THE ADVENTURE OF PETER

Story Generated by ChatGPT Pictures Generated by MidJourney Edited by Peter Zhang

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Once upon a time, there was a little boy named Peter who lived in a small village.



One day, he found a magical painting that could transform reality into comic book-like images.



Curious, Peter picked up the painting and suddenly found himself drawn into the painting's fantastical world.



He saw himself standing in a forest surrounded by strange creatures like candy trees, chocolate rivers, and cotton candy clouds.



Peter began to explore this wondrous world and discovered a big bad wolf chasing three little pigs.



He decided to help the pigs and ran up to the wolf with a large bone in his hand, shouting, "Hey, Mr. Wolf, would you like a taste of this?"



The wolf, smelling the delicious aroma of the bone, eagerly pounced on it, allowing the pigs to escape.



Peter and the pigs danced with joy, and all the creatures around them joined in the celebration.



Later on, they encountered an evil witch who tried to turn them into frogs.



But Peter, using his wits, put a magic bean in the witch's potion, which caused the witch to turn into a frog instead.



Finally, Peter and the pigs successfully returned to the real world, bringing back sweet memories and experiences.



Peter also learned many useful skills and wisdom from this magical adventure.

中文版 (Chinese Version)



从前有一个小男孩叫彼得,他住在一个小村庄里。



有一天,他发现了一幅神奇的画, 这幅画可以将现实变成连环画般的画面。



彼得好奇地拿起了画,一抬头, 他发现自己已经被画中的景象所吸引。



他看到自己站在一座森林里,周围有很多奇怪的生物, 如糖果树、巧克力河流和棉花糖云朵。



彼得开始探索这个奇妙的世界, 他发现了一只大灰狼正追逐三只小猪。



彼得决定帮助这些小猪,他奔跑到大灰狼的身边,手里拿着一块大肉骨头,大声喊道:"嘿!大灰狼,你想尝尝这个吗?"



大灰狼闻到了骨头上的香味, 迫不及待地扑了过来, 但却被小猪们趁机逃脱。



彼得与小猪们高兴地跳起舞来, 周围的生物也都加入了他们的队伍。



接下来,他们遇到了一个邪恶的女巫,女巫试图将他们变成青蛙。



彼得聪明地想到了一个计策,他在女巫的药水中放了一颗魔法豆, 结果女巫被自己的药水变成了一只青蛙。



最终,彼得和小猪们成功地回到了现实世界, 他们带回了一些甜美的记忆和经历。



彼得也从这个神奇的经历中学到了很多有用的技巧和智慧。

Epilogue

Story Generation

The story was generated by ChatGPT (GPT-3.5). I asked ChatGPT to randomly generate a fairy tale in Chinese, then translated the fairy tale into English. The original story written by ChatGPT is like this:



编写一个可以改变成连环画的有趣的童话故事。



从前有一个小男孩叫彼得,他住在一个小村庄里。有一天,他发现了一幅神奇的画,这幅画可以将现实变成连环画般的画面。

彼得好奇地拿起了画,一抬头,他发现自己已经被画中的景象所吸引。他看到自己站在一座 森林里,周围有很多奇怪的生物,如糖果树、巧克力河流和棉花糖云朵。

彼得开始探索这个奇妙的世界,他发现了一只大灰狼正追逐三只小猪。彼得决定帮助这些小猪,他奔跑到大灰狼的身边,嘴里叼着一块大肉骨头,大声喊道:"嘿!大灰狼,你想尝尝这个吗?"

大灰狼闻到了骨头上的香味,迫不及待地扑了过来,但却被小猪们趁机逃脱。彼得与小猪们 高兴地跳起舞来,周围的生物也都加入了他们的队伍。

接下来,他们遇到了一个邪恶的女巫,女巫试图将他们变成青蛙。彼得聪明地想到了一个计策,他在女巫的药水中放了一颗魔法豆,结果女巫被自己的药水变成了一只青蛙。

最终,彼得和小猪们成功地回到了现实世界,他们带回了一些甜美的记忆和经历,而彼得也 从这个神奇的经历中学到了很多有用的技巧和智慧。

And its English translation:

Once upon a time, there was a little boy named Peter who lived in a small village. One day, he found a magical painting that could transform reality into comic book-like images.

Curious, Peter picked up the painting and suddenly found himself drawn into the painting's fantastical world. He saw himself standing in a forest surrounded by strange creatures like candy trees, chocolate rivers, and cotton candy clouds.

Peter began to explore this wondrous world and discovered a big bad wolf chasing three little pigs. He decided to help the pigs and ran up to the wolf with a large bone in his mouth, shouting, "Hey, Mr. Wolf, would you like a taste of this?"

The wolf, smelling the delicious aroma of the bone, eagerly pounced on it, allowing the pigs to escape. Peter and the pigs danced with joy, and all the creatures around them joined in the celebration.

Later on, they encountered an evil witch who tried to turn them into frogs. But Peter, using his wits, put a magic bean in the witch's potion, which caused the witch to turn into a frog instead.

Finally, Peter and the pigs successfully returned to the real world, bringing back sweet memories and experiences. Peter also learned many useful skills and wisdom from this magical adventure.

Note that there is one place in this story that is unreasonable: "He decided to help the pigs and ran up to the wolf with a large bone in his mouth", which does not make sense, so I changed it to "in his hand" instead.

Determine the Character

The entire story was adapted into a children's comic book. I used Midjourney (V5) to automatically design the appearance of the main character the boy Peter.



Once the image of the boy Peter was determined, I could start drawing the entire story using Midjourney. The story was broken down sentence by sentence, and each stentence was illustrated as a picture. Each sentence was fed as a prompt to Midjourney to generate a suitable illustration, and I also used ChatGPT or Bard to assist me to create more detailed prompts.

For example,

The original sentence from the story:

The Boy Peter and the three pigs danced with joy, and all the creatures around them joined in the celebration.



Use ChatGPT to write the prompt more detailed:

Write prompt for AI image generator to draw "The Boy Peter and the three pigs danced with joy, and all the creatures around them joined in the celebration."

The new prompt:

Create an image of a young boy named Peter dancing with three pigs in a colorful and festive environment. The scene should be surrounded by a variety of other animals who

have come together to celebrate this joyous moment. The background should be full of vibrant colors, flowers, and other natural elements that contribute to the cheerful mood of the image. Peter and the pigs should be depicted in playful and dynamic poses, with their bodies and limbs in motion to convey a sense of happiness and celebration. The other animals around them should also be shown in various poses of joy and excitement, such as jumping, singing, or clapping their hands. The overall tone of the image should be one of happiness, playfulness, and community, with a sense of togetherness and unity between all the creatures in the scene.

And Midjourney gave four illustrations:



The prompt generated by Google Bard:

Peter and three pigs danced with joy, and all the creatures around them joined in the celebration. The birds sang, the flowers bloomed, and the sun shone brightly. The animals came out of the forest to join the party. They danced and sang and played

games. Peter and the pigs were so happy that they could share their happiness with all the creatures of the forest.



Interestingly, most of the time shorter sentences in the original work can produce more suitable pictures.

Current Issues

- a) The stability of the character's appearance cannot be guaranteed. In each picture, the character's appearance and clothes keep changing. Generative images can guarantee statistical similarities but cannot maintain the exact character image. (Even with the same seed, it cannot guarantee the stability of the character's appearance.)
- b) The character's emotions cannot be expressed well. Due to the samples of the character, who mostly has a smiling expression, the character in all subsequent

illustrations mostly maintains a similar smile, even the pictures were generated by prompts that explicitly require fear or worry.

- c) Due to the randomness and different quality of generated images, it takes me about three hours to search for the most suitable pictures, and a significant amount of GPU time is required to complete the comic book even it is only a 12-page book. Eventually we want the whole pipeline to be automated.
- d) Technically, the hands are usually a weak point, and Midjourney often struggles to draw them accurately.
- e) The images lack different layers, making it challenge for comic strips and animation production.

Of course, we can put in some human effort to improve the quality of this comic book, but that is not our ultimate goal. Our goal is to automate the entire pipeline from writing the story to drawing the illustrations. The following are the directions of our efforts to achieve this goal:

- 1) Ensure character's appearance to be consistent in a series of pictures.
- 2) Ensure accuracy in character illustration (e.g., no extra or missing fingers.)
- 3) Ensure that the illustrations have multi-layer structure.
- 4) The future program should be able to automatically select the most suitable illustrations.

Once the above goals can be achieved, we can move towards to fully automating text, image, and even film production.