Hollis Ma

Synthesaurus Website: http://synthesaurus.surge.sh/

GitHub Repo: https://github.com/hollisma/Synthesaurus

ENG385: Children's Literature

Preceptor: Liora Selinger

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<div align="center">Synthesaurus and Children's Literature</div>

I created a digital humanities tool called Synthesaurus that simplifies the process of choosing the best words for your writing. First, I'll describe how it works, then go over its relation to children's literature, and finally expand on things that I would add to Synthesaurus given more time.

The way Synthesaurus works is that it lets you enter a piece of text of any length. You can enter a series of words, an essay whose words are a bit dull, or a short story that wants to be more colorful. After entering the text, words appear near the bottom left of the website, some of which are bold. The bold words are words that have synonyms in the thesaurus API that I use. Clicking on any of these bold words will trigger a box that appears on the right side of the site that shows the word you picked, and a list of its synonyms. If you click on a synonym, it will replace the word you originally chose.

The website has a few additional features, namely buttons to show the original text you entered, to update the original text to what is currently inside the text box, to reset everything, to download the text that you created, and an about page that describes how to use the website.

The relationship between Synthesaurus and children's literature is that Synthesaurus allows children's literature authors to create more vivid and immersive text. We first look at the impacts Synthesaurus can have on early readers, then transition to properties used in a wider range of literature.

A very common theme for early readers is the use of simple, repetitive language that makes it easy for children to learn words and engage with the texts. For example, Dr. Suess often repeats single syllable words to emphasize certain points and to create a certain rhythm or flow. Synthesaurus can help by showing authors words that might lend themselves to this repetition and create the rhythms or flow that the authors desire.

Another common theme for Suess books is the profuse use of rhyming. Many of his titles feature this property such as "Cat in the Hat" and "One Fish, Two Fish, Red Fish, Blue Fish." Synthesaurus can make it easier for authors to discover words that rhyme and improve the flow and engagement of a text.

In addition to rhymes, portmanteaus are widely used in children's literature as they provide vivid descriptions of images that normal words would not be able to imitate. In Alice In Wonderland, portmanteaus like "chortle" and "slithy" are strategically used to paint pictures and have even entered official dictionaries. I purposely found a thesaurus API to use in Synthesaurus that gives as many synonyms as possible, even synonyms that aren't directly related, just for this purpose of finding words that can enrich the images through portmanteaus.

In a similar vein to rhymes and portmanteaus, puns are a humorous way of getting readers to interact with the text more by helping them draw connections between words and think more about what they are reading. In The Phantom Tollbooth, we encounter characters like the spelling bee that can actually spell, the watchdog Tock that has a watch on his body, and scenes with light meals which are meals of actual light. Synthesaurus includes double meanings in its search for synonyms and thus increases the likelihood and quality of the puns that authors can make.

Puns are a direct way for readers to engage with words and the meanings of them, but authors often use a more subliminal method by purposefully naming characters and objects with specific sounds or meanings attached. For example, in Harry Potter, spells like "Windgardium Leviosa" and "Expelliarmus" directly references the words wing, levitate, and expel, and makes it easier to envision what the spells do. In Dread Nation, the shamblers references the word

shambles and gives readers an image of what shamblers are like without even seeing them. Synthesaurus helps authors find these words that they can turn into names by exposing authors to a large amount of words. A method of doing this is to use chaining, where one can find a synonym, then find synonyms of that synonym and keep going until they find a suitable word.

Synthesaurus is a great way to help authors find words, but it can do so much more. Finding synonyms is barely scratching the surface of what Natural Language Processing can do. With enough time, I would add features such as sentiment analysis that lets you view the emotions that each sentence conveys and ensures that certain sections of your text carries the emotions and atmosphere that you want it to. NLP can also compute the word frequencies to see how often you're using certain words, and then authors can calibrate the appearance of words based on the importance they wish to give the words. Some more advanced features include determining which character would say a phrase or sentence based off what the characters say in other parts of the story, creating chatbots so that readers can talk with characters like Harry Potter or Milo, and linking sentences or phrases to social media and other parts of the internet to see how often they are mentioned or quoted.

Children's literature is a very special space where so many people remember as kids being immersed in other worlds and with special friends. I fondly remember the stories that I read as a child, and I think each and every child should get the opportunity to find a world they can find happiness and solace in. Synthesaurus is my way of contributing to this amazing experience and community, and I hope authors can use Synthesaurus to create more immersive and memorable paradises.