DOWN THE

heads downwards! The Antipathies, I think—”
(she was rather glad there was no one listening,
this time, as it didn't sound at all the right word)
—but I shall have to ask them what the name of
the country is, you know. Please, Ma'am, is this
New Zealand? Or Australia?” (and she tried to
curse as she spoke—fancy curtseying as you're
falling through the air! Do you think you could
manage it?) “And what an ignorant little girl
she'll think me for asking! No, I'll never do to
ask: perhaps I shall see it written up somewhere.”

Down, down, down. There was nothing else to
do, so Alice soon began talking again. “Dinah'll
miss me very much to-night, I should think!”
(Dinah was the cat.) “I hope they'll remember
her saucer of milk at tea-time. Dinah, my dear! I
wish you were down here with me! There are no
mice in the air, I'm afraid, but you might catch a
bat, and that's very like a mouse, you know. But
do cats eat bats? I wonder?” And here Alice
began to get rather sleepy, and went on saying
to herself, in a dreamy sort of way, “Do cats eat
bats? Do cats eat bats?” and sometimes, “Do
cats eat cats?” for, you see, as she couldn't answer
either question, it didn't much matter which way
she put it. She felt that she was dozing off, and
had just begun to dream that she was walking hand
in hand with Dinah, and was saying to her very
carately, “Now, Dinah, tell me the truth: did you
ever eat a bat?” when suddenly, thump! thump! down
she came upon a heap of sticks and dry
leaves, and the fall was over.

RABBIT-HOLE

Alice was not a bit hurt, and she jumped up
on to her feet in a moment: she looked up, but it
was all dark overhead: before her was another long
passage, and the White Rabbit was still in sight,
hurrying down it. There was not a moment to be
lost: away went Alice like the wind, and was just
in time to hear it say, as it turned a corner, “Oh
my ears and whiskers, how late it's getting!”
She was close behind it when she turned the
corner, but the Rabbit was no longer to be seen:
she found herself in a long, low hall, which was lit
up by a row of lamps hanging from the roof.

There were doors all round the hall, but they
were all locked; and when Alice had been all
the way down one side and up the other trying
every door, she walked sadly down the middle, won-
dering how she was ever to get
out again.

Suddenly she came upon a little
three-legged table,
all made of solid
glass: there was
nothing on it but
a tiny golden key,
and Alice's first
idea was that this might belong to one of the doors
of the hall; but, alas! either the locks were too
large, or the key was too small, but at any rate it
**Subword Visualization**

**ALICE NEOLOGISMS**

so000p, beau00tiful, eeevening, curiouser, pleasanter, uglifying, uglification, dinner, seaography.

**ALICE PROSODY**

Twin-kle twin-kle lit-tle bat,
How I won-der what you're at.
Up a-bove the world you fly,
Like a tea-tray in the sky.
Twin-kle twin-kle --

---

Neologism Visualization
High x-height letters: letters Carroll added (or modified) in the word e.g. oo on beauootiful
Low x-height letters: letters Carroll removed from word e.g. er on dinner

Prosody Visualization
Note Pitch: font-weight, baseline shift, x-height
Note Duration: font-width
Red-highlight: rhyming phoneme
Background yellow highlighter: portion poem the Carroll changed.
Words and Word Pairs (1)

**ALICE CHARACTER EMOTIONS**

- Happy: Bill, Puppy
- Angry: Gryphon, Queen, Turtle, Hare, Rabbit
- Sad: Dormouse, Hatter, Knav
- Afraid: Alice, Caterpillar

Extracted by NLP based on emotion lexicon analysis of words close to characters

**ALICE CHARACTER FREQUENCY**

- Rabbit
- Mouse
- Gryphon
- Hatter
- Dormouse
- Caterpillar
- Queen
- Cat

**ALICE CHARACTER SENTIMENT**

- Human
- Mammal
- Bird
- Reptile—Fish
- Insect
- Mythic
- Other (Card)

Extracted by NLP based on sentiment of words close to characters

**ALICE CHARACTER TIMELINES**

Dots correspond to speech/thoughts through the chapters

- Alice
- White Rabbit
- Mouse
- Lory
- Dodo
- Caterpillar
- Pig
- Fish/Frog
- Footman
- Duchess
- Cheshire Cat
- March Hare
- Hatter
- Dormouse
- Two
- Five
- Seven
- Queen
- King

Other minor characters: (duck, egret, crabs, magpie, canary, soldiers, jury, cook, knave)
**ALICE TOP BIGRAMS**

Oh: dear, my, I, how, such, it’s, won’t, she, ever, they’ll, ’tis

Quite: forgot, as, natural, out, tired, silent, pleased, crowd
cry[ed,ing]: Alice, Mouse, Gryphon, Mock, out, again, come

First word of bigram is on left. Second word of bigram on right, weighted by frequency.

**ALICE TOP FIVE ADVERBS PER CHARACTER**

Weighted by frequency and further ordered by uncommonness

- Alice: timidly, certainly, politely, eagerly, hastily
- Mock Turtle: deeply, lastly, calmly, wildly, sadly
- King: hurriedly, wildly, gravely, triumphantly, melancholy
- Queen: furiously, uneasily, merely, triumphantly, severely
- White Rabbit: suddenly, presently, violently, splendidly, slowly
- Hatter: dreadfully, mournfully, hurriedly, contemptuously, triumphantly
- Dormouse: sulkily, unwillingly, cautiously, instantly, slowly
- Mouse: crossly, inquisitively, severely, impatiently, politely
- Gryphon: nearly, impatiently, solemnly, eagerly, hastily
- Duchess: secondly, entirely, occasionally, affectionately
- Caterpillar: sternly, contemptuously, decidedly, angrily
ALICE CHARACTER RANKING

Characters from Wonderland rank differently depending on the metric from the text or Wikipedia:

- Most talkative (heavy-weight): **ALICE**, Mock Turtle, **HATTER**, **WHITE RABBIT**, King of Hearts, Mouse, Gryphon
- Most viewed wiki-page (wide font): **WHITE RABBIT**, **CHESHIRE CAT**, **ALICE**, **HATTER**, Queen of Hearts
- Longest wiki-page (caps): **ALICE**, CHESHIRE CAT, **HATTER**, Queen of Hearts, **WHITE RABBIT**, Dormouse
- Most edited (dark color): **CHESHIRE CAT**, **HATTER**, Queen of Hearts, **WHITE RABBIT**, **ALICE**, Caterpillar

Using this encoding, all the characters that have a Wikipedia page, by order of appearance, are: **ALICE**, **WHITE RABBIT**, Mouse, Lory, Duck, Dodo, Eaglet, Pat, Bill the Lizard, **CATERPILLAR**, **DUCHESS**, CHESHIRE CAT, March Hare, **HATTER**, The **Dormouse**, Queen of Hearts, King of Hearts, Gryphon, **Mock Turtle**, Knave of Hearts.

Noticeably, many of the birds visually recede – not highly ranked by any metric. The birds have short speaking parts but speaking doesn’t correspond to popularity: the cat doesn’t speak much but ranks at the top of all other lists.
“Then you should say what you mean,” the March Hare went on.

“I do,” Alice hastily replied; “at least—at least I mean what I say—that’s the same thing, you know.”

“Not the same thing a bit!” said the Hatter. “You might just as well say that ‘I see what I eat’ is the same thing as ‘I eat what I see!’”

“You might just as well say,” added the March Hare, “that ‘I like what I get’ is the same thing as ‘I get what I like!’”

“You might just as well say,” added the Dormouse, who seemed to be talking in his sleep, “that ‘I breathe when I sleep’ is the same thing as ‘I sleep when I breathe!’”

“It is the same thing with you,” said the Hatter, and here the conversation dropped, and the
‘The reason is,’ said the Gryphon, ‘that they WOULD go with the lobsters to the dance. So they got thrown out to sea. So they had to fall a long way. So they got their tails fast in their mouths. So they couldn’t get them out again. That’s all.’

‘Thank you,’ said Alice, ‘it’s very interesting. I never knew so much about a whiting before.’

‘I can tell you more than that, if you like,’ said the Gryphon. ‘Do you know why it’s called a whiting?’

‘I never thought about it,’ said Alice. ‘Why?’

‘It does the boots and shoes,’ the Gryphon replied very solemnly.

Alice was thoroughly puzzled. ‘Does the boots and shoes!’ she repeated in a wondering tone.

‘Why, what are YOUR shoes done with?’ said the Gryphon. ‘I mean, what makes them so shiny?’

Alice looked down at them, and considered a little before she gave her answer. ‘They’re done with blacking, I believe.’

‘Boots and shoes under the sea,’ the Gryphon went on in a deep voice, ‘are done with a whiting. Now you know.’
TOP EMOTIONS, SENTIMENT & ANNOTATIONS PER CHAPTER
As indicated by proportion of format

1. Down the Rabbit-Hole: Alice was beginning to get very tired of sit
2. The Pool of Tears: Curiouser and curiouser! cried Alice (she was s
3. A Caucus-Race and a Long Tale: They were indeed a queer-looking pa
4. The Rabbit Sends in a Little Bill: It was the White Rabbit, trott
5. Advice from a Caterpillar: The Caterpillar and Alice looked at eac
6. Pig and Pepper: For a minute or two she stood looking at the house
7. A Mad Tea-Party: There was a table set out under a tree in front o
8. The Queen's Croquet-Ground: A large rose-tree stood near the entra
9. The Mock Turtle's Story: You can't think how glad I am to see you
10. The Lobster Quadrille: The Mock Turtle sighed deeply, and drew th
11. Who Stole the Tarts?: The King and Queen of Hearts were seated on
12. Alice's Evidence: "Here!" cried Alice, quite forgetting in the fl

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<th>6</th>
<th>8</th>
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*Properties per chapter, as indicated by length of bold, length of underline, or length of bar and bar color.

**based on *The Annotated Alice*, Lewis Carroll, Martin Gardner, John Tenniel
Dialogue from one character to another. Color indicates repeated word sets spoken by character – note word sets can vary the word order, such as logical inversions.

**Rabbit**

*“Well, of course you can’t do it. It’s not worth anyone’s time. It’s not even a worthy act! How could you even think of doing it, I mean? How could anyone do it?”*

**Alice**

*“Of course I could do it. Why not? It’s not that difficult, is it? You can do it too, you know.”*

**Rabbit**

*“But you don’t have the time! You have other things to do! You can’t just stop everything else to do this!”*

**Alice**

*“But I have the time! I want to do it! It’s important to me!”*
Chapter I: Down the Rabbit Hole

Chapter II: Why I作了 a Pony in Tears

Chapter III: A Caucus-Race and a Long Tail

Chapter IV: The Rabbit Sends in a Little Bill

Chapter V: Advice from a Caterpillar

Chapter VI: Pig and Pepper

Chapter VII: A Mad Tea-Party

Chapter VIII: The Queen's Croquet Ground

Chapter IX: The Mock Turtle's Story

Chapter X: The Lobster Quadrille

Chapter XI: Who Stole the Tarts?

Chapter XII: Alice's Evidence
That depends a good deal on where you want to get to," said the Cat.

"I don't much care where..." said Alice.

"Then it doesn't matter which way you go," said the Cat.

"So long as I get somewhere," said Alice, as an explanation.

"Oh, you're sure to do that," said the Cat. "If you only walk long enough."

"I don't want to go among mad people," Alice remarked.

"Oh, you can't help that," said the Cat; "we're all mad here."

"I'm mad. You're mad," said Alice.

"How do you know I'm mad?" said Alice.

"You must be," said the Cat, "or you wouldn't have come here.
Visualizations 1-41 in the paper Surveying Wonderland for more many literature visualization techniques are owned by their respective authors: