

Story Sibylla and The Cocoons

Sibylla woke – the room was still pitch black in the early morning but she was very excited and just couldn't sleep any longer. She listened and heard her family members breathe while they were still asleep. She smiled when she noticed that she didn't hear a different sound: The rain wasn't pouring down onto the roof any longer, it had finally stopped and she would be going on the trip that her stepfather had promised they would make later that day.

Sibylla was 13 years old and she loved to draw. Initially that had been a problem, as her mother didn't want her to spend hours and hours working on her pictures. Only when her stepfather, who was a painter himself, praised her pictures and said she might be able to earn her living with these one day, her mother reluctantly gave in to her dream. Only a couple of weeks before she had drawn a flower so precisely and well that her stepfather had told her he would be able to use the picture as a sample for a book he was currently working on. As a reward he wanted to visit a silkworm farm with her, so she could take a look at the animals that were responsible for the production of silk ...

Slowly the dawn came and she could already hear the first carriages rumble down the streets. Sibylla heard her mother get up and she saw the glow of the petrol lamp that was lighting the fire in the hearth. Even though the family was able to make a reasonable living off the money that her stepfather earned with the production of pictures for science books, life was still quite tough for a girl in 1660.

Sibylla got up quickly, got dressed and hurried to her mother who was a little surprised because usually Sibylla wasn't the one who left her bed first. Finally, her stepfather also came to the table and Sibylla instantly asked: "Sir Father, it doesn't rain any more, will we visit the silk farm today?" Jacob Marrel – that was the name of her stepfather – smiled but her mother was already criticizing her: "First of all you will say good morning, young lady." But Jacob interrupted, "Come on, leave her alone, I can understand her and it really is a pity that it has been raining all this time. Yes, we will leave right after breakfast."

Three hours later they stood in front of a big wall with a couple of strange trees behind it. Jacob Marrel knocked on the gate and shortly afterwards someone opened up: "Right", the old man behind the gate said, "Jacob! You wanted to come along with your daughter. Is

this her?" Sibylla stepped forward and curtsied. "Good day, my name is Sibylla and I want to see the silkworms, please." "Well then, come on" the man said and gave way. Two hours later Sibylla was still enthusiastic. She had seen the silkworms, how they pupated and how the silk threads were pulled out of the cocoons and were then spun. But at the same time she was annoyed by herself because she had forgotten her drawing book at home and she would have loved to draw those silkworms.

Sibylla asked if she might be allowed to take one of the silkworms home in order to draw it – but the old man shook his head and said: "No that is out of question, I guess you want to start your own silkworm breed?" Sibylla shook her head and said: "No, I would only like to draw the silkworms. They move so slowly and look so pretty, I would love to try it." The old man first chuckled and then coughed: "Draw? Draw my silkworms? Nobody has ever asked to do this before." Sibylla was disappointed by this reaction but then her father said: "You know, she really is a good artist and if she continues this way she will reach my level in a couple of years." Such praise made Sibylla feel proud and then the old man rose from the table and said: "Well, then wait a minute." He left the room and her stepfather smiled and winked at Sibylla.

Some time passed but then he returned and held a little box in his hand: "Here you have some silkworms, but take good care of them." Sibylla was very happy and took the box into her hands and carefully opened the lid. In the box there were some twigs from the trees that grew in the garden; she carefully lifted one of them and there was a silkworm crawling around. She smiled but the elder man said: "Now listen: These silkworms only eat the leaves from these trees that grow in my garden. You won't be able to keep them for very long unless you return every third day to collect some new leaves." Sibylla nodded, yes, she would do that.

The entire way home she carefully carried her box with the silkworms. But at home she encountered a new problem because her mother wouldn't let the silkworms into the house. Apparently the animals were bugs. Sibylla was confused, mother didn't seem to mind wearing the silkworms silk. Finally, her father suggested Sibylla could keep the silkworms in the attic if she wanted because they couldn't do any harm there. Her mother still didn't agree but ultimately she gave in.

Sibylla often went to the attic in the coming weeks in order to observe and draw her silkworms. The animals moved a little in their box and ate the leaves, and now and then, their skin broke and a new caterpillar emerged from the remains and kept on eating. Sibylla was more and more fascinated by the animals and tried to understand them better through her observations. At the same time she tried to draw a really good picture of a silkworm, which wasn't exactly easy even though they moved very slowly. Sometimes she would start to draw the strange leaves on the branches that the silkworms were eating and sitting at.

And then one day the silkworms started to spin themselves into a cocoon. The elder man had predicted this would happen when she collected the leaves a couple of days earlier but Sibylla hoped to be able to keep observing and drawing the animals. So she went to the farm and knocked on the gate. The old man opened the door some time later and Sibylla said: "Good day, today I will probably be here for the last time because my silkworms have spun themselves in." The old man nodded and said: "Well, that's how it goes, there is a time for everything". Sibylla produced her drawing that she had brought along with her from under her cape and gave it to the man. "Here you go. This is one of the pictures I drew from your silkworms." The old man glazed at the picture for some time and then he said: "Gosh, you really are an artist already. You know what? I will fetch some new silkworms for you if you want to." Sibylla nodded and shortly afterwards she ran home, looking forward to observing the new silkworms.

About a week later Sibylla entered the attic like she did every day and looked at her silkworms. Suddenly she noticed something un-

sual with the cocoons that she had set aside: Something moved inside the cocoon. Sibylla squatted and observed them very carefully: She saw how the cocoon seemed to rip from the inside very similarly to when the silkworms were shedding their skin. But that couldn't be real. She kept looking and finally the cocoon had reached the point where an animal crawled out, but that certainly wasn't a silkworm.

Sibylla held her breath when the animal had emerged completely and crawled up a little. Suddenly the animal spread its wings and Sibylla realized that it was a butterfly.

How could this be true? She had seen that a silkworm had spun a cocoon around itself and now a butterfly came out of the cocoon. Sibylla went downstairs to collect her drawing utensils and then she drew the butterfly that was sitting there hardly moving at all. Soon it became too dark to draw in the attic and Sibylla went downstairs and reported her observations over dinner. However, nobody quite wanted to believe her.

The next day she went back up to the attic and now there were three butterflies that were flying around and three broken cocoons lay there. How could this be? Sibylla decided to inspect this phenomenon some more and to observe it even closer.

Maria Sibylla Merian started observing and drawing silkworms, caterpillars and butterflies at the age of thirteen. Nineteen years later the first volume of her work "The caterpillars' wonderful transformation and curious flower nutrition" was released, in which she described the principle of metamorphosis illustrated by a number of drawings.

Story Sibylla and The Cocoons was translated by Anna Grohmann and edited by Don Metz and it is based, in part, on **Historical Background: Sibylla Merian** written by Timo Engels and on **Biography: Sibylla Merian** written by Marlena Zielinska.

Story Sibylla and The Cocoons was written by Peter Heering with the support of the European Commission (project 518094-LLP-1-2011-1-GR-COMENIUS-CMP) and the University of Flensburg, Germany. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.