# Science Fair Adventure a 21st Century Folk Tale.

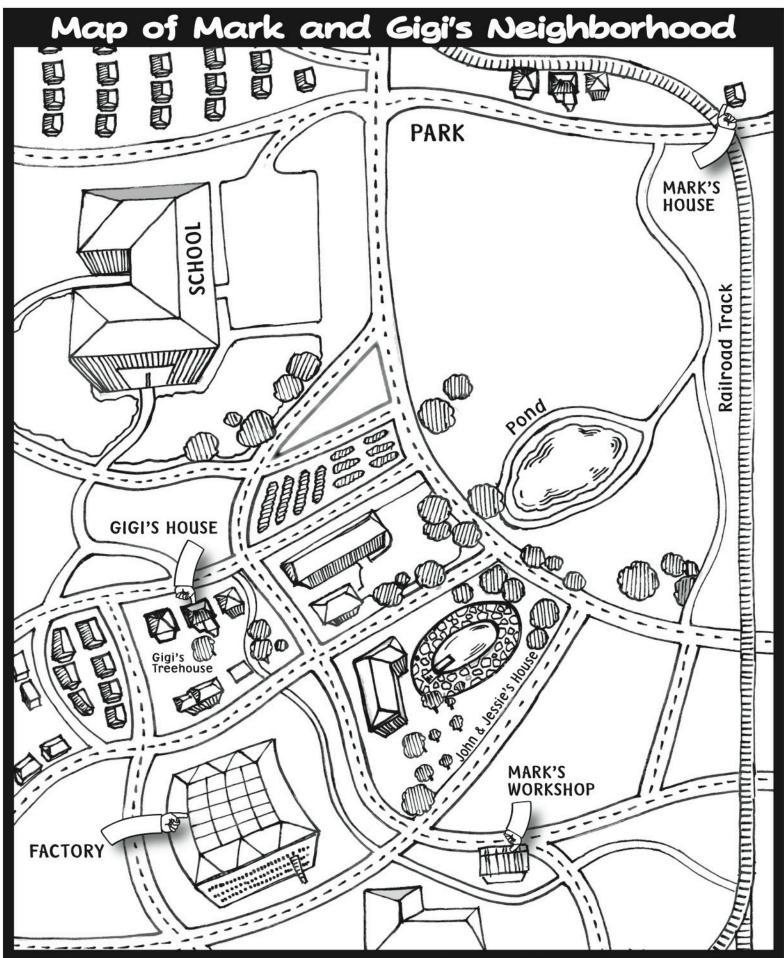


Mark's workshop might look something like this - but it sure needs more details!

Where does he keep his tools? Do they hang on the wall, or does he have a tool-caddy? What about windows and doors? Does he have a junk bin? What else does he need to make the robot? Draw in your details and color them up to make your Cover Art complete! If you want to add Mark and Gigi, just draw them on another piece of paper, cut them out and paste them in.

created by Ms. Carr's 4th Grade Class of 2009 - East Orient School In collaboration with Earth Arts \*\*, tribal@spiritone.com

Artist's Name (That's YOU!)



Our Map needs Details! Draw in the Junkyard and Hardware store where Mark & Gigi find Robot parts. Where's the Library and the Mall? The Factory needs a fence & gate, and all the streets need to be named. What other details does your map need?

#### Chapter 1 - Why Me?

"Please, please, please, please," Gigi whispered softly.

Her fingers were crossed and her eyes were shut tight as she waited nervously.

"Mark," said Ms. Carr the science teacher, "you'll partner with . . . "Gigi!"

"NO!" Gigi blurted out as Mark blushed and gave her a scowl.

Ms. Carr said cheerfully, "I have assigned partners for a reason."

She went on to explain that each team was chosen because
of their complementary skills. Whatever that means, Gigi thought.

But she wasn't even listening. "He's so, so . . . weird," Gigi whispered to Jessie, the girl sitting next to her. "And he never listens to anyone else." "Students," said Ms. Carr, "Please join your team partners."

Mark and Gigi didn't move a muscle as everyone else partnered up.
"Gigi! Mark! Please join your partner," Ms. Carr repeated gently but firmly.
Head up, Gigi bravely marched towards Mark as he shuffled in her direction.

"Now for the rules," said Ms. Carr	. "As you know, this year's 4" grade
Science Fair project is to create a R	ROBOT - and I know you're ALL excited."
"Yah! Cool!	!" Kids spoke up all over the room.

"So, here are the rules," she continued, handing out copies.

"Rule Number 1: Your Robot must be original - your own idea.

Rule Number 2: No one over 18 can help you work on it - AT ALL!

Rule Number 3: Your Robot must be made from % recycled materials.

Rule Number 4: Your Robot must do something to help the Earth.
 Rule Number 5: Your Robot can't do anything dangerous.
 Rule Number 6: Your Robot must be finished for judging by April 20<sup>th</sup>!

Break just <u>one</u> of these rules and your Robot will be disqualified!

But **Extra Points** will be given if your Robot looks like an animal,

or if it can dance or share valuable information.

And <u>this</u> year, a very generous prize has been donated . . ."

Ms. Carr smiled warmly at the Olsen twins - John and Jessie - as she went on,

". . . by two wonderful parents of students in *our class!*"

"		!"
	an all-expense paid trip to" - EVERYONE GASPED -	
	"I'm thrilled to announce that the TWO WINNERS will receive	

Mark *almost* yelled out loud, "I'M GOING TO **WIN THIS CONTEST!**"

He'd never had a chance to go anywhere before and this was like . . . AMAZING!

No one's going to STOP me, he thought, not even HER.

Mark was husky and kind of a loner.

Other kids thought he was rude, but mostly . . . he was just shy.

Sometimes he could hear them whispering behind his back.

G E E Z! Why don't they just give me a break? He thought.

Mark pretended like he was looking at the floor, but he was really watching Gigi out of the corner of his eye.

She's like . . . the smartest kid in class, Mark thought.

"So," Gigi asked in a sharp tone, "When do you want to get started?"

"Tomorrow after school?" Mark answered.

"You want to come to my treehouse?" Gigi asked.

"NUH! You come to my workshop," Mark answered gruffly.

"But I live only a block from school," Gigi answered, annoyed.

"I've got tools and a workbench and . . . and . . . it's just better!" Mark said loudly.

"How *far* is your workshop?" Gigi asked.

"About, like . . . uh . . . maybe four blocks?" Mark said.

"Well then - let's go to *my* house because it's really **a lot** closer," Gigi said.

"I'm gonna work on the Robot in MY Workshop, period."

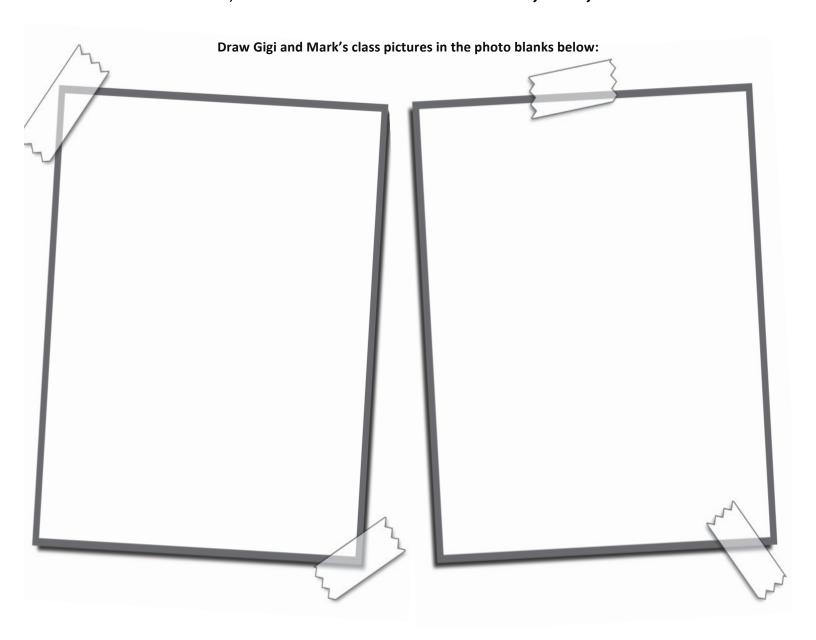
Mark's face was red and his jaw was tight as he said it.

"OK," said Gigi, exasperated. "Winner chooses - Rock, Paper, Scissors."

Mark was bummed when he lost, but Gigi said,

"We'll go to my place tomorrow to *plan,*but we can make the Robot in your workshop - OK?"

"OK," Mark said embarrassed as he hurried away. "See ya!"



## Chapter 2 - "You're Impossible!"

	Mark had never <u>ever</u> be	een inside a tree-house.
"My dad	d built it for me," Gigi said	proudly as the two kids climbed in.
It had a		and,
	and a little frig	with snacks in it.
It even had	secret compartments to ke	eep hidden messages in - stuff like that.
She	<i>'s really lucky</i> , Mark though	nt. But he didn't tell Gigi that.
Не	e said, "This place is a dum	p! What's with all this junk?"
	See Gigi is always pic	king up peculiar things -
like	and	and
"You n	ever know when you're go	oing to <u>need</u> something like that,"
	she's always to	elling her mom.
	"It's not junk!" Gigi	answered fiercely.
•	"I'm re-using - you know?	Reduce, Re-use, Re-cycle?
She	picked up an old	and said,
"Т	his could be the Robot's fo	ot! It's supposed to be made
	from recycled mate	erials, remember?"
"]	Nah," said Mark. "That's no	ot heavy enough for a foot."
"It is	too!" said Gigi. "Is NOT!"	Mark shouted right in her face.
THIS!" Mark said,	, picking up a rusty	, "is heavy enough for a foot.'
"0	K," Gigi nodded. "We'll use	e that! See it's NOT junk!"
	Mark pulled a notebook ou	t of his worn-out backpack
a	nd started to sketch his ov	vn ideas as Gigi kept talking.
"What do you thi	ink the Robot should do? I	think it could, maybe, squish metal cans
or, pick	up litter or OH! I kr	now! It could be a Spokes-Robot!"

"Huh?" Mark grunted sarcastically. A Spokes-Robot?

That's like the dumbest thing I ever heard!"

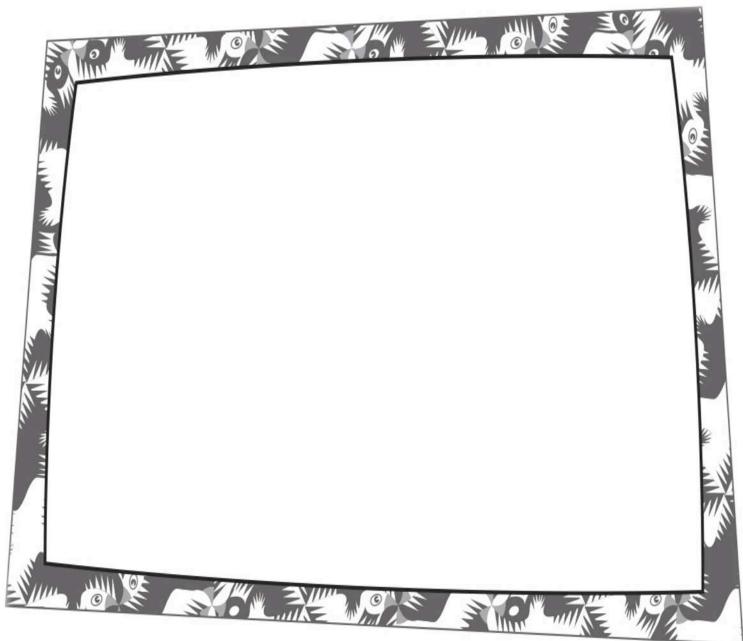
"You're so **dumb** you don't even **know** what I'm talking about,"

Gigi responded angrily. Her feelings were hurt.

"A Spokes-Robot could be programmed with lots of information, even facts from the Guinness Book of World Records.

Then it could go into businesses and teach people how to make their factory - or whatever - more eco-friendly."

Here's a window into Gigi's treehouse. Draw what's inside:



"Nah," said Mark, even though he thought it was a *really* good idea.

"I think it should have a stove-top that's music powered - you know . . . vibrations?

Or maybe it cleans stuff up - like, it has a *cleaning ray* and a *freezing ray* 
and it dances **The Robot** while it's cleaning."

Gigi peeked over Mark's shoulder to look at his drawing.

"It's the plan for MY ... uh ... our Robot!" Mark said proudly.

"Those are all *your* ideas, Mark!" Gigi blurted out.

This is a two-person project, remember?"

She was frustrated and kept talking and stomping back and forth,

"What do *your* ideas have to do with Rule #4?

It's got to do something to help the Earth! RIGHT?

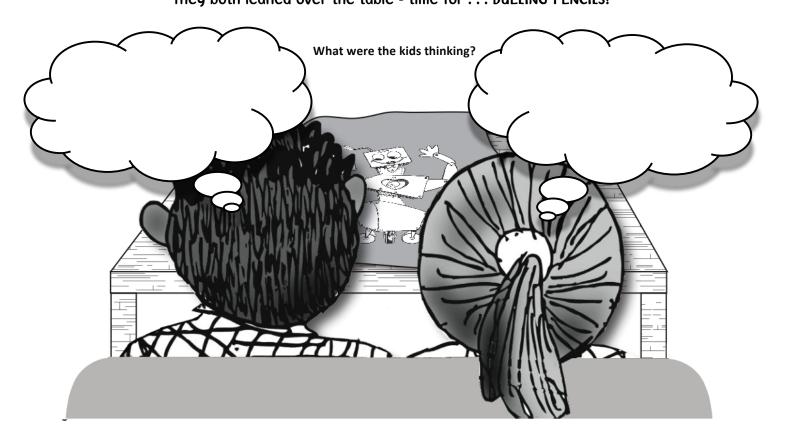
How is a freezing ray going to help the Earth?

What about rule # 5? Isn't a freezing ray kind of . . . DANGEROUS?

Suddenly she knew just what to do. Gigi slid onto the bench next to Mark.

"Would you scoot over, please," she said kindly.

They both leaned over the table - time for . . . DUELING PENCILS!



It wasn't easy but Gigi and Mark decided on TWO things as they sketched ideas and figured out how to make them work.

"OK," Mark agreed, "We can have it tell facts and stuff like that."

"It would be sooo cool if our robot danced **The Robot**." Gigi said, giggling.

"But if we want to WIN," Mark insisted, "it's gotta do something more!

Gigi interrupted, "It could pick up litter . . . that wouldn't be too hard!"

"Oh Man! That is SOOOO LAME!

We're not gonna win with a garbage collector!" Mark snorted.

"Now . . . a cleaning ray that freezes ice cubes - *that's* gonna win!" he continued.

"Which <u>IS</u> the stupidest thing I've ever heard. Besides," Gigi argued, picking up the plan and looking at it, "you don't even know *how* to make it work!"

"Do TOO!" Mark scowled, grabbing the other end of the plan.

"Do NOT," insisted Gigi. "DO TOO!" Mark interrupted. "NOPE!" Gigi smirked.

They argued back and forth, tugging at both ends of the drawing.

"I'm taking MY drawing and I'm makin' MY Robot,"

Mark shouted, pulling hard with both hands.

"This is MY ROBOT TOO," Gigi answered leaning back as she pulled even harder.

Suddenly the plan . . . RIPPED in half.

"Great! Just GREAT!" Mark muttered, folding up half of the plan.

"I'm building the **Freezing Ray** half," Mark said,

shaking his part of the plan under Gigi's nose.

"You can build the **Talking** half... AS IF!"

"You're Impossible," Gigi sighed.

"No," Mark answered, "You are."

Both kids glared at each other saying:

"You're the one who's IMPOSSIBLE!"

#### Chapter 3 - The Cheaters

Two months went by faster than Gigi could even imagine.

Day and night she worked on the Robot in the family garage.

Her dad, Homer, poked his head in every so often to ask,

"Do you need any help, honey?"

But her answer was always the same,
"NO DAD! Remember? No one over 18 can help me!
She went to the library and did Internet research on engineering,
computer programming, and \_\_\_\_\_\_\_.

Once a week, Gigi passed a note to Mark and he passed one over to her with questions like:

- What are the dimensions of the center connector?
- What is the power source going to be?
- How much does the base weigh?

It was the only way they could work together, but it was working OK.

And every week, Ms. Carr asked each team to give a PROGRESS report. YUK.

Most kids talked about problems that came up. Almost everybody in class gave each other ideas about how to solve the problems - except for John and Jessie.

They just brought videos of themselves building an INCREDIBLE Robot.

It had a built-in pastry kitchen and it could disco dance!

How come they never have any problems? Gigi wondered. And they don't help anyone else!

But Mark surprised Gigi - a lot! He gave really good ideas to everyone!

I guess he's not so bad after all, she thought.



"It's too heavy!" Gigi cried, trying to lift her half of the robot off the garage floor.

"Need some help, honey?" Homer asked, watching her try so hard to pick it up.

"DAD! Remember rule #2?" Gigi asked, struggling.

"CLARA!" yelled Homer. "Please come help your sister!"

Clara was working on a drawing at the kitchen table, right next to the garage.

"Gigi," Clara said, looking at her sister's project. "This is so cool!"

The two girls loaded the Robot into their little brother's wagon, and Gigi hooked the wagon onto her bike. She pedaled away, waving goodbye. "Good Luck, honey . . . take the bike path, it's getting dark!" Homer said, waving back.

"OK, Dad," she yelled. "It goes right past Mark's workshop - don't worry!"

The Robot kind of rocked back and forth in the wagon,
so Gigi had to go v-e-r-y s-l-o-w-l-y. She crossed \_\_\_\_\_\_ St.,
and was pedaling past the Olsen's factory when she saw . . .

"John and Jessie Olsen!" she said aloud. "They must be finishing their robot.

She could see the kids in one of the 4<sup>th</sup> floor windows.

"Hey! What are those other people doing up there?"

Gigi rode off the path and leaned her bike against the factory gate.

"It's getting dark. No one will see me," she said to herself, climbing over the fence.

"A ladder!" she whispered. It was leaning against the side of the factory.

Gigi climbed up to the 4<sup>th</sup> floor and peeked into a half-open window.

John was reading comics and Jessie was watching TV

as factory technicians FINISHED THEIR ROBOT!

Chomping down Potato Chips, John said to his twin sister,
"I think I've figured out how to mess up the other robots tomorrow.

Wanna help me?" "Sure," said Jessie, flipping channels. "That'll be fun!"

"They're **Cheating!**" Gabi whispered out loud. "Hey," said John, "did you hear that?"

"What?" answered Jessie, glued to the TV.

Gabi quickly scrambled down the ladder and hid.

Above her, John leaned out the window and looked all around.
"I guess it was nothing," he replied, glancing at the gate where Gigi's bike was resting.

Gigi snuck over the fence, hopped on her bike and vanished - just like a spy.

#### Chapter 4 - A few little Problems . . .

Gigi was breathless when she got to Mark's workshop and told him everything she'd just seen and heard.

"Mark, we've got to work together from now on," Gigi said firmly.

"You want to win this contest, don't you?"

"OK," replied Mark. "You're right. No one is going to believe the Olsen twins are cheaters, so we've got to make our robot even BETTER than theirs."

"WOW!" Gigi said as she looked at Mark's half of the robot.

"It's wonderful, Mark! The head, the arms . . . how did you do it?"

"My mom's a sculptor," Mark said proudly. "She's been teaching me since I was a kid.

And she let me use her tools for this . . . but she didn't help me!"

"I know you didn't cheat, Mark. You're really creative - and smart.

You didn't have to help the other kids, but you did," Gigi said quietly.

"So did you!" Mark blurted out. "I couldn't believe you knew how to help Simon with that computer chip thing - that was, like . . . AWESOME!"

Gigi smiled when Mark examined her part of the robot and said,

"Wow! You used *Industrial Casters!*"

	But things didn't go together so e	asily.
Their first p	roblem was	·•
Then the	didn't fit into the	so they
had to _		to make it fit.
After they so	olved <i>those</i> problems, the	got stuck
inside the	and they had to use a	to get it out.
	It was late and both the kids were	tired.

"OK, now we just have to connect the core power bundle,"

Gigi said wearily. "Where's the wire?" They looked all over the robot - no wire.

"GEE!" Mark murmured, "I wonder if it slipped inside the base

when we pulled the	through the	."
--------------------	-------------	----

Gigi poked around inside the intelligence module until she said, "got it!"

After they connected the wires Mark shouted, "let's power it up!"

He put his hand where the controller switch was supposed to be . . .

"UH OH!" both kids said at once.

"We'll just have to rig a switch through the power core," Mark said, exhausted.

So they worked late into the night . . finally, it was finished!

### Chapter 5 - Surprise, Surprise . . .

The next morning the kids tried to load their robot into Gigi's wagon.

"It won't fit!" Mark hollered, kicking at a cardboard box.

"Judging starts in half an hour!"

"We can roll it!" Gigi suggested. "You push, I'll pull!

School is downhill... remember? C'mon, let's hurry!

We have to warn the other kids about John and Jessie," urged Gigi.

But they got there too late to warn anyone. The doors were just closing. "Girls and Boys," announced the Principal. "Judging has begun! Please don't start your robots until it's your turn to he judged."

Ms. Carr rushed up to them and whispered,
"I was worried about you two. Here's your Team Tag - # 14. Good Luck!"
"Look!" whispered Gigi to Mark, "Jessie's poking gum inside Cameron and Sookie's robot.

"Team # 1," announced the principal, "come to the judging circle, please."

Cameron and Sookie kind of hesitated . . . then they did their famous side-slide into place.

They fiddled around with their robot, faking like it wouldn't go on.

"It worked great just five minutes ago," Sookie said, bewildered.

Everybody laughed. "We're not kidding!" Cameron said in dismay. "It won't start!"

"I'm sorry Team # 1. That means you are disqualified," said the principal.

John smiled at Jessie as Cameron and Sookie shuffled off in defeat.

Team after team was disqualified, and everyone was mystified.

Team #6's Robot fell apart, and #11's blew up - but it wasn't *too* bad.

The fire department was only there for a few minutes.

Gigi and Mark wouldn't let John or Jessie anywhere near Zertroid.

That's what they named their robot as they rolled it to school.

After all the other teams were eliminated,
only the Olsen twins and Mark and Gigi were left.

"And NOW," The Principal announced, "It's time for our *Three Final Challenges*.

First, ROBOT COOK-OFF!

Team # 5 and Team # 14 - TAKE YOUR PLACES!"

Jessie and John carefully programmed their Robot to create a perfect Coconut Crème Pie.

Mark rigged the cleaning ray to heat up a Totino's pizza.

After tasting both the principal declared,

"Team # 5, YOU are the winners!"

Everyone cheered as she added "Now it's time for the ROBOT DANCE-OFF!"

"Amazing! Fabulous! Incredible!" The crowd went crazy over

Gigi and Mark's robot dancing **The Robot!**The Olsen twin's disco-dancing robot . . . not so much.

"Team # 14, the Principal said merrily, YOU are the winners!"

"For our final contest," she continued, "we have ROBOT GENIUS!

The team whose Robot answers this question correctly is THE WINNER!

Everyone gasped. Gigi could hardly breathe and Mark was shaking.

"What is the largest forest on earth and where is it located?" asked the principal.

John and Jessie punched in the question and their Robot answered,

"The Amazon Rain Forest in Brazil."

Team # 14, what is *your* answer?" the principal asked Gigi and Mark.

Gigi programmed Zertroid with the question: what is <u>now</u> the largest forest on earth?

She knew they would get a different answer with that question.

"The Boreal Forest," answered Zertroid. "It covers 2.3 million square miles and can be found in Russia, Canada, Alaska and Scandinavia."

The principal smiled calmly, clasped her hands and said to everyone in the room, "I'm so *very* proud of each and every one of you.

And you should ALL be proud of yourselves.

But, as you know, there can only be ONE winning team.

And I'm please to announce that the winning team is . . .

(Everyone Gasped AGAIN) TEAM number 14!"

Mark started jumping and hollering, "We WON! WE WON! WE WON!"

Gigi threw her arms open wide and burst out laughing.

The crowd was cheering and stomping, "Zertroid, Zertroid, Zertroid!"

But John totally lost it.

He kicked his Robot and yelled, "You piece of JUNK! I'll have my Dad *fire* the guy who programmed you!" He kicked it again and again until the Robot spun out.

It lurched towards the crowd, kicking people and knocking them down.

The principal ran over to turn it off and it threw a Coconut Crème Pie in her face.

Then things *really* got ugly.

That Robot fired up its laser oven and aimed the jets at Mark and Gigi.

Zertroid saw the danger and zoomed over to protect the kids.

It took a direct hit right in the heart . . . its power center.

But then something really amazing happened.

Zertroid's Freeze-Ray turned on - maximum power,

and it stopped John and Jessie's Robot COLD.

And the rest, of course, is History. Oh . . . didn't you hear what happened?

Gigi and Mark took Zertroid to the . . . well, that's another story, isn't it?

THE END . . . for now