Answers to "the Enigmas from GENERATOR"

Nikolay Shpakovsky and Elena Novitskaja triztrainer@nm.ru http://gnrtr.com

In the last issue of the journal, we proposed some enigmas to our readers. All of them are based on the ideas described in old and modern folktales, engineering ideas and stories from everyday life (http://www.triz-journal.com/archives/2003/08/b/02.pdf). We express our thanks to everyone who sent solutions and give the original answers proposed in the sources on which the enigmas are founded.

About Dobrynya's feat (from a Russian fairy tale)

The Russian hero Dobrynya was attacked by a firedrake. He was unarmed at that moment and only had the following resources at his disposal: sand and a helmet (Grecian hat). What was Dobrynya to do?

He had to strike the firedrake with something. But as for sand, one grain of sand is very small. And the hat is practically weightless. Wouldn't it be great if a grain of sand were the size of a hat!

And Dobrynya applied something like the principle "Combining".



«...The hero was not at a loss. He took his Grecian hat, filled it with 40 pounds of sand and hit the firedrake with that so hard that he knocked off all the three heads at a time.»

About key and baby.

To open the car, it is necessary to bring the electronic key close to the lock. But the child swallowed the key. What was to be done? How could the car be opened?

While solving this problem, the mother managed to abstract the situation from her child, who became a mediator involuntarily attached to the key. Then she acted as a technically aware person trying to build a classical full Su-Field model: S1 - key, S2 - lock, F - electromagnetic field.



«...And suddenly a good idea occurred to her. She picked up the child in her hands and set his tummy against the place where the electronic key is usually applied. A snap went off and the car door opened. It was much more difficult to switch on the ignition lock, but

she managed. The car started up and the young lady successfully brought her child to hospital.»

About a space pen.

A fountain pen cannot write under zero gravity. A costly experimental and design work resulted in a pen capable of righting under zero gravity. How can this problem be solved in a simpler way? What was the solution proposed by the Russian specialists?



If we consider the operational zone (the place of contact between a writing unit and paper), the answer becomes obvious. The popular in Russia engineering story says: "... the Russians write with pencils."

To do them justice, we must say that the research done by the American engineers was not wasted. It resulted in the development of numerous perfect writing appliances.

About Palanquin bearers (Korean fairy tale).

Palanquin bearers agreed to carry an old man in a palanquin but did not want to go and seek his lost dog. What was the old man to do?

He had to demand that the palanquin bearers should strictly implement the agreement. If they do not want to go to seek his dog, they will still have to do it, but together with the mediator — the old man in the palanquin.



«..."Right you are," said the old man. "You have agreed to carry me in the palanquin. Do it then! And I will look for the dog. I will not let you go until I find it."

The bearers began thinking what to do and decided that they would rather look for the dog than carry the master! And so they did.»

About closed eyes (Indian folktales)

Tenali Raman promised to do with his eyes closed what the visiting magician would never do with open eyes. What did Tenali Raman do?

Tenali Raman used an additional resource – eyelids that covered his eyes. Now you may think about many things that cannot be done if eyeballs are not covered by anything.



«...Raman sat down on the floor, dipped two handfuls of sand, closed his eyes and emptied the sand out of his hands. Then he raised himself and said.

"And now try to do this with open eyes!"

The Emperor and courtiers burst out laughing and the magician had to recognize defeat. And Tenali Raman became one thousand gold coins richer.»

Here is one more excellent answer proposed by our Bulgarian reader Vesselin Tonchev: "What cannot one do with his eyes open? He cannot open them!"

About writing the letter (Iranian funny stories)

While giving regards to his relatives in the letter he was dictating to a scribe, Dakho suddenly wished health to Kalbe Husain in a very loud voice! Why did he do that?

Dakho was a rational man and always remembered about coordination. So, while dictating the letter, he thought that his friend did not quite catch what he said.

«...The scribe gave a start of surprise and dropped the pen,

Why crying! I am not deaf...

'You aren't, but Kalbe Husain is. If I do not cry loudly, he will not hear!'»

