with her peers, and met with Loukina at the conferences in Lausanne and at the World Economic Forum in Davos. Without these two, and their interest in exchange with science and with scientists globally, the movement would look different.

Towards an ecophilosophy of democracy

This book also offers an introduction to ecophilosophy and a unified science of democracy in times of interdependent sustainability crises. This is the case not only in the narrower sense of a philosophy of climate ethics, but as an attempt to explore and present interrelated ideas about our place in nature, and the creation of a convivial, just world. It includes questions of moral and political philosophy, highlighting that the idea of justice should always be complemented by the notion of being humane, making relations and structures of domination visible and opening a world where everyone can experience the dignity of us all; thereby repairing and creating a common fabric of integrity which links us to nature as vulnerable creatures – and gives us a unique common task to create a world in which we can live together as equal and free democratic animals (see appendix for such a political program and a new framework for a convivial, global democracy).

This leads to the enterprise of a new science of sustainable democracy, integrating insights from many sciences, from neuropsychology to political science, exploring the substance of democracy and how this relates to its formal aspects: focusing on the idea of meeting on an equal footing beyond structures and relations of domination (gender, class, ethnicity etc.).

What if we could explore all of this – even in a creative way (arts and drama education) – at every school and university, in every village and town? The final chapters sketch the idea of such a prototype centre as a possible core of all educational institutions. Trying to understand the movements as well as university life, the book explores what a sustainable, democratic approach to the world could be – and what it would mean to create the social (political, economic, cultural) spaces needed to connect with each other and the environment, to produce enough resources in a regenerative way for all to live a life in dignity.

The chapters follow the chronology of the movements, but also give an introduction to the basics of earth sciences (first chapters), economics (chapter on Davos), justice, global ethics and politics (chapter on corona and Madrid), sociology (chapter on Glasgow), democracy (chapter on the “many fights, one heart”), and especially education and philosophy (chapter on education).

On this journey, one main question is: what is this endeavour of science, and scientific research and education which leads us into and maybe leads us out of the crises? What does this exploration of humans as embodied, social, imaginative beings living in problematic power relations mean for curricula, teaching methods, research ethics, and for the institutional reframing of these topics, leading to a new picture of scientific endeavour as a regenerative and transformative exploration?

The intergenerational challenge and the idea of a united, global movement

Fridays for Future was founded by Greta together with Mina, Edit, Eira, Tindra and Morrigan on the 7th of September, 2018. It is a movement initiated by young people, and that has consequences. As Roger Hart’s Unicef text (1992) so wisely delineates, there is a whole “staircase” of possibilities for intergenerational cooperation: from projects initiated and carried out only by young people, to projects initiated by adults and organised for children. #FFF is a “youth-led” movement, initiated and led by young people. Young people have the right to organise themselves. Adults can help – if they are asked; or if they organise themselves as “parents”, “artists”, “scientists”, and so on.

So adults have the task of giving young people confidence that they believe in them and in their ideas, and that they believe them capable of acting independently. A universal power imbalance between children and adults

comes into play here, according to the Swedish theatre director Suzanne Os-ten (2009), who shaped the culture of her country. The “grown-ups” have the responsibility to make sure that the younger ones are doing well. The well-be-ing of the younger ones has priority. The older ones can listen and help. But above all – according to the fundamental idea of this book – they must con-tinue working on the “hand” of the united climate movements, which is made up of “fingers” such as Fridays for Future, Extinction Rebellion, the NGOs and so on. Patting the young people on the shoulder is clearly not sufficient.

The question is then: what if we joined together as “People for Future” in a global, democratic, united movement or network that anyone can simply join (see the appendix of this book) – respecting and celebrating the existing movements and their history and identity? A movement which stops the Ama-zon rainforest from being cut down and the German coal power plants from running, which prevents the Swiss banks from financing the fossil industry and which comes together worldwide to build a sustainable, fair society, a movement which takes care of everyone’s needs and ends the injustices of colonial history – with regenerative forestry and agriculture founded on plant-based products, a fossil-free public transport system, a global network of renewable energy and a really democratic economy that helps everyone flourish and stays within the limits of the planet; this is roughly the image of the future towards which Scientists for Future are working. And strengthen-ing a sustainable democracy beyond the nation-state, being fair to the Global South and eliminating power relations of domination based on gender, class, and ethnicity. If we look closely, this is the movement that has emerged in the last five years.

The task

“Are you happy with how things are going?” asks a reporter from the *Finan-cial Times* in March 2019, when a million children are on strike. “We are happy when we see the young people who are standing by our side everywhere and doing the same as us. Not going along with it anymore. That makes us happy,” say the young people. “But nothing has happened yet,” they add. “Nothing has changed. Emissions are rising across the world.” Even in the wealthiest coun-tries, such as Switzerland, Germany and Sweden, emissions are hardly going down. Sweden has a green Deputy Prime Minister when the young people be-gin their strike. They strike in front of these parliaments because governments

do not, in this sense, take the science seriously. If Sweden adhered to the Paris Agreement, which almost all states across the world signed in 2015, its parliament would have to pass laws reducing emissions every year by more than twelve percent, say scientists at the University of Uppsala (Anderson et al 2020). The young people are on strike because with their talk of “climate neutrality” and “net zero emissions in 2050”, governments are precisely not keeping to the Paris Agreement. They are on strike because they understand that the populations of all countries would have to rise up and join together in solidarity, if a dignified life is to be made possible for all people on this planet.

We were actually all united – or rather, our governments were united – when it came to complying with the Paris Agreement. This obliges us to do everything to limit the rise in temperatures to well under two and if possible under 1.5 degrees. The IPCC-SR1.5 report, which was accepted by all UN states, shows that we will already miss this target in three or four years if we continue as we are: that we have an absurdly tiny amount of CO₂ emissions left (2020: around 350 Gt). And the Gap Report by the UN shows that the established and contractually planned fossil infrastructure (coal, oil, gas) will cause around double the permitted emissions in the next ten years (UNEP Production GAP report 2019). We are on the way to a much warmer world, already in the lifetime of the children who are currently going out into the streets, with up to three billion people fleeing from regions which have become uninhabitable and too hot (Xu et al. 2020), and with large proportions of the glaciers melting, so that water supplies across the world are under threat. That is why Scientists for Future say: We need systemic change, and all of us must take action – and take to the streets.

This book outlines how that could work. Thanks are due to Jana Eriksson, who took many of the photographs included here and who is herself part of the Stockholm climate movements.

The parts of the book which describe the first two years were written in 2020 (with the corresponding scientific data) as part of the German book *Gemeinsam für die Zukunft* (Fopp et al. 2021); the chapters about the last three years were written in Summer 2023. All activists, no matter their age, are mentioned by their first name, also as a measure of safety; the only exceptions are those who are internationally known.

There are many things to which this book is unable to do justice – with its Stockholmian, European, privileged, and restricted perspective. In that sense, this European history of Fridays for Future and Scientists for Future is not a work of journalistic research, and it should and will be told by many more dif-

ferent voices (see Nakate 2021). However, hopefully, this story can inspire to action and to some extent explore and explain what is important to this group of young people and scientists, and what that could mean for all of us.

Many people are concerned about the state of our world but don't know how to engage. What can each one of us do? Following the movements, we can also see the history of bottom-up initiatives which grow with the help of the grassroots movements, which are open for everyone, individuals and organisations. Together, they can be seen as a united program to change our world: including the Doughnut Economy Lab, the Fossil Fuel Treaty, the Faculty for a Future, Earth4All, bioregions, etc. But still, the central idea is that we need to come together as a humane, global grassroots movement.