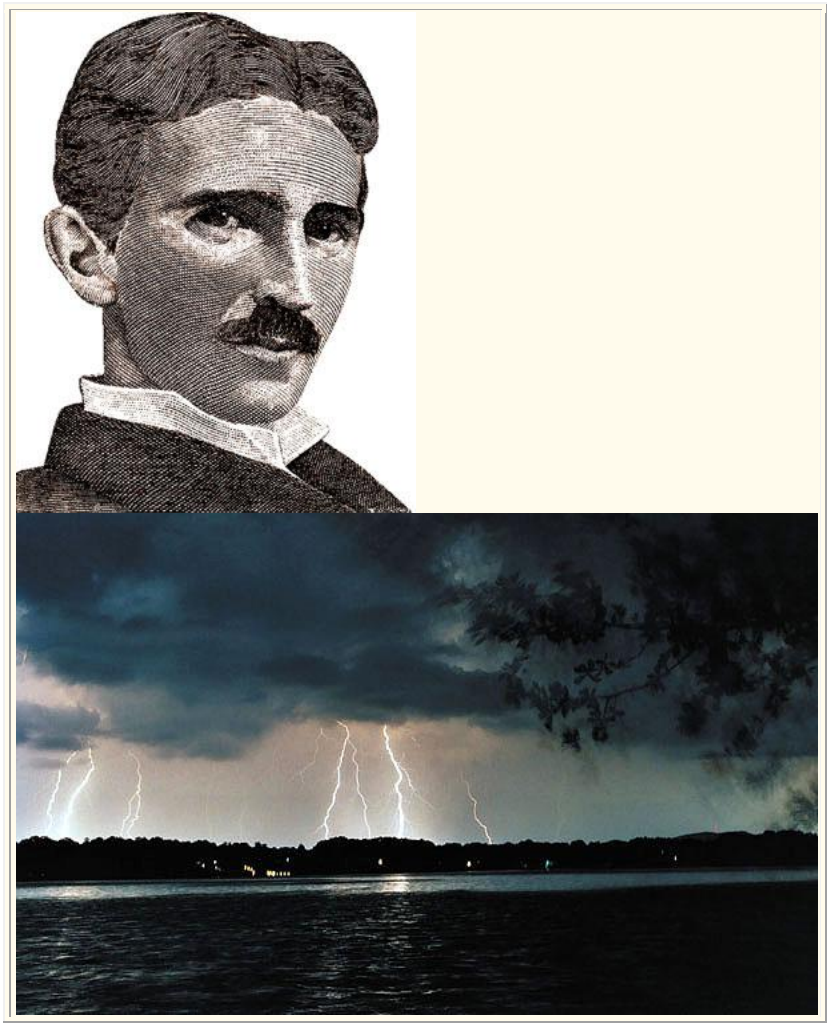
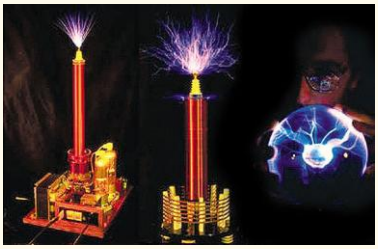
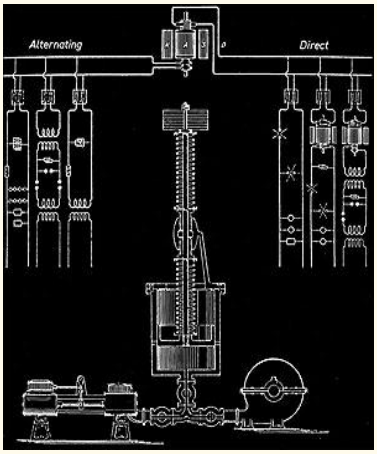
Genius From Smiljan

Nikola Tesla, a fascinating scientist and inventor, possessed unusual mental characteristics. Born in Lika, American by choice, but still he had Serbian geniality in his genes. If somebody would destroy his inventions, the world would simply – stop



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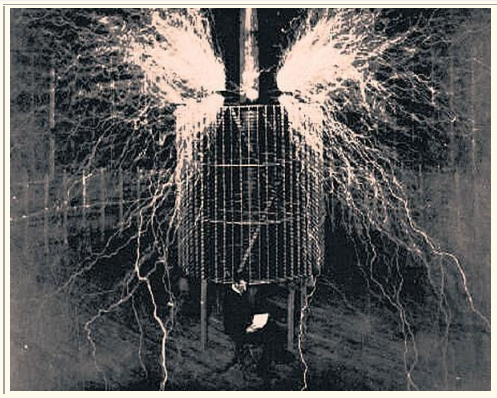


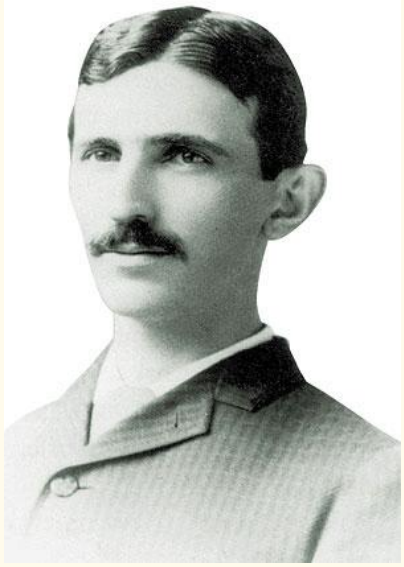
 If the much abused word “genius” could be applied to any man, then that man, prior to anyone else should be Nikola Tesla. Some consider him a scientist who went ahead of his time. Others say that Tesla really lived outside of time, and still others call him the Prometheus of the day, a man of all times. He was the “inventor for the third millennium”, but he was a prophet as well. Although the scientific scripts of one of the most famous physicists shouldn’t be called prophecies, it is unusual how many of his ideas really came true. At the time when Tesla spoke about them to his contemporaries, they may have looked more like a novel by Jules Verne, closer to fiction than science. Even today, the leading scientists working in the most modern conditions, in attempt to patent inventions, discover that Tesla signed “their” patents a long time ago. One must be surprised and fascinated that Tesla’s discoveries came without computers or high technology, or even without mathematics that was yet to be invented – thus making it

almost impossible even to calculate or predict the forces Tesla studied. It's these superhuman qualities that lead us to call Tesla a genius.

There were many times in which Tesla was called an angel and modern messiah, but also there were rumours that he was an alien, a daring and extreme belief, but not one without a foothold in Tesla's work. The great physicist dedicated one whole period of his life to attempts to communicate with the planet Mars. The father of modern electricity believed that the Earth's globe could be used as an electrical resonator, that energy could be transferred without wires, through the air, and that warm streams from the atmosphere could set machines in motion. He believed that thoughts could be photographed, which is today considered one of his most implausible ideas.

Smiljan, near Gospić, in Lika: Tesla's native house and the orthodox church where Tesla's father was a priest

When Albert Einstein turned the world upside down with his theory of relativity, the only one who opposed him was Tesla. According to Tesla, Einstein's relativity wasn't sufficiently relative. He proved to Einstein that he could create velocities that are much greater than the speed of light. He considered Constant C the basis, and not the fastest velocity in the universe.



He should have become a priest: father gave in to Nikola's wish to study technique only when Nikola got seriously ill, and when doctors predicted he had only a few months left to live

In the period from 1886 until 1943, in seven years of his work, Tesla achieved more than any individual before or after him. He discovered multiphase electric power, then techniques of the alternating current. In spite of Kelvin and Edison, who opposed him and who were, until that moment, considered the leading experts in this field, Tesla's invention was used in the first hydro-electric power plant, located in Niagara Falls. Even today, a monument to this great scientist as well as a plaque listing all of his inventions stand there. The induction engine, the use of oil in transformers, and an electrical induction arc moved by direct current in a magnetic field, were all important for development of radiotelephony.

Lamps with gas discharges over the arc are the precursors of contemporary neon lamps. He discovered the possibility of using high-frequency currents in medicine. He was the first to discover the wireless, remote control system, leading many to consider him one of the founders of robotics. Also, Tesla created the basis for the development of radio-technology, and since all his inventions were subordinated to the protection of the environment and conserving energy resources, we could say that Tesla was a pioneer of ecology as well.

He lived in a heroic time of technology. He was a scientist and mystic. A poet of electricity. New Yorkers called him the “old wizard from the park”.

People were afraid of him when he was talking about how he could cut the planet in half using powerful oscillators. Because of the blue lights that sparked out of his laboratory at nights, people believed Tesla knew how to set the sky on fire.

They laughed at him when he played, just as a little boy would, with model boats on the Hudson River. They didn’t know that with these models remote control technology was born, which has wide use in every home today.

And everything began on July 10, 1856, in the village of Smiljan, not far from Gospić in Lika. Exactly one year before his son Nikola was to be born, on July 10, 1855, Milutin Tesla had, as he wrote, providence from God.

Dominik Maričić: Portrait of Nikola Tesla

“It was hot outside, and the air was heavy, it was raining in the afternoon under Velebit Mt, and before the evening came, the sky was clear and the air was cold, then the sky became dark and stars disappeared, and it could be said that the whole of nature stopped. The appearance that was in the sky seemed so close that one could reach it with their hand, and it sounded like a distant waterfall and, spilling sparks from itself, it left livid traces behind. When it moved behind the first hill, it sounded like a

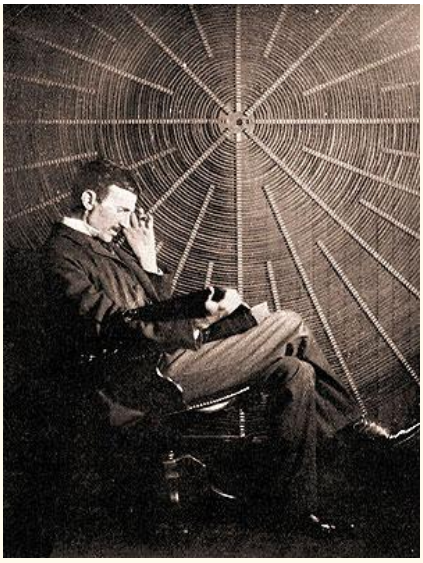
large tower had been torn down. On the south side of Velebit Mt the echo was heard for a long time after".

Nikola Tesla demonstrates wireless power transmission

Nikola's older brother Dane, for whom even in early childhood it was discovered that he was a mathematical wunderkind, died from the consequences of a fall from a horse. His brother's death left a huge impact on Tesla. Years after that, he had nightmares and hallucinations that reminded him of Dane's death. As Nikola remained the only male child in the family, his father hoped he would have a successor in Nikola. That's why he was preparing his son with different spiritual exercises to become a priest. They would spend long hours in prayers. They "played" by guessing thoughts and communicating without words.

Only when Nikola became severely ill and doctors predicted the boy didn't have much time left, his father, a priest, allowed him to study technology.

Many years later, in a letter to the little girl Pola Fotić, the daughter of the Yugoslavian ambassador in the USA at that time, Tesla wrote a story with the title "Story about childhood". In this story he picturesquely described to the girl the winter nights in his parents' home, and his special friend – the cat. When he was only three years old, playing with a cat helped him to understand electricity. He pulled his cat's tail and long back fur.



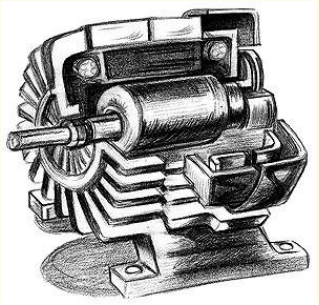
Throughout his life, Nikola Tesla read Serbian epic poetry, and he even translated some poems into English and had them published

“What I would see then was such a miracle for me that it left me speechless. The cat’s back was swimming in lights, and my hand caused fireworks of sparks whose explosions could be heard all around the house. Later, when dark would fill the room, the cat waved its paw as if shaking off water, and I saw the golden aureole around him, the same as on the pictures of the saints.”

Even though his mother warned him to leave the cat alone because he would cause a fire in the end, the boy had different thoughts on the matter.

“Is nature a big cat?” he would ask, “If it is, who is pulling its tail?”

Eighty years after that event, Tesla himself still believed that he hadn’t found an answer to that fundamental question.



One of the first AC (alternating-current) motors

Very early Tesla discovered he had an unusual ability, which his brother Dane also possessed. Tesla's photographic memory was astounding, he could remember even the smallest details. Tesla's mental pictures, as they are called today, would appear to him in flashes, most often in moments of excitement. These visions were so strong that he himself could often not distinguish them from reality.

This ability forced Tesla to refine his method of thinking. He constructed all his patents in his head, not touching anything with his hands until the machine was completed. He was able to visualise things so precisely that he would usually say it was immaterial to him whether he ran his machine in his mind or tested it in his shop. He created the first experiments in his head. Final solutions would come unexpectedly - suddenly and always at a moment when he wasn't concentrated on the problem. Something like that happened on October 12, 1892 in Budapest.

Nikola Tesla was walking through the city park with his friend. They were watching the sunset, which inspired Tesla to recite a few verses from Goethe's "Faust", which he knew by heart.

"The Sun is withdrawing, and the day is dying,
And the Sun is the one that creates new life
Ah, why I don't have wings to spread them,
To fly with you above the Earth!
It is a beautiful dream while the Sun is withdrawing
But bodily wings don't grow easily
Next to the light, spiritual wings."

At the moment of inspiration when he pronounced those words, an idea appeared to him, which he compared to a flash of lightning. Using a stick he drew the same drawing that showed up six years later in his presentation before the American Institute of Electrical Engineers. A rotating magnetic field.

"I would give up a thousand of nature's secrets that I could discover by accident for just this one I snatched away from it" later wrote the great scientist whose life was as interesting as his discoveries.

Believing that inventors are married to science, Tesla never fell in love. Four beauties unsuccessfully tried to conquer his heart: Flora Dodge, Catherine Moth, Francis Warwick and Catherine Johnson.

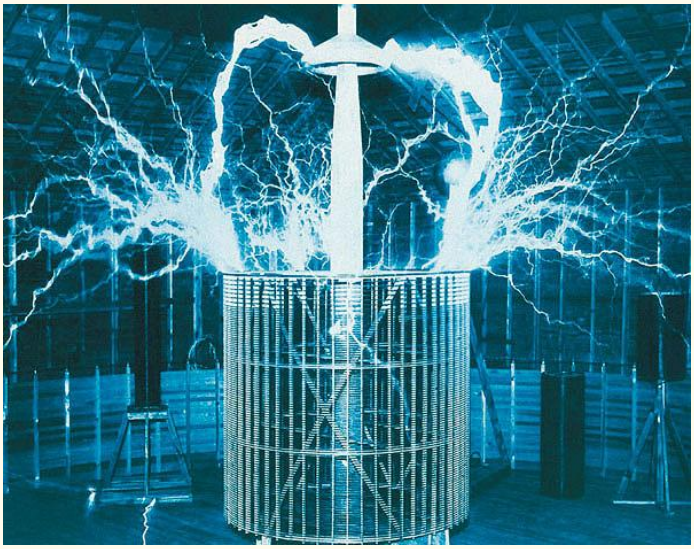
The first power plant to produce alternating current,
built in Niagara Falls according to Tesla's designs
The Americans have built a museum dedicated to Nikola Tesla

A story that looks most similar to the love story of Tesla's life is a story about a white dove – one of the thousands of pigeons he fed and healed. John O' Neill, Tesla's biographer, was the first to notice Tesla's connection with this dove, and thought the freckles on its wings represented magical symbols. He asked Tesla about this dove, who explained to him that:

"She is something different…I needed only to think of her, call her and she would fly over. I loved her like a man loves a woman. When that pigeon died, something disappeared from my life. I knew that my life's work had come to an end."

Beside the pigeons he was feeding and which followed him everywhere, the "old wizard from the park" had many other habits that confused the

citizens of New York and staff in the hotels where he lived for the bulk of his life. He loved only numbers divisible by 3. Instead of food from the menu, he would demand specially prepared vegetable soups, warm milk or meat from both sides of bird's breasts. Before the meal, 18 (6 x 3) napkins would always be waiting for him on the table. He would use them to wipe utensils and glasses, polishing them so much they began to heat up. He would never start eating before calculating the volume of the portion and then the volume of every bite. He didn't eat bites with volumes that couldn't be divided by 3. He wore gloves, and his handshake was so strong that many of his contemporaries described it in their memories of Tesla. He didn't drink alcohol, but he always requested that the same bottle of first-class wine, never opened, be served alongside his meal.



Laboratory in Colorado Springs: Tesla's electric oscillator that produces 12 million Volts

He said he would live 160 years exactly. His life ended earlier though. On Orthodox Christmas, January 7, 1943.

He was bedridden for a long period prior to that. He didn't accept visitors, not even the friends who were once dear to him, he rejected every thought that he was ill, and persistently opposed advice to call a doctor.
Two days before he died, he allowed a chambermaid to enter his room. He commanded her to make sure that nobody disturbed him. Three days

later, the girl got worried and went to him, although she assumed he would protest. She found him dead. He was calm and looked like he was sleeping, with a smile on a pale, bony face.

The police were informed that Tesla died alone, without the presence of a doctor. A doctor declared that his death was a result of his age, and had occurred during the night of January 7. A few hours later the FBI visited the room. All of Tesla's papers were reviewed before his relatives and friends, as well as his nephew and legal heir Sava Kosanović (at the time he was Yugoslavian ambassador in the USA), were informed of the scientist's death. All these strange events led biographers of Nikola Tesla to speculate on the causes of his death.

The firmest evidence, supporting the claim that the American government was involved in Tesla's death and subsequent events, were brought up by Charlotte Muzar. She was Sava Kosanović's secretary and became the key person for the preservation and classification of Tesla's legacy exhibited in the Museum of Nikola Tesla in Belgrade.

Belgrade's Museum of Nikola Tesla holds Tesla's legacy (here are also kept some of Tesla's yet unexplained drawings and plans), which arrived in Belgrade thanks to the involvement of Tesla's nephew Sava Kosanović who was Yugoslavian ambassador in the USA

Charlotte Muzar and Sava Kosanović together packed Tesla's scripts and the Edison medal in a safe, whose combination only she knew. In the notes about this event, Charlotte Muzar mentions, however, that she never found out who called the locksmith who sealed the safe.

The safe was in a storage facility in Manhattan for some time and it wasn't opened prior to its arrival in Serbia. Then, when it was opened in 1952 in Belgrade, Charlotte Muzar and Sava Kosanović discovered that several things were missing from the safe. Missing were plans for Tesla's secret weapon and the Edison gold medal, which Tesla, many years before, wanted to recast in order to pay off belated salaries to his employees. It has never been discovered what happened to this medal.

However, the documents concerning the secret weapon can be traced, as it is known that experiments have been conducted by the governments of the greatest military powers: the United States of America and Russia. Project HAARP – High Frequency Active Auroral Research Program, one of the darkest public secrets of the American military industry, in many ways is based on Tesla's plans. It should be known that the initial whispering and subsequent uproar that hit Serbia during the 1990's about "Tesla's secret weapon that would protect our people" weren't based on fabrications of tabloids. In his letters, Tesla had indeed mentioned several times a "heavenly shield" that could be raised around our country.

"Four shields for Serbia, three for Croatia and two for Slovenia" he wrote, "That would be sufficient to forever protect our country from enemies".

In May 1892 Tesla visited Belgrade. A brilliant reception was organised to welcome him, people cheered him on and even released horses from his carriage in order to drag it themselves. The entire flower of Serbian intelligentsia gathered to bow to him, and during the banquet held in his honour, the poet Jovan Jovanović Zmaj recited for the first time a poem he dedicated to Tesla:

“Kiss the trunk, the newborn,
Press the breast, brave son:
Every branch of the Serbian tree
Is babbling Tesla, is hugging Tesla”

After these verses, Tesla kissed Zmaj’s hand. When he returned to America, he published a literary article about Zmaj, thus showing that he wasn’t only an admirer but also a true connoisseur of Serbian poetry. Several times he published news articles in which he warned the Americans that they have too many negative prejudices about Serbian people. In one of the conversations with Ivan Meštrović, Yugoslav artist who was his close friend, Tesla mentioned that he would return to Yugoslavia if a good laboratory and working conditions were to be provided for him. Meštrović mentioned this to the King, but what Tesla desired actually never happened.

Something similar occurred in 1892, the same year he visited Belgrade. Tesla was the first scientist nominated for permanent membership of the Serbian Royal Academy of Sciences. He wasn’t elected. A few years later, when he was notified that he was accepted for membership in this renowned institution, Tesla didn’t even respond to the telegram. Although they asked him to send his curriculum vitae in order to print it in their annual, the annual was published without this text.

The electrical age, which started in America, drew Tesla’s attention to that country. He admired the Americans and their technological advances, where everything is “in the name of freedom and human rights”. However, it should be known that Tesla never worked for the money. He could never comprehend the American obsession with material goods, and instead he invested all of his earnings back into further research.

He knew by heart almost all the epic poems of Serbia and opposed Vuk Karadžić’s language reform, saying that Vuk introduced “the language of shepherds” into literary language. He despised the thesis according to which Vuk simplified orthography, arguing that the spelling had always been simple. He spoke superb Serbian and English, and it is well known that he had pride in both his Serbian people and Croatian homeland.

If our Serbian people should feel chosen for any reason, then it should be for the fact that Nikola Tesla was born as a Serb, a son of a priest from Gospić and one of the most extraordinary, fascinating and fertile minds in the history of humankind…

Many have written poems, novels and dramas inspired by his personality and work. Still, the dearest to Tesla remained Zmaj's poem that ends with the verses:

"Every fresh leaf will understand
every branch of its tree,
Electrics will connect us –
The electrics of our hearts-
Without wires and without cables"

Tesla believed that intelligence exists in space and by sending his signals he expected an answer from the "Martians". He believed that science will soon discover "brain waves" that will explain para-psychological phenomena.