

Quantum Tales

by Spencer Churchill

General metrics

23,614

characters

3,936

words

288

sentences

15 min 44 secreading
time**30 min 16 sec**speaking
time

Score



This text scores better than 87%
of all texts checked by Grammarly

Writing Issues

132

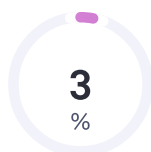
Issues left

11

Critical

121Advanced

Plagiarism

**11**

sources

3% of your text matches 11 sources on the web
or in archives of academic publications

Writing Issues

43

Clarity

9

Hard-to-read text



12

Passive voice misuse



12

Intricate text



10

Wordy sentences



16

Correctness

4

Comma misuse within clauses



1

Unknown words



1

Faulty subject-verb agreement



1

Determiner use (a/an/the/this, etc.)



1

Misplaced words or phrases



2

Punctuation in compound/complex sentences



1

Wrong or missing prepositions



2

Confused words



1

Misspelled words



2

Incomplete sentences



61

Delivery

61

Inappropriate colloquialisms



12

Engagement

11

Word choice



1

Monotonous sentences



Unique Words

Measures vocabulary diversity by calculating the percentage of words used only once in your document

30%unique words

Rare Words

Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

46%rare words

Word Length

Measures average word length

4.8characters per word

Sentence Length

Measures average sentence length

13.7words per sentence

Quantum Tales

Spencer Churchill

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¹³⁵ Quantum Tales is a work of fiction. Names, characters, places, events, locales, and incidents are the products of the author's imagination, or are used^{2 3} fictitiously.⁴ Any resemblance to actual events, locales, or persons, living or dead, is entirely coincidental.

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Introduction

Fairy Tales

Quantum Tales borrows fables from around the world to excite and educate readers about quantum algorithms. There are four popular fairy tales from England to China, and they all illustrate different applications for quantum computing.

- The Cowherd and the Weaver Girl (牛郎织女) is the Chinese Valentine's day story that I modify to teach Quantum Teleportation.
- Goldilocks and the Three Bears ⁶comes from England, and ⁷it's the most fitting story to teach the Deutsch-Jozsa algorithm.
- Ali Baba and the Forty Thieves (علي بابا والأربعون لصا), a traditional Arabian oral story, perfectly demonstrates the power of Shor's algorithm.
- The Tortoise and the Hare (Ο λαγός και η χελώνα), originating from ancient Greece, is revitalized in a rematch using Grover's algorithm.

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Quantum Algorithms

- Quantum Teleportation
 - This algorithm is used⁸ as an example of sending quantum information by classical means.
- The Deutsch-Jozsa Algorithm
 - This algorithm determines if a function is constant or balanced, meaning it returns either the same value (0 or 1) or both evenly (0 and 1).
- Shor's Algorithm
 - This algorithm calculates the periodicity of a function. The application is often attributed⁹ to prime factorization.
- Grover's Algorithm
 - This algorithm searches for an item in an unordered list.

QR Codes

There is a QR code in each story to allow for a deep-dive into the content. The QR codes are presented¹⁰ when the protagonist is implementing¹¹ the quantum algorithm, and they allow for an involved and enriching experience. Readers with experience in quantum computing should scan the QR codes and be redirected¹² to the GitHub repository. If you¹³ click the Google Colab link, you can¹⁴ run the code in your¹⁵ browser; however, you¹⁶ can also simply click on the jupyter notebook in the repository.

Ways of Reading

For readers looking for an enjoyable twist on classic fairy tales, simply reading¹⁷ the stories is more than enough; however, if you're a curious reader, scan the^{18,19} QR codes, and look at the code, variable names, and outputs.²⁰ Also, browse the citations for the best quantum resources I could find. For advanced quantum

readers, please check out the code and submit a pull request if you find²¹
anything you'd like to improve.^{22,23}²⁴

The Entangled Love of the Cowherd and Weaver Girl

As the first peonies broke into bloom, the seven imperial daughters of Heaven, with clouds tracing their steps, descended from their palace to bathe in the clear lake. While they soaked, a breeze lifted the dress of Zhīnǚ, the youngest sister, off a branch into the water. Her sisters laughed as they put on their dry clothing and returned to Heaven.

Driving his oxen by the lake, the cowherd Niúláng spied Zhīnǚ sitting along the bank. Hastily, he took off his tunic and covered the young lady. She explained to him that her clothes were wet from the lake and Niúláng, charmed by Zhīnǚ, offered to show her the area while her dress dried.

Niúláng led Zhīnǚ up a nearby hill that overlooked the water and surrounding countryside. He explained that he came here to graze his oxen and watch the colorful clouds overhead. Niúláng continued describing the beautiful hues of these clouds and had no idea why Zhīnǚ was blushing and smiling, but she soon revealed that she was the one who weaves the clouds in Heaven.

To Niúláng, the clouds were just shadows of Zhīnǚ's beauty; he would rather see empty skies than not be with her. Returning to the lake, Niúláng grinned, tossed Zhīnǚ's clothes back into the water, and asked her to stay with him until her clothing dried. Her cheeks grew pink as she smiled and nodded.

137 The two grew closer, soon lost in love. Zhīnǚ hardly thought of the jade palace. As their love grew, so did their family, and Zhīnǚ and Niúláng began sharing their gentle²⁵ life with two children. All this time, Zhīnǚ's heavenly dress rested along the lake bed.

Zhīnǚ's mother and Queen of the Heavens, Xīwángmǔ, was bothered by a suspicious absence of new clouds. After questioning six of her daughters, she discovered that Zhīnǚ had betrayed Heaven and married a mortal. Driven to a ²⁶ rage by her youngest daughter's foolishness, Xīwángmǔ dragged the unwilling princess back to her heavenly palace.

Niúláng, distraught from the loss of his dear beloved, ran to the lake. Clutching his wife's sodden dress, raised high, he cursed the heavens for stealing her. And a response came, not from the sky, but from Niúláng's most prized ox that had sipped from the ²⁸ heavenly water.

The ox told Niúláng that if he wore its hide as a cloak, he could ascend to Heaven and find his wife. With a heavy heart, Niúláng killed the ox, covered his shoulders with its skin, and climbed toward the heavens with his children. ²⁹

Niúláng and Zhīnǚ were overjoyed to be reunited, but Zhīnǚ knew her mother well and what was to come. She warned Niúláng that the arrival of a mortal and two half-celestials in Heaven would infuriate her mother, who would likely separate them again.

As Zhīnǚ prepared for their inevitable separation, she remembered what Yùhuáng, her father and ruler of Heaven, had taught her.

As all good emperors know, effective communication is key to maintaining power, and Yùhuáng had devised the best method in the universe. He referred to this method as Quantum Teleportation, a secure way to encode and ¹³⁸ communicate information across the heavens at the speed of light.

Niúláng listened ³⁰ closely as Zhīnǚ imparted her father's method of communication. Using starlight, they could connect particles and send messages to each other, despite whatever Xīwángmǔ may try.

Zhīnǚ demonstrated the process. She unclasped one of her crystal earrings and held it high, splitting a beam of starlight into two photons. This pair, born

from the same beam, was tightly related and entangled. If either photon in this entangled pair were changed ³¹ even slightly, the other photon would reflect this change. Zhīnǚ stored one photon for her and the other for Niúláng.

She handed Niúláng her other earring, and they worked together, entangling enough particles to communicate for an entire year, all organized by pairs. Alas, Xīwángmǔ spotted Niúláng with Zhīnǚ in Heaven. Enraged once more, Xīwángmǔ drew her jade hairpin, and as her hair tumbled around her feet, slashed a river between the couple, forming the Milky Way.

This heavenly river swept the two lovers apart. ³² But, with their entangled particles, they sent messages back and forth throughout the year. ³³ And though Xīwángmǔ tried her hardest, she could never read the couple's messages.

The magpies, curious upon finding a new river of stars in the sky, flew up to ask Zhīnǚ what had happened. She explained what her mother had done and that she and Niúláng needed a way to entangle more particles each year. The magpies considered this, and on the seventh night of the seventh moon, flew to Heaven to temporarily form a bridge across the Milky Way for the two lovers. ³⁴

Even now, despite her mother's interference, Zhīnǚ and Niúláng continue entangling particles each year and sharing their love across the universe.

Goldilocks and the Quantum Spoon

Between a quiet town and a dark forest, there was a vast field of wildflowers.
Picking her way through the vibrant field was a girl with golden hair. As she walked, she hummed and searched for perfect flowers. ³⁵ You ³⁶ see, this girl was Goldilocks, and, as everyone knows, she needed everything to be just right. She searched, but few flowers struck her fancy. Some stems were bent, some petals had brown tips, and some stamens were combed by bees, so she

ventured deeper into the forest.³⁷ After some time had passed, Goldilocks had the most beautiful bouquet of honeysuckles and merrybells. But³⁸ she had been without refreshment for too long and needed a break.

Almost as if she were in a fairy tale, she spied a humble cottage in a clearing deep in the forest. The cottage looked cozy, and delicious scents wafted toward her.

Goldilocks knew the aroma of fine cuisine, but what she didn't³⁹ know was that the house was home to three bears. Luckily for Goldilocks, the three bears had ventured into the forest to work up an appetite while⁴⁰ they waited for their dinner to cool down.

Goldilocks knocked, waited, then knocked again. There was no response. The smells of freshly-made supper filled the porch, finding the door was unlocked, and she couldn't⁴¹ help but peek inside.

Inside, she found a table set for three and one quantum computer. She hoisted herself into the largest chair, but the cushion was too deep, and her feet dangled awkwardly. The middling chair was too hard, so she relaxed into the smallest chair, and it felt just right. She waited patiently, sniffing at the bowls of porridge.

Since the lodgers were taking their time, she assumed they weren't⁴² hungry and decided to further investigate their porridge.⁴³

There were three wooden bowls: one large, one medium, one small, all filled with porridge. Goldilocks reached for a spoon, then hesitated. "Which porridge to try first?" She pondered. Too cold would be stodgy and unpalatable, too⁴⁴ hot might burn her tongue.

Goldilocks was a fan of flowers and porridge, but she was also well-versed in quantum algorithms. The key was to consider each bowl as completely hot or

completely ⁴⁵cold, or a perfect mix of hot and cold porridge. By doing so, she could apply the Deutsch-Jozsa algorithm.

This algorithm instantly reveals whether a bowl is either constant or balanced. A constant bowl of porridge is always hot or always cold. A balanced bowl is a mix of hot and cold porridge. Using the Deutsch-Jozsa algorithm, the quantum computer can find if a bowl is just right.

Now instead ⁴⁶of having the misfortune of burning or numbing her tongue, she used the computer to test the bowls. The large and medium bowls were constant and therefore either too hot or too cold. The small bowl was balanced, and thus, she knew it was just right — the perfect mix of hot and cold porridge. She sat at the table and savored yet another successful application of quantum computing. She continued to savor taste after taste until the bowl was ⁴⁷thoroughly tasted. After scraping the bowl clean, Goldilocks went to an adjacent room to rest. She laid down on the smallest bed, which was just right, and contemplating more applications for quantum algorithms, ⁴⁸she fell fast asleep.

⁴⁹But while Goldilocks was sleeping, the three bears returned and could tell something was amiss. The smallest bear saw his empty bowl and growled loudly, for he was ⁵⁰very hungry.

Goldilocks awoke to this low growl and peeked out. The three bears were approaching where she hid, following the scent of the bouquet. Quickly, Goldilocks threw the flowers away from her and dashed to the open window. The honeysuckle's strong scent distracted the bears, and Goldilocks leaped from the window into the clearing.

The bears saw Goldilocks running toward the trees, but Goldilocks had just eaten and slept while the bears were tired from their ambling. The small bear,

his tummy grumbling, sadly watched the thief escape into the forest ⁵¹while the other two bears happily began slurping up their porridge.

Ali Baba and the RSA Keys

A wealthy merchant fathered two sons, Ali Baba and Cassim. Cassim prided himself on living comfortably, having acquired their father's business and marrying into ⁵²further wealth. Ali Baba, on the other hand, welcomed a more humble lifestyle — becoming a woodcutter and marrying the woman he loved. ⁵³

While chopping wood one day, Ali Baba heard many heavy footsteps approaching. From behind a large juniper tree, Ali Baba spied forty thieves laden with treasure. ⁵⁴The leader of the thieves, called Lot, approached a sheer mountain face, whispered to it, and a cave magically opened in the rock. One by one, the thieves hoisted their gold inside, and the cave closed behind them. Sometime later, the cave opened to let out the now empty-handed thieves, closing behind them once more.

After the thieves had vanished, Ali Baba approached the cliff face and noticed a series of jumbled letters carved into the rock. He whispered them to the mountain, curious if they would open the cave, but alas, they did not. He transcribed the letters from the rock to a roll of papyrus and returned home. In his foyer, Ali Baba found Cassim anxiously pacing and clenching his fists. Ali Baba asked what was wrong, and Cassim explained that a fellow trader had ⁵⁵just been killed in a nearby town. Their entire caravan was looted and destroyed, and the thieves left only an unintelligible note behind.

Curious, Ali Baba asked to see the note and was shocked when he saw letters as jumbled as those on the mountain face. However, he also spotted a small number scribbled on the corner of the note.

He remembered hearing stories from a trader about a band of thieves who communicated with secret messages. As they had grown more prosperous and powerful, they eventually needed a method to communicate without fear of being compromised.

The trader had explained that the thieves used a cipher known as RSA to encrypt their secret messages. This cipher would scramble messages with a public key and unscramble messages with a private key. Only with the private key was the message able to be read. Thus, the leader of the thieves⁵⁶ could receive reports from his members, employ spies, and monitor his thieving throng while remaining safe from prying eyes. This communication method had helped them become very⁵⁷ successful and wealthy.

Around the same time, Ali Baba's father had received a device that drew on the nature of atoms for computation. This mysterious quantum computer could uncover the patterns of functions to factor numbers, a process referred to as Shor's algorithm.

The number that needed to be factored⁵⁸ was⁵⁹ on the corner of the note. This number is called the modulus, the product of two prime numbers. Those two prime numbers were also used⁶⁰ to create the public and private keys. If Ali Baba can find the two prime numbers that produce the number on the note,⁶¹ he can⁶² easily generate the private key and read the secret message.⁶³

With his plan in place, Ali Baba began working on the quantum computer. The fastest way to factor numbers is with Shor's algorithm, and there wasn't⁶⁴ a moment to spare.

It was late at night when Ali Baba finally finished implementing Shor's algorithm, but he⁶⁵ factored the number and generated the thieves' private key. With this key, he decrypted the message in the rock, and it read "Open sesame."⁶⁶

The next morning, Ali Baba hastened to the mountain, whispered “Open sesame,” and watched the cave magically open⁶⁷. Not wishing to leave any trace, he rushed in and grabbed only one sack of gold. Ali Baba returned home to show his wife the gold, and she burst into tears of joy. She went to Cassim to ask for a scale. Curious about what on earth his poor brother could possibly⁶⁸ need to weigh, Cassim sneakily stuck wax to the inside of the scale.

After weighing the gold, the wife returned the scale, and when Cassim saw a piece of gold sticking to the wax, he became very envious. “Ali Baba has so much gold he can’t⁶⁹ count it! He needs to weigh it all!” he cried.

Driven by suspicion and jealousy, Cassim decided to tail his brother. When Ali Baba left home the next morning to chop wood, Cassim followed from a safe distance. After several hours, he saw Ali Baba approach a cliff and an⁷⁰ entrance to a cave, filled with treasure, magically opened in the rock. Ali Baba quickly emerged with a bag of gold, and the cave sealed itself once again. Cassim couldn’t⁷¹ stand the thought of Ali Baba having more gold than him, so he planned to return and empty the magic cave of all its treasure.

At home that night, Cassim strapped great chests to all his mules. He led the caravan toward the cliff, but it would not open when he approached. For hours Cassim scratched and smacked the rock and was so engrossed that he didn’t⁷² notice the forty thieves silently approaching. Turning around to catch his breath, Cassim was greeted⁷³ with dozens of scimitars.

Lot strode out from between his men. “What have we here?” he asked as his thumb grazed the edge of his scimitar. Cassim’s eyes bulged. “Look, habibi⁷⁴, I appreciate a good theft like any other, but this is our secret cave, and now it’s⁷⁵ not so secret⁷⁶, is it?” Lot toyed with the hilt of his scimitar. Cassim quickly tried to reveal that Ali Baba knew about their cave, but the scimitar was quicker⁷⁷.

After a few weeks, Ali Baba asked Cassim's wife where his brother was. She mentioned that he had left with his mules but had not yet returned. Weeks turned to months, and with no sign of Cassim, they correctly guessed that the group of bandits had found his caravan. Ali Baba vowed to have revenge for his brother and kept secretly looting from the cave. He quietly invested the wealth back into the town and even funded the construction of a new school. There, he taught quantum computation and assured the students quantum algorithms were quite useful.

Tortoise vs. Hare — Quantum Rematch

The wind rushed through his fur. The ground shook with his every leap. With ears slicked back, the Hare bolted across the hills. Several animals glanced up as he thundered by. Breaking the beat of the Hare's pounding paws, the Weasel jeered, "Slowpoke!"

The Hare wheeled around, skidding to a halt. "Who said that? Answer!" He thumped angrily as the animals howled with laughter. ⁷⁸ This was the last straw. "For over two thousand years," the Hare began, "I have endured your jokes. Well, that ends now!" His tail bristled. "I am the most agile, quick, dashing animal, and I will redeem all harekind." His roving eyes narrowed as they settled on the dozing Tortoise.

After his humiliating defeat millennia ago, the Hare had trained relentlessly. Despite all his displays of speed, however, the other animals ⁷⁹ constantly reminded him of his loss.

The Tortoise, on the other hand, had spent his days under an olive tree, contemplating the world. Quite the philosopher, he was currently immersed in the study of quantum mechanics.

“There is no way you can ⁸⁰best me,” the Hare hissed. “We will race again, and I will win.” The Tortoise slowly blinked. The Hare’s eye twitched.

¹³⁹ A few days went by, and it was time for the big race. The Fox marked the destination as he had long ago. With a wave of his flag, the Tortoise and the Hare started ⁸¹off.

The Hare bounded and zig-zagged through bushes and shrubs at an astonishing speed. Occasionally, ⁸²he’d pause and stretch, looking behind with a smug smile on his face. Not seeing the Tortoise, the Hare scratched his ears, fluffed his tail, and dashed over the game trail toward the finish line. ⁸³This was the best the Hare had felt in years.

The Tortoise, however, made his way to his nearby quantum computer and represented the paths from start to finish as a list of their associated distances. He used Grover’s algorithm to quickly find which path was the shortest and began the race. With this information in mind, he headed off, away from the Hare.

Instead of following the worn path, he held to the path that Grover’s algorithm outlined, avoiding the bushes and shrubs, and ⁸⁴greatly reducing the distance. The Tortoise slowly, but directly, made his way toward the finish line.

On a nearby hill, the Hare looked behind him, squinting against the sun, trying to spot the Tortoise. ⁸⁵“Typical,” he thought. “Tortoise is even slower than last time.”

The Hare turned around to finish the race. Much to his despair, he saw, just a few steps from the finish line, the Tortoise trudging forward. ⁸⁶

“How can this be?” The Hare exclaimed. He charged toward the finish line but could not overtake the Tortoise in time.

The Tortoise looked back at the panting Hare and said, ⁸⁷“It’s the shortest path that wins the race.”

Acknowledgments

140 | I need to begin by thanking my family and friends for reading the stories and listening to me during the process. I'm sure that they'd prefer to do anything than hear me decide between "find," "determine," and "reveal," but their consistent support helped me finish this project.

141 | I am so fortunate to have such a talented artist help tell my stories. Larissa's illustrations re-inspired me countless times when I was in the midst of writer's block. I can't imagine being asked to illustrate a fairy tale book, and then get quantum computers thrown at me, but she did a wonderful job researching and bringing my vision to life.

For the quantum community that welcomed me, gave invaluable feedback, and kept me excited about quantum, I thank you all. To everyone in the Qiskit community, thank you, and especially for your votes for the most interesting quantum algorithms that directly shaped this book.

For the first reason there exists any book at all, I'd love to extend a thank you to the original story-tellers who created these fairy tales. Our world is a much richer place because these stories exist. I am so grateful that they've been preserved and can now be shared with a new purpose.

The other reason I'm able to publish this book is due to the tremendous support from the Unitary Fund. I came to them with an idea to introduce quantum algorithms through stories, and they have helped me along the way since. Their fund is founded on open-source ideologies, and hopes to bring quantum to everyone. It has been an absolute pleasure to work with the Unitary Fund.

I specifically want to thank Travis Scholten for pushing my project to receive funding. I would also like to thank Nathan Shammah and William Zeng for helping me narrow my focus and providing countless resources to get these stories prepared for publication.

Bibliography

Æsop. *The Æsop for Children*. Chicago, Rand McNally, 1919. *Library of Congress*.

“Deutsch-Jozsa Algorithm.” *Learn Quantum Computation using Qiskit*, Qiskit, <https://qiskit.org/textbook/ch-algorithms/deutsch-jozsa.html>.

Diyab, Hanna. “Ali Baba and the Forty Thieves.” *Wikipedia*, 19 May 2006, https://en.wikipedia.org/wiki/Ali_Baba_and_the_Forty_Thieves.

“Goldilocks and the Three Bears.” *Mother’s Nursery Tales*, by Katharine Pyle, E. P. Dutton, 1918, pp. 207-213. *Project Gutenberg*.

“Grover’s Algorithm.” *Learn Quantum Computation using Qiskit*, Qiskit, <https://qiskit.org/textbook/ch-algorithms/grover.html>.

“Quantum Teleportation.” *Learn Quantum Computation using Qiskit*, Qiskit, <https://qiskit.org/textbook/ch-algorithms/teleportation.html>.

Shi, Li Wei. “The Cowherd and the Weaver Girl.” *Chinaculture.org*, 16 August 2010, http://en.chinaculture.org/focus/focus/2010qixi/2010-08/16/content_391106.htm.

“Shor’s Algorithm.” *Learn Quantum Computation using Qiskit*, Qiskit, <https://qiskit.org/textbook/ch-algorithms/shor.html>.

1.	<i>No part of this publication may be reproduced, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission of the publisher.</i>	Hard-to-read text	Clarity
2.	imagination,	Comma misuse within clauses	Correctness
3.	<i>are used</i>	Passive voice misuse	Clarity
4.	<i>Names, characters, places, events, locales, and incidents are the products of the author's imagination, or are used fictitiously.</i>	Intricate text	Clarity
5.	xxxxxxxxxx	Unknown words	Correctness
6.	comes → come	Faulty subject-verb agreement	Correctness
7.	it's → it is	Inappropriate colloquialisms	Delivery
8.	<i>is used</i>	Passive voice misuse	Clarity
9.	<i>is often attributed</i>	Passive voice misuse	Clarity
10.	<i>are presented</i>	Passive voice misuse	Clarity
11.	is implementing → implements	Wordy sentences	Clarity
12.	<i>be redirected</i>	Passive voice misuse	Clarity
13.	<i>you</i>	Inappropriate colloquialisms	Delivery
14.	<i>you</i>	Inappropriate colloquialisms	Delivery
15.	<i>your</i>	Inappropriate colloquialisms	Delivery
16.	<i>you</i>	Inappropriate colloquialisms	Delivery
17.			

	simply → merely	Word choice	Engagement
18.	you're → you are	Inappropriate colloquialisms	Delivery
19.	you're	Inappropriate colloquialisms	Delivery
20.	<i>For readers looking for an enjoyable twist on classic fairy tales, simply reading the stories is more than enough; however, if you're a curious reader, scan the QR codes, and look at the code, variable names, and outputs.</i>	Hard-to-read text	Clarity
21.	you	Inappropriate colloquialisms	Delivery
22.	you'd → you would	Inappropriate colloquialisms	Delivery
23.	you'd	Inappropriate colloquialisms	Delivery
24.	<i>For advanced quantum readers, please check out the code and submit a pull request if you find anything you'd like to improve.</i>	Intricate text	Clarity
25.	gentle → peaceful	Word choice	Engagement
26.	a rage	Determiner use (a/an/the/this, etc.)	Correctness
27.	And → Moreover,, Furthermore,	Inappropriate colloquialisms	Delivery
28.	heavenly → holy	Word choice	Engagement
29.	<i>With a heavy heart, Niúláng killed the ox, covered his shoulders with its skin, and climbed toward the heavens with his children.</i>	Intricate text	Clarity
30.	closely	Misplaced words or phrases	Correctness
31.	even	Wordy sentences	Clarity
32.	But → However, Nevertheless	Inappropriate colloquialisms	Delivery

33.	And → Moreover,, Furthermore,	Inappropriate colloquialisms	Delivery
34.	<i>The magpies considered this, and on the seventh night of the seventh moon, flew to Heaven to temporarily form a bridge across the Milky Way for the two lovers.</i>	Intricate text	Clarity
35.	<i>Between a quiet town and a dark forest, there was a vast field of wildflowers. Picking her way through the vibrant field was a girl with golden hair. As she walked, she hummed and searched for perfect flowers.</i>	Monotonous sentences	Engagement
36.	You	Inappropriate colloquialisms	Delivery
37.	<i>Some stems were bent, some petals had brown tips, and some stamens were combed by bees, so she ventured deeper into the forest.</i>	Passive voice misuse	Clarity
38.	But → However,, Nevertheless,	Inappropriate colloquialisms	Delivery
39.	didn't → did not	Inappropriate colloquialisms	Delivery
40.	while → . At the same time,	Hard-to-read text	Clarity
41.	couldn't → could not	Inappropriate colloquialisms	Delivery
42.	weren't → were not	Inappropriate colloquialisms	Delivery
43.	to investigate their porridge further	Inappropriate colloquialisms	Delivery
44.	,too → ; too, . Too	Punctuation in compound/complex sentences	Correctness
45.	cold,	Comma misuse within clauses	Correctness
46.	Now instead → Instead	Wordy sentences	Clarity
47.	<i>was thoroughly tasted</i>	Passive voice misuse	Clarity

48.	she → ; she, , and she, . She	Punctuation in compound/complex sentences	Correctness
49.	But → However,, Nevertheless,	Inappropriate colloquialisms	Delivery
50.	very hungry → starving, famished, ravenous	Word choice	Engagement
51.	while → . In contrast,	Hard-to-read text	Clarity
52.	further → other	Word choice	Engagement
53.	<i>Ali Baba, on the other hand, welcomed a more humble lifestyle — becoming a woodcutter and marrying the woman he loved.</i>	Intricate text	Clarity
54.	The leader of the → The	Wordy sentences	Clarity
55.	<i>been killed</i>	Passive voice misuse	Clarity
56.	thieves' leader	Wordy sentences	Clarity
57.	very → wildly	Word choice	Engagement
58.	<i>be factored</i>	Passive voice misuse	Clarity
59.	in was	Wrong or missing prepositions	Correctness
60.	<i>were also used</i>	Passive voice misuse	Clarity
61.	note's number	Wordy sentences	Clarity
62.	easily → quickly	Word choice	Engagement
63.	<i>If Ali Baba can find the two prime numbers that produce the number on the note, he can easily generate the private key and read the secret message.</i>	Hard-to-read text	Clarity

64.	wasn't → was not	Inappropriate colloquialisms	Delivery
65.	, but he → . However, he	Hard-to-read text	Clarity
66.	<i>With this key, he decrypted the message in the rock, and it read "Open sesame."</i>	Intricate text	Clarity
67.	open → opens	Confused words	Correctness
68.	possibly	Wordy sentences	Clarity
69.	ean't → cannot	Inappropriate colloquialisms	Delivery
70.	and an → . An	Hard-to-read text	Clarity
71.	couldn't → could not	Inappropriate colloquialisms	Delivery
72.	didn't → did not	Inappropriate colloquialisms	Delivery
73.	<i>was greeted</i>	Passive voice misuse	Clarity
74.	habibi → Habibi	Misspelled words	Correctness
75.	it's → it is	Inappropriate colloquialisms	Delivery
76.	<i>so secret</i>	Incomplete sentences	Correctness
77.	<i>quicker</i>	Incomplete sentences	Correctness
78.	<i>This</i>	Intricate text	Clarity
79.	eonstantly → always	Word choice	Engagement
80.	best → beat	Confused words	Correctness
81.	off	Wordy sentences	Clarity
82.	he'd → he would	Inappropriate colloquialisms	Delivery
83.	<i>This</i>	Intricate text	Clarity

84.	greatly → significantly	Word choice	Engagement
85.	<i>On a nearby hill, the Hare looked behind him, squinting against the sun, trying to spot the Tortoise.</i>	Intricate text	Clarity
86.	<i>Much to his despair, he saw, just a few steps from the finish line, the Tortoise trudging forward.</i>	Intricate text	Clarity
87.	It's → It is	Inappropriate colloquialisms	Delivery
88.	I	Inappropriate colloquialisms	Delivery
89.	my	Inappropriate colloquialisms	Delivery
90.	me	Inappropriate colloquialisms	Delivery
91.	<i>I need to begin by thanking my family and friends for reading the stories and listening to me during the process.</i>	Intricate text	Clarity
92.	I'm → I am	Inappropriate colloquialisms	Delivery
93.	I'm	Inappropriate colloquialisms	Delivery
94.	they'd → they would	Inappropriate colloquialisms	Delivery
95.	me	Inappropriate colloquialisms	Delivery
96.	," but their → ." However, their	Hard-to-read text	Clarity
97.	I	Inappropriate colloquialisms	Delivery
98.	my	Inappropriate colloquialisms	Delivery
99.	me	Inappropriate colloquialisms	Delivery
100.	I	Inappropriate colloquialisms	Delivery
101.	I	Inappropriate colloquialisms	Delivery

102.	can't → cannot	Inappropriate colloquialisms	Delivery
103.	book,	Comma misuse within clauses	Correctness
104.	me	Inappropriate colloquialisms	Delivery
105.	, but she → . However, she	Hard-to-read text	Clarity
106.	a wonderful → an excellent, a fantastic	Word choice	Engagement
107.	my	Inappropriate colloquialisms	Delivery
108.	me	Inappropriate colloquialisms	Delivery
109.	me	Inappropriate colloquialisms	Delivery
110.	I	Inappropriate colloquialisms	Delivery
111.	you	Inappropriate colloquialisms	Delivery
112.	you	Inappropriate colloquialisms	Delivery
113.	your	Inappropriate colloquialisms	Delivery
114.	interesting → exciting	Word choice	Engagement
115.	I'd → I would	Inappropriate colloquialisms	Delivery
116.	I'd	Inappropriate colloquialisms	Delivery
117.	you	Inappropriate colloquialisms	Delivery
118.	<i>For the first reason there exists any book at all, I'd love to extend a thank you to the original story-tellers who created these fairy tales.</i>	Intricate text	Clarity
119.	I	Inappropriate colloquialisms	Delivery
120.	they've → they have	Inappropriate colloquialisms	Delivery

121.	<i>be shared</i>	Passive voice misuse	Clarity
122.	I'm → I am	Inappropriate colloquialisms	Delivery
123.	I	Inappropriate colloquialisms	Delivery
124.	me	Inappropriate colloquialisms	Delivery
125.	along the way	Wordy sentences	Clarity
126.	ideologies,	Comma misuse within clauses	Correctness
127.	I	Inappropriate colloquialisms	Delivery
128.	my	Inappropriate colloquialisms	Delivery
129.	I	Inappropriate colloquialisms	Delivery
130.	me	Inappropriate colloquialisms	Delivery
131.	helping me narrow → narrowing	Wordy sentences	Clarity
132.	my	Inappropriate colloquialisms	Delivery
133.	<i>All rights reserved. No part of this publication may be reproduced,</i>	in any form or by any means – electronic, mechanical ... http://www.vdb-loi.com/wp-content/uploads/2019/05/Laos-Tax-Booklet-2016.pdf	Originality
134.	<i>stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without</i>	No part of this publication may be reproduced, stored in a ... https://forum.wordreference.com/threads/no-part-of-this-publication-may-be-reproduced-stored-in-a-retrieval-system-or-transmitted.409777/	Originality
135.	<i>and incidents are the products of the author's imagination, or are used fictitiously. Any resemblance to actual events, locales, or persons,</i>	Copycat Culture: Adapting to a World of Adaptations HuffPost https://www.huffpost.com/entry/copycat-culture-adapting-_b_6174414	Originality

	<i>living or dead, is entirely coincidental.</i>		
136.	<i>Ali Baba and the Forty Thieves (علي بابا والأربعون لصا), a traditional</i>	Jarmen Kell And The Forty Thieves Command and Conquer ... https://cnc.fandom.com/wiki/Jarmen_Kell_And_The_Forty_Thieves	Originality
137.	<i>As their love grew, so did their family,</i>	John Pugh Obituary (1956 - 2020) - The Daily Herald https://www.legacy.com/obituaries/columbiadailyherald/obituary.aspx?pid=197271027	Originality
138.	<i>across the heavens at the speed of light.</i>	THE SECRET BEHIND STAR WARS - The New York Times https://www.nytimes.com/1985/08/11/magazine/the-secret-behind-star-wars.html	Originality
139.	<i>A few days went by, and it was</i>	Help windows 7 keeps on crashing - Microsoft Community https://answers.microsoft.com/en-us/windows/forum/all/help-windows-7-keeps-on-crashing/634ddc41-b428-4829-be27-87841d4762e3	Originality
140.	<i>I need to begin by thanking my family and friends for</i>	Maricopa County Jail Stories: 2010 https://ldsbiker.blogspot.com/2010/	Originality
141.	<i>I am so fortunate to have such a</i>	I am so fortunate to have such a caring sensitive doctor ... https://www.mdvip.com/patients/member-testimonials/i-am-so-fortunate-have-such-caring-sensitive-doctor	Originality
142.	<i>Our world is a much richer place because</i>	How to Produce A Low Budget Short Movie - Sofy.tv - Blog https://sofy.tv/blog/low-budget-short-movie/	Originality
143.	<i>It has been an absolute pleasure to</i>	United States : HFF announces	Originality

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