CIRCLES

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'Circles' takes us on a phantasy tour de force and into deep connection with earth under our feet while, at the same time, being a prime example of creativity and imagination. In this story, future physiotherapists in the high collect reindeer manure to support the growth of plants that can help reduce mercury pollution – a very real and longstanding problem in the Arctic. Once again, this is a story about how collaboration and curiosity can turn bad conditions to the better and open us up to new opportunities and entirely new tasks. And in the exploration of these new tasks, the digging of manure and joy of touching the earth with our hands, 'Circles' also reminds us that every little action has an effect on everything else and can be a meaningful contribution to healthier and more sustainable futures, no matter how distant, small or strange it might seem.

It is cold. The snow has been falling all night and now lies over the landscape like a blanket of soft, fine wool. Just the way it should be. She turns away from the window, takes the coffee cup with her on the way out to the hallway, where she puts on her suit, thick hat and winter shoes. She takes one last sip of coffee, and puts the cup down on the dresser, before she opens the door and steps into the white. It smells of clear, cold air and winter landscape. She is always a little overwhelmed when it hits her like this in the morning and feels when her lungs can finally take in the freshness again. The snow crackles under her shoes as she crosses the farm

on her way to the yard. You can virtually hear the sound of several degrees below zero. There will probably be some long working days ahead. Previously, she would have been exhausted just at the thought, but here, long working days mean shared frustrations, sparkling enthusiasm, bad jokes, exhausted yet content bodies, increasing solidarity, and this feeling of being an indispensable piece in the Greater Whole.

She meets the others in the equipment room, where someone has already started to prepare the sleds. They spread across into the different areas. The ice layer from last week is probably still in the heart of the valley, so they will have to bring a little extra feed for the reindeer even today. Climate change and the restoration of balance in nature are not done in a jiffy - although winter certainly came back quickly when they finally managed to affect the ocean currents.

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THERE HAS BEEN A BIG **PROBLEM WITH MORE** AND MORE PEOPLE BEING INACTIVE DUE TO NEW **TECHNOLOGIES AND FEW** PHYSICALLY ACTIVE JOBS. THOSE WHO ARE ACTIVE USUALLY TRAIN INDOORS AND DO NOT OFTEN VENTURE OUT DUE TO THE CHANGING WEATHER. THE PLAN IS THEREFORE TO MAKE A DOME WITH A LOT OF TREES AND OTHER PLANTS SO THAT IT BECOMES A KIND OF "OUTDOOR" EXERCISE PARK - YET WITHOUT **BEING COMPLETELY OUTDOORS!**

She can still remember the first time she came ashore here after the Plantation was set up. It was admittedly only a vague childhood memory and grandmother's stories she had as a basis for comparison; but that only a few years earlier palms and banana trees had grown here seemed completely unthinkable - she came to a stand and stared.

The reindeer have taken shelter for a rest. Exhausted after an unsuccessful hunt for food down under the ice layer. They spread the feed out a little further away, and the animals push up on their legs as they lurch towards the breakfast table. The fresh snow means that they have to spend a little extra time digging out all the dirt. But it's nice to work together like that and with the whole body as a tool. This is a rather gratifying hunt. She smiles a little; the reindeer seem to thrive. It has gradually become a nice, small herd of strong animals. But it has taken time to build it up. Patience. Patience, hope for the future and purposeful work. The words of the century if you had to ask her. Or cooperation and interdependence. These small circles of life, which together create the great circle. Sometimes she has to remind herself of this: that their small circle here at the end of the world is in fact an important piece in the Greater Whole.

They bring the manure into the hall; not very large quantities today, but it helps. After a short break out in the sun, she and a couple of the others go to the plants. It seems that the plant has done its job; only a millimeter of white covers the earth. And that is just right for them. A purple tinge in the petals; it seems that the snow has brought something with it from the south. Good. It is the mercury that gives them this distinctive colour, before it eventually disappears again as the plants absorb it, transforming the toxin into this unique combination of molecules. It is hard to imagine that such a dangerous substance can create such a beautiful colour.

She still has to think of Grandpa every time she walks here among the plants and their purple shine. His choppy movements, and the violent spasms in his neck. When she was little, she had thought he was scary. He could not speak either; only grandmother understood what the strange bursts of sound meant. It took a while before she realised that Grandpa had not always been like that; that something had entered him that had destroyed something. Then she cried. Crying for the grandfather she would never get to know. It was also when she had decided that she wanted to help others like her grandfather; help them struggle less with movements, reduce the violent spasms in their neck, talk without such bursts. And here she was. The soil in the test tube shimmers faintly purple as a ray of sunlight hits it. So it's what she thought: a fairly large field must have passed in the night. Well. Ash over in the lab will be delighted. Maybe they can start a new round today.

It had all been a coincidence. When a plant had been discovered a few decades earlier in the areas where the cold had just begun to return - a plant that changed colour with the amount of mercury in the precipitation - a handful of dedicated researchers insisted that this had to be investigated further. On their own, they had set up a plantation and a research center here at the end of the world. Their assumptions had proven true; the plant converted the toxic metal into harmless molecules that were easily absorbed into the soil and contributed to increased moisture. However, the growth conditions in this area had not been ideal. The plant thrived best in the cold - yes, but the soil in the cold regions was still no good.

It was around this time that the first reindeer appeared. A lean and staggering herd of a total of five animals. Until then, this animal had been considered extinct - something it almost was, but the researchers quickly decided to intervene, and soon it looked much brighter for the small population. Without thinking about it, they used the reindeer manure as fertiliser for the plants. And it was here that the happy coincidence had first materialised.

She finds the others in the kitchen after delivering the sample to Ash. The sun lights up the room, while everything is sprouting in the food garden. She pulls up a carrot, grabs a cup of coffee and settles down in the corner. This is definitely the best seat around the table. From here she has a view both to the mountains in the north and down toward the plantation. To the left of the windows there is also a picture of the first time it happened.

It had become apparent that, with at a particularly high concentration of mercury, the soil around the plants reacted with the manure from the reindeer, and tiny spheres fell out. To take these spheres to the lab and put them under a microscope, had admittedly seemed almost banal, like researching something a child might have found in a sandbox. Fortunately, researchers are often of the curious kind, and these were no exception. Curious and patient.

66 "HEY, CATHRINE! FINALLY, YOU ARE HERE! WE NEED HELP TO PLANT THE LAST TREES ON THE OTHER SIDE OF THE DOME!", A COLLEAGUE SHOUTS A FEW METERS AWAY. "I'M COMING!". CATHERINE SHOUTS BACK AS SHE TAKES ONE LAST LOOK AROUND HER **BEFORE TURNING** AROUND AND JOGGING FURTHER INTO THE DOME. IN JUST A FEW SECONDS, SHE DISAPPEARS INTO THE JUMBLE OF VOICES, HUMANS, ROBOTS AND NATURE.

Ash strolls into the kitchen with a huge grin on his face. He says that the concentration is far above high enough, and that they can start as soon as they have finished eating. It is important that they do not wait too long, to prevent the concentration from falling again. They also have enough manure in stock to produce a sizeable amount. It is certainly a painstaking job. Several of her friends in the south started laughing when she first told what her job up here would be; that she should stand and dig in the soil and manure. Why couldn't the automatic machines take care of this too, as they did with everything else? Of course, they could have done it, and they had done it at some point. It was just that the quality of the spheres had dropped when they did; the material had changed properties. It seemed that contact with human skin was of crucial importance for the fusion process and the product. Besides, it had to happen up here. The whole small circle had to happen in the same place. A suggestion for fragmentation of the process had once been made, but it didn't work out in the end. The soil from the plants had to be fresh.

The cold soil pressing against the fingers. They collect it in buckets which they then put on the sledges, while taking care to replenish with new soil, so that the plants can continue where they left off. The sledges are then driven into the hall, where the manure is released from the warehouse and mixed with the soil. Twenty minutes, and then they can pick out the spheres. The spheres are then placed in trays, which are further transported to the fridge. Here they will once again rest for twenty minutes, before they are finally merged into blocks that are ready for further transport.

She picks up one of the finished blocks. It weighs barely a kilo, but soon it may

cover a large hospital's need for sterile "disposable items". The fabric has properties such as plastic: low weight and good durability. In addition, it has a selfcleansing effect, and perhaps best of all, it breaks down easily and quickly to safe soil after being used. She knows that what they are doing here is currently small-scale, but for being a side effect of the work to help those like her grandfather, she thinks that they have already come a long way. In the near future, the cold will also move a little further south, and new plantations can be created. Patience, hope for the future and purposeful work. And then the circles. The circle. She smiles.

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