

The Letters

LETTER 01

IS NATURE A GIGANTIC CAT?

Nikola Tesla to Pola Fotić

23 July 1939

Born in 1856 in Smiljan, in Croatia, Nikola Tesla was an inventor whose invaluable impact on the modern world is difficult to comprehend. During the course of his eighty-six years he made numerous breakthroughs in the realm of electrical engineering, particularly around his AC induction motor, and by the time of his death, the 'Father of Electricity' had approximately 300 patents to his name. In Washington DC in 1939, aged eighty-three and in failing health, Tesla met Pola Fotić, the daughter of the Yugoslav ambassador to the United States, and they bonded over their shared love of cats. Soon afterwards, from his home in New York City, Tesla wrote to his new friend and revealed the reason behind his lifelong fascination with electricity.

THE LETTER

New York,
July 23, 1939

My Dear Miss Fotić,

I am forwarding to you the “Calendar of Yugoslavia” of 1939 showing the house and community in which I had many sad and joyful adventures, and in which also, by a bizarre coincidence, I was born. As you see from the photograph on the sheet for June, the old-fashioned building is located at the foot of a wooded hill called Bogdanic. Adjoining it is a church and behind it, a little further up, a graveyard. Our nearest neighbors were two miles away. In the winter, when the snow was six or seven feet deep, our isolation was complete.

My mother was indefatigable. She worked regularly from four o'clock in the morning till eleven in the evening. From four to breakfast time – six a.m. – while others slumbered, I never closed my eyes but watched my mother with intense pleasure as she attended quickly – sometimes running – to her many self-imposed duties. She directed the servants to take care of all our domestic animals, she milked the cows, she performed all sorts of

labor unassisted, set the table, prepared breakfast for the whole household. Only when it was ready to be served did the rest of the family get up. After breakfast everybody followed my mother's inspiring example. All did their work diligently, liked it, and so achieved a measure of contentment.

But I was the happiest of all, the fountain of my enjoyment being our magnificent Máčak – the finest of all cats in the world. I wish I could give you an adequate idea of the affection that existed between us. We lived for one another. Wherever I went, Máčak followed, because of our mutual love and the desire to protect me. When such a necessity presented itself he would rise to twice his normal height, buckle his back, and with his tail as rigid as a metal bar and whiskers like steel wires, he would give vent to his rage with explosive puffs: Pffft! Pffft! It was a terrifying sight, and whoever had provoked him, human or animal, would beat a hasty retreat.

Every evening we would run from the house along the church wall and he would rush after me and grab me by the trousers. He tried hard to make me believe that he would bite, but the instant his needle-sharp incisors penetrated the clothing, the pressure ceased and their contact with my skin was gentle and tender as a butterfly alighting on a petal.

He liked best to roll on the grass with me. While we were doing this he bit and clawed and purred in rapturous pleasure. He fascinated me so completely that I too bit and clawed and purred. We could not stop, but rolled and rolled in a delirium of delight. We indulged in this enchanting sport day by day except in rainy weather.

In respect to water, Máčak was very fastidious. He would jump six feet to avoid wetting his paws. On such days we went into the house and selected a nice cozy place to play. Máčak was scrupulously clean, had no fleas or bugs, shed no hair, and showed no objectionable traits. He was touchingly delicate in signifying his wish to be let out at night, and scratched the door gently for readmittance.

Now I must tell you a strange and unforgettable experience that stayed with me all my life. Our home was about eighteen hundred feet above sea level, and as a rule we had dry weather in the winter. But sometimes a warm wind from the Adriatic would blow persistently for a long time, melting the snow, flooding the land, and causing great loss of property and life. We would witness the terrifying spectacle of a mighty, seething river carrying wreckage and tearing down everything moveable in its way. I often visualize the events of

my youth, and when I think of this scene the sound of the waters fills my ears and I see, as vividly as then, the tumultuous flow and the mad dance of the wreckage. But my recollections of winter, with its dry cold and immaculate white snow, are always agreeable.

It happened that one day the cold was drier than ever before. People walking in the snow left a luminous trail behind them, and a snowball thrown against an obstacle gave a flare of light like a loaf of sugar cut with a knife. In the dusk of the evening, as I stroked Máček's back, I saw a miracle that made me speechless with amazement. Máček's back was a sheet of light and my hand produced a shower of sparks loud enough to be heard all over the house.

My father was a very learned man; he had an answer for every question. But this phenomenon was new even to him. "Well," he finally remarked, "this is nothing but electricity, the same thing you see through the trees in a storm."

My mother seemed charmed. "Stop playing with this cat," she said. "He might start a fire." But I was thinking abstractedly. Is nature a gigantic cat? If so, who strokes its back? It can only be God, I concluded. Here I was, only three years old and already philosophizing.

However stupefying the first observation, something still more wonderful was to come. It was getting darker, and soon the candles were lighted. Máček took a few steps through the room. He shook his paws as though he were treading on wet ground. I looked at him attentively. Did I see something or was it an illusion? I strained my eyes and perceived distinctly that his body was surrounded by a halo like the aureola of a saint!

I cannot exaggerate the effect of this marvelous night on my childish imagination. Day after day I have asked myself “what is electricity?” and found no answer. Eighty years have gone by since that time and I still ask the same question, unable to answer it. Some pseudo-scientist, of whom there are only too many, may tell you that he can, but do not believe him. If any of them know what it is, I would also know, and my chances are better than any of them, for my laboratory work and practical experience are more extensive, and my life covers three generations of scientific research.

Nikola Tesla

LETTER 02

MY PRECIOUS LITTLE COMPANION IS GONE

Rachel Carson to Dorothy Freeman

18 December 1963

*During Christmas of 1963, as she battled the breast cancer to which she would soon succumb, marine biologist and author Rachel Carson wrote to her dear friend, Dorothy Freeman, with some sad news: her precious cat, Jeffie, was also coming to the end of the road. A year earlier, Carson had risen to prominence with the publication of *Silent Spring*, a seminal book which helped kick-start the modern environmental movement by shining a light on the damage done by fertilisers and pesticides. That book had taken four long and stressful years to write, and Jeffie had been with her every step of the way. As Carson remarked in an earlier letter to Freeman, shortly after finishing the book:*

I took Jeffie into the study and played the Beethoven violin concerto – one of my favorites, you know. And suddenly the tensions of four years were broken and I got down and put my arms around Jeffie and let the tears come. With his little warm, rough tongue he told me that he understood.

Now, she was forced to say goodbye.

THE LETTER

Wednesday night, December 18

Dearest,

Perhaps I shouldn't write you in a minor key so close to Christmas but my heart is so burdened about Jeffie that I need to talk to you. He is slipping so fast that I feel he will surely have left us by Christmas – so much weaker each day, and now eating nothing at all but what I give him with a spoon. I was to have taken him down for a shot today but snow kept me in (I skipped my treatment too), and besides I would have hesitated about taking him out in the raw, windy cold. But if driving is possible tomorrow I guess I'll have to take him, even though I now have very little hope that anything can be done. It reminds me so much of our Tippy's last days. He was six years older than Jeffie, but I guess calendar age doesn't mean much.

You will know that deep in my heart I feel I ought to be willing and even thankful to let him go, for it would be so much easier for him to go while I am still here to care for him. You know that his fate has been one of my concerns. But it is so very hard to think of doing without him. His little life has been so intertwined with mine all these ten

years. And how strange it would be if the three darling kitties that have meant so much to you and to us should all die within the year!

Now it is Thursday morning and my precious little companion is gone. I imagine I shall have talked to you before this reaches you and you will know. I sat up late with him in the living room, then carried him into the bedroom and closed the door so I could check on him more easily during the night. About 3:30 I was wakened by the sound of his difficult breathing, with little moans, and found him lying at the door. I sat on the floor beside him for some time, stroking him and talking to him. Finally he got up and went under the bed. That is where he died this morning, I think just before Roger left for school. We both heard him cry just as we finished breakfast. We came in and Roger reported he was under the bed. I could not see him well, but after Roger left I got down with a flash light and then I knew. In a few minutes Ida came, and she moved the bed so I could lift him out and hold him in my arms. Then we curled him up in the little battered oval basket he loved so well. I will have Elliott bury him out under the pine trees by the study, a place that I should think would never be disturbed.

So many sad and somber thoughts, which I should not even try to express. For exactly three

years, since I flew to Cleveland in December and first understood my own situation, I have worried about my little family. I knew no one could take care of Jeffie, and I felt it unlikely that whoever takes Roger would want to adopt a cat, too, so even Moppet was a problem. Last September when she died I felt that the inevitable dissolution of my little circle had begun. Now I have lived to witness another step. But oh, I should be glad for Jeffie, and soon I know I can be, for it would have been awful for him, and so frightening, if he had survived me. Now that problem exists no more.

Darling, I suppose I oughtn't to send you such thoughts, but it seems I have to express them.

Now this means Roger and I can come to you, leaving, and returning to, such a strangely empty house. I'll discuss with you the best time. Now that it makes no difference here, I am wondering whether morning or evening is the easiest time for you to meet the train, in terms of weather. Of course we won't go at a time we know the weather will be bad.

I have to go down for a treatment this afternoon. It's cold and windy, but bright, and I guess most of the snow is off the roads. I'll be talking to you tonight if you're home, dear. Meanwhile, all my love.

Rachel