THE GREEN REVOLUTION

A STORY OF BOULDER BY VILDE RYE-HOLMBOE

"I'm sorry sweetie, but that's not for you to decide. We need to think about the world in a bigger picture."

I was soaked in sweat as I climbed up the last bit of the hill. I turned around and looked down at the city beneath me. It was early even though the sun was already standing high up on the sky, and the city was still dozing off beneath me. All I could see as I looked down on the city were the sparkling rooftops, all covered with solar panels. On the other side there were rows and rows of wind turbines, and behind that more mountains. It was a glorious sight, but I could feel my mind drifting away. I turned my attention back to the passage I'd been working on last night. I scrolled down with my eyes, and had another look on it. Still nothing.

Back home I had a quick shower, the cold water replaced the burning sensation with numbness, which felt good. I should have worn sun protection, but I'd just have to put on some healing cream this time instead. It was only the beginning of June, but nowadays the temperature could easily get up to 35°C. The summers were always long, hot and dry, and as the years passed it only got worse. I put on the first clothes I could find, shorts and t---shirt, and put my hair in a bun. I went to the kitchen to have some breakfast; I had a look through my options. "Egg and bacon" (made out who---knows--- what), bread and jam, cereal and soya---milk or fruit and soya---yoghurt. Sometimes I still missed eating meat and dairy products, but after the green shift it was illegal to produce animal products for food. Livestock used to contribute to more than 50% of our greenhouse gas emission, and was one of the first things the green party abolished. Besides, we needed all the land for growing our own food now. I grabbed the soya---milk and a box of cereal, made a soya latte from the coffee machine and sat down at the kitchen table. I had a look on the latest news. The intense heat and sand storms in the Middle East had led to even more people on the run. In a few years, that part of the world would be uninhabitable. Scrolling down, you could read about the environmental crisis in all parts of the world and the wars between countries fighting for the shrinking resources. In the US it was fairly safe, but it was only because the government threatened to blow up any country that tried to attack us. It might seem cruel, with all the resources we still had. Working for the university I knew the government planned to share our technologies with the rest of the world, once they were developed.

I took a bus to the university area, the summer holiday had just started and there were barely anyone there. I sat down at my computer, it was uncommon nowadays to have one, but I liked the feeling of running my hands over the keyboard. I opened up the code I was working on for my PhD. I worked on behalf of the government. Everyone at the universities did. We worked on lots of things, ways to grow food in very dry environments, ways to recover lost species, how to clean the polluted air and so on. The green party got to power in 2050. I barely remember anything before the green shift. Even my mother is a distance memory. She was one of the last to die of cancer, a year after doctors found a way to treat it. I've never felt bitter about it, but I miss her a lot. When I was younger I really wished there was a way to get her back, or to travel back in time to see her. In truth, it had been what had started my interest in science in the first place. As I got older I realized science couldn't get my mom back, but I strongly believe we can make the world a better place with science.

My PhD is quite simple to explain in short, but not that easy to explain in details. By processing all data available about a person I'm trying to map out a person. The higher the level of data is, the more detailed mapping I'm able to get. After analyzing a person's data I hope to be able to know as much about a person as possible, regarding abilities, personality and lifestyle. For the people that I'm using in the project, I've conducted interviews as well as collecting the data that I need. I collect all the data that I legally can get access to: health records, old test results, information about family connection, education etc. The smart grid collects data on a day---to---day basis, but it's

also kept record of to make a more accurate life style profile. It's amazing how much you can tell about a person through just looking at this data. You have no idea of what they talk about, what they read or what they think, but it sill gives you a pretty good idea about who they are. The smart grid is almost the same as it was when it was built, even though it was built long before the green revolution. It's only 15 years since the revolution, and most of the infrastructure hasn't changed since then. They (the government) have done some adjustments to the smart grid, which makes it possible to know which electrical devices are being used, which make the data more useful for me.

A lot of things have changed since the revolution, towards a more sustainable future. The old government really tried their best, but change went slowly. A lot of people thought the government didn't do enough. The number for environment refugees increased, and more and more people arrived in the US. At the same time the climate was changing causing food production to fail year after year. A lot of people came from the south, and land where people used to live is now taken over by large deserts. People were getting angry and frustrated. They'd had enough and wanted change. The green party's timing was in that way impeccable.

Suddenly my thoughts were interrupted as Rob, my PhD advisor, coughed loudly. I realized he was standing right next to me. Strictly speaking it wasn't Rob in person, but a hologram of Rob, but the holograms looked almost real nowadays. "Oh.. Hi Rob" I stuttered in surprise. "Thought I'd check on how you're doing on your project" Rob said and smiled grimly. "I think I'll be done soon, I've discovered some irregularities in my results, but I'm sure it won't take that much time to fix it" I said, trying to sound as confident as I could. "Good" he said, but sounded far from content with my answer. "I hope you'll have it done by the end of the month as planned. I have spoken of this to some really important people in the government, and they are looking forward to see what you come up with." Without saying goodbye Rob's hologram disappeared.

I was left feeling a bit shaky. Rob only turned up for our scheduled meetings every Monday and Friday morning, but today I'd completely forgotten about it. I usually never contacted him in between. I did pretty well on my own, and our meetings mostly consisted of me reporting how I was progressing. I also found him kind of intimidating, which didn't increase my eagerness to make our meeting more frequent. This was the first time he'd told me that my work was of interest for people high up in the system. I didn't know if I should feel happy or scared. You didn't see much of the people in the government, and I wondered what they'd use my research for.

The government already collects a lot of data on people's everyday life. Of main interest is the data that concerns our environmental impact on the earth. Through the smart grid system they measure everyone's power consumption. If you go above you're allowed power consumption you'll be fined. All the trash is weighted, and there's also a limit on how much you can throw away. Families with kids are the only exception when it comes to the prohibition on buying dairy products. Some families have tried to sell products on the black marked, which is strictly forbidden. If you start buying more than you necessarily need, you'll get a visit from the police. They have, as far as I know, remained within already exciting laws of privacy. They came to power through a revolution, so strictly speaking they could have made new laws. The framework of our society has remained the same, and maybe that's made people feel like the revolution wasn't such a drastic change anyway. If they go across the line, in order to collect more information I'm not sure what the consequences will be. Why would they want to do it, anyway?

I worked until 5 pm; I managed to fix some of the issues. The rest would have to wait until Monday. I took the bus to the city center. There were not many people in the streets, but as I got closer to the railway station I could hear many happy and anticipating voices. At the station grown---ups were standing next to their big piles of

luggage, while their kids where running around. No one had cars anymore, and airplanes were of course out of the question. If you wanted to go somewhere, you had to go by train.

I found my train, and after fighting my way through the crowd, I found my seat. Not long after the train started moving. I watched as we passed the city, soon the houses and the streets were replaced with fields and small country houses every now and then. After an hour I reached my destination. I decided to walk the 3 miles to the farm. It was a dense summer evening; I wish I'd remember to bring a bottle of water. Eventually, I got to the old familiar gate that led to the farm. I walked on for a few more minutes. I had cornfields on both sides until I arrived at the old white house where my dad lives. Next to the house there's a big red stable where my dad keeps the crops until he sells it.

I walked in without knocking. From the living room I could hear my twin brother Caleb and my little sister Tara argue friendly in front of my dad's old---fashioned flat screen television. I went through the hallway to the kitchen were my dad was making a delicious chilly sin carne. "Hi Sally!" he greeted me as I entered. "Hi dad" I gave him a good and long hug. I'd been so busy with my PhD the last couple of months, so I hadn't been able to visit my family for a long time. He looked older. Tired. It was very dry outside, and the last 20 years we'd had a lot of sand storms. If you lived on the countryside you were particularly exposed and breathed in a lot of sand. In the long run it broke down your lungs. I knew my dad often had trouble to breath. It looked like it was getting worse. Medicine had still not found a way to "cultivate" new lungs, even though they were trying hard as the problem grew amongst the population.

At the dinner table our family was making light conversation. Caleb's girlfriend Emma was also there. She works as a nurse and I could see that she every now and then sent worried looks at my dad. My brother Caleb helps my dad out on the farm; I'd always been the brain of the two of us. Tara is only 16 and still in high school, and makeup and boys are her two favorite hobbies right now.

"So... How are you getting along on your project?" Dad asked. "Fine, just fine dad" I replied. "What will you do after you're done with your PhD?" "I don't really know yet," I said. "Right now I'm really just focusing on finishing the project, and maybe they'll want me to work more on it" I said. "Who wants you to keep working on it?" my dad asked. "I talked to my counselor today and he said that the government is interested in what I'm working on." "In what way?" My dad said and looked me straight in the eyes. I felt like I was 14 years old again, and caught hacking into the school system. My brother made me do it, so that he could get his hands on the solution proposal to an upcoming test. "I don't know exactly. He didn't say." My dad was one of the few outspoken opponents of our government. He'd refused to buy any new electric devices after the revolution, claiming that you never know what the government might put into them. He'd also been one of the last to get connected to the smart grid, but eventually they'd threaten with prison, and he'd let them do it.

"From what I understand about your project, in the hands of the government they can use it to get more information about people and increase their control on us." "You don't know that" I said stubbornly "From what I've seen the green party has only tried to make life better for us since they came to power. I'd say they have succeeded in it too. We have enough food now and people's quality of live is improving." "But to what cost Sally? What have we lost on the way? Since they got to power we haven't had a single election. Do you know who runs our country? People are not allowed to travel in or out of the country; some people haven't seen their families for years. Who knows how far they will go?" "They've had to make some difficult decisions, but we have to look on the world as a whole." I said, "When it comes to environmental issues and the nation's safety we have to do all that we can..." My dad was no longer listening at me and continued, "I warned you at the beginning of this project. You know how the government loves information. In the beginning they might have had interest in it for the sake of

'Mother Nature', but they have gone too far now. I can't say how I know, but something tells me that they want to control everything we do. Absolutely everything!" he said. "I think you're wrong. Why do you have to be such a stubborn old man?!" He was about to answer me but started coughing, and I realized he could barely breath. Emma gave him some water, and eventually it stopped. Then she took him by the arm and helped him upstairs to bed. We three siblings stayed behind. I was glowing with rage and guilt, and I didn't want to look my sibling in the eyes. Emma soon returned. We spent the rest of the evening in front of the television; everyone sat in silence, lost in our own thoughts.

Saturday mornings are like any other day when you're a farmer. I ate breakfast alone in the kitchen, after a while Tara joined me. We sat there for a long time not saying anything. "You now daddy isn't angry at you. The government will find a way to do whatever they want eventually anyway. He just wished you'd use your talents otherwise. You know how he is with the government" Tara said, and looked at me much too serious for a 16---year---old. "I know Ta, I just wished he'd be proud of me. That's all. "I went out on the cornfields. A strong wind was blowing, which would have felt nice if it wasn't for all the sand I got in my eyes. I found Caleb and dad working in the shade of a shelter in the middle of the field. Dad never held a grudge, and smiled as I approached them. They were doing repairs on a sort of water device that my dad had built many years ago. Before my parents bought the farm, my dad had been an engineer; he'd always been good at fixing stuff and could solve any kind of technical problem. "The local authorities have been on me again, saying I use more than my share of power supply. And let me not start on the water supply. How do they expect me to be able to grow anything with all these regulations and restrictions? I'd lose at least half of my crops if I'd listened to their bullshit." My dad snorted. "It's true, we struggle so much as it is" Caleb said. "They say this summer will be even warmer than usual, I don't know how we'll manage." I didn't know what to say, but I stayed with them for a while. It calmed me to watch their skilled hands work on the machine.

Sunday morning I said goodbye to my family and took the train back into the city. I decided to go to the university and try to get some work done. In reality I just wanted to get my thoughts away from what my dad had said. Working for the government I always felt like I had to defend what they did. In reality I wasn't sure what to think. Rob and the government scared me a little bit. I did my project because I hoped that it could come to use to people that could need directions in life, as a tool. Maybe I'd been blinded by my own ideas. If the government wanted to, they could get access to far more detailed information than I was able to. My program only needed a few changes, and then they could know everything about a person. It would almost be like being able to read people's mind. The thought made me shuddered. A part of me couldn't, or maybe didn't want to believe them capable of something like that. My dad wasn't necessarily right, but what if he was?

Monday morning I felt nervous while I waited for Rob to arrive. This time he didn't take me by surprise. I was staring at the empty spot as he slowly came into sight. "Good morning" he said, in an almost friendly tone. "Did you get further after we talked on Friday?" "Yes, but I've been thinking some after we spoke. I know that my research can help people. But I'm starting to doubt if this is going a little bit too far into people's life?" I tried not to meet eye contact with him but I could see the surprise in his eyes. "Too far? I'm not sure if I understand what you mean, Sally." "If you know everything about a person, he or she could easily be manipulated. What a about privacy?" I asked. "When the party took over, they had a vision. To save the world." Rob started. "There are three ways of changing the people. The first option is to give them information. People have known about climate change for almost a hundred years. Did that help?" He asked rhetorical. "I guess not... but it was different back then" I stuttered. "Number two, make it easier for people to make better choices. That was also done, to a certain extend. Did that help?" He didn't wait for me to reply. "Sally, you're so naïve. Don't you see what we need to do? Humans are selfish creatures. They will always choose what's best for them. Look at where we are now! For a hundred years people have known were the world was heading. Did they really try to do anything? At the end of

the day humans will act on the basis of their own self---interests. If we are to help people, its better if we make the decisions for them" I bit my lip so hard that I could taste blood on my tongue. "That doesn't give you the right to control them." I said in a low voice, even though my inner instincts wanted to shout at him in rage. "I'm sorry sweetie, but that's not for you to decide. We need to think about the world in a bigger picture. If I can speak frankly we are already at the brink of extinction. We've told everyone that we're doing fine. But guess what? Our climate is still changing, and most likely it can end very badly."

Not many things were clear to me at that moment, but one thing was. I deleted all my data for my PhD. I couldn't be sure it was gone; maybe they'd already taken a copy of it. I could only hope they hadn't. I collected my belongings from the desk, and left it for good. They'd probably come after me, but I would have to think about that later. I only knew of one person that could help me, my dad.

I was now an enemy of the government, but what I was fighting for was far more important. Our freedom. Maybe Rob was right about the future, maybe the world was heading towards a crisis so big that we wouldn't be able to save ourselves. We were still alive however, and where there's life there's still hope. We can only try.