An Analysis of the Nonce-Words of Dr. Seuss

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Abstract

The books of children's author Dr. Seuss are filled with nonce-words—novel word formations that can only be understood within the context of the books. This paper is an attempt to analyze a subset of these nonce-words and their phonological and orthographical structure. A database of 377 words from 33 books was created and the words were analyzed in terms of their internal structure as well as in their context in the books. The author found that a significant amount of these neologisms were likely influenced by the poetic constructs of rhyme and alliteration. In addition, certain characteristics of the nonce-words were examined, and possible reasons are given to explain their use. These characteristics include unusual word-final double consonants, and the extensive use of the letter z.

1. Introduction

Dr. Seuss (1904–1991), whose real name was Theodor Seuss Geisel, was a writer and illustrator of over forty books for children, and a pioneer in books for beginner readers. His works are highly imaginative and often feature fantastic places, strange creatures, and impossible contraptions. This paper is an examination of a subset of nonce-words found in his works. Nonce-words, informally called nonsense words, but also known as neologisms or coinages, are found throughout children's literature, from Lewis Carroll's *Jabberwocky* to J.K. Rowling's *Muggles*. Matthews defines nonce-word as "a word coined on a specific occasion" (265) and neologism as "any new word which

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is introduced into a language, by whatever process" (261). As Bauer notes, however, the term neologism usually refers to a new word which has been accepted to some degree into the language, whereas a nonce-word has not (38-40). Murat further defines nonce-words as "words which cannot enter the lexicon, not because of their structural properties, but due to their heavy context dependence and lack of referential utility in the world at large" (169). This definition seems to be the best fit for the coinages found in Dr. Seuss, which in large part serve to name his imaginative creations, and have not become part of the standard English lexicon. (Of the hundreds of words Dr. Seuss coined, only the word *grinch* (from *How the Grinch Stole Christmas!*) has become accepted English.) This paper examines a subset of the nonce-words found in the works of Dr. Seuss, namely those whose structures are not formed by regular morphological rules. In particular, I am interested in the phonetic and orthographic motivations behind the production of his "pure neologisms," as defined by Geeraerts. That is, words "created out of the blue, without starting from existing words or word formation rules" (420).

2. Procedure

In order to analyze broad patterns among his nonce-words, a lexicon of 377 items was created from 33 of Dr. Seuss's books. As I was chiefly interested in those noncewords whose meaning cannot be understood outside of their context, I decided not to examine the following types of nonce-words (hereafter *type 1 nonce-words*):

- a. words consisting of existing words and morphemes (e.g. *elephant-bird* (*Horton Hatches the Egg*, 53), *un-slumping* (*Oh, the Places You'll Go!*, 18))
- b. words consisting mostly of existing words or morphemes where the existing words provide the meaning (e.g. quacker-oo (Dr. Seuss's ABC, 40), whisper-maphone (The Lorax, 9))
- c. existing words which have been slightly altered for comic effect, often to fit a rhyme, but maintaining their meaning (e.g. SeptUmber (On Beyond Zebra, 16), corn-on-the-cobsk (If I Ran the Zoo, 42))
- d. proper nouns which, while unusual in their combinations, are formed from legitimate names or words (e.g. Conrad Cornelius o'Donald o'Dell (On Beyond Zebra, 1))
- e. onomatopoeia (e.g. Gloing (Bartholomew and the Oobleck, 25), Grum Grum

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(Mr. Brown Can Moo! Can You?, 21))

f. a combination of any of the above types (e.g. *audio-telly-o-tally-o count* (Dr. Seuss's Sleep Book, 18))

I did, however, consider nonce-words which fall into the following categories (hereafter *type 2 nonce-words*):

- g. proper nouns for fictitious places or characters that do not occur in English (e.g. *the Desert of Zind, Jo and Mo Redd-Zoff*)
- h. common nouns naming fictitious creatures or things (e.g. Wocket, Borfin)
- i. nonsense words as interjections or magical chants (e.g. wista fista mista-cuff)
- j. adjectives or verbs (e.g. *gicky, snarggle*)
- k. words that are combinations of nonce-words and accepted words (e.g. Kwuggerbug, Crunk-car)
- 1. a new meaning ascribed to an existing word (e.g. Nook, Who)

A full list of type 2 nonce-words appears in the Appendix, along with sources and page numbers. Note that capitalization in the data generally corresponds to the capitalization found in the original texts, with the exception of words that were written in all caps, and does not indicate whether the word is a proper noun.

Many of Dr. Seuss's books follow a similar style of storytelling in which there is little plot, but instead showcase various creatures of Dr. Seuss's own invention. These books necessarily contain a large number of type 2 nonce-words. Books which fall under this category include *On Beyond Zebra* (47 such nonce-words), *If I Ran the Zoo* (37), *There's a Wocket in My Pocket* (34), and *Did I Ever Tell You How Lucky You Are?* (31). On the other hand, several of Dr. Seuss's "Beginner Books," including *The Cat in the Hat* and *Green Eggs and Ham*, as well as the books he wrote under the pseudonym Theo Lesieg have no instances of such nonce-words, and therefore were not included in this study. Although an extensive list, it is not an exhaustive list. First, not all of Dr. Seuss's books containing nonce-words were considered, nor were any of his early magazine publications or work in advertising. In addition, I may have inadvertently omitted nonce-words appearing in the works that were considered. Finally, it was often difficult to determine whether or not to include certain proper names, and as a result, proper names were often omitted.

In analyzing the data, I looked at several aspects of the nonce-words, including

the part of speech, the number of syllables and stress pattern, the orthography of the word, in particular unusual spelling combinations, as well as the context of the words, including whether the word was a part of an alliteration or rhyme. I considered looking at sound symbolism as a possible motivating factor, but after initially finding a lack of supporting data, decided in the end to forgo such an analysis at this time.

3. Results

Before looking at the motivating factors behind the type 2 nonce-words, and what factors influenced Dr. Seuss's word formations, I would like to examine some basic characteristics of the words. First, do his nonce-words belong to certain parts of speech more than others? This question is explored next.

3.1 Parts of Speech

Of the words chosen, most were nouns, with common nouns accounting for 61 percent of the words and proper nouns accounting for 27 percent. Figure 1 below shows the distribution of the words.

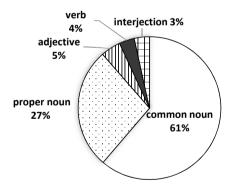


Figure 1. Distribution of nonce-words by part of speech.

Generally, Seuss invented words for his new creatures, places or things, but refrained in large part from coining new verbs and adjectives. When he did, he often made a simple vowel change to a word already in the passage, as in the nonce verbs *strutch* and *streech* from the verb *stretch* (*Kwuggerbug*, 27), which I have decided to classify as type 1 nonce-words, and did not include in the data. For these reasons, verbs and adjectives may be slightly underrepresented, although nouns derived in this way (e.g. *swampf*) (*Zebra*, 23)) were also not included in the data. The short list of verbs, adjectives, and interjections in the data are given in table 1 below. Again, a complete list of all the words in the data is given in the Appendix.

Verbs	Adjectives	Interjections
berk	bummbeling	Balber
pipping	cruffulous	fista
gleap	duddled	Fotichee
glump	flubbulous	Klay
klonk	gicky	Malber
uffle	Grinchy	mista-cuff
shlump	gruvvulous	Screebees
lupp	piffulous	Tidder
narggle	punkerish	Tinkibus
puggle	rippulous	Tudd
vub	smogulous	Winkibus
coop	smoke-smuggered	wista
zum	snergelly	yopp
	Soobrian	
	wubble-some	
	wuddled	

Table 1Complete List of Verbs, Adjectives, and Interjections in the Data

Under the category of interjections, 11 of the 13 words are found in magical chants by the King's royal magicians in the books *The 500 Hats of Bartholomew Cubbins* and *Bartholomew and the Oobleck*. These words appear above as separate entries, but they really belong together, as the word choice is influenced by rhyme and alliteration. I provide the context below:

Mix and mold the mystic mud Malber, Balber, Tidder, Tudd. Winkibus, Tinkibus, Fotichee, Klay, Hat on this demon's head, Fly far away! (500 Hats, 31)

Shuffle, duffle, muzzle, muff Fista, wista, mista-cuff. (*Oobleck*, 10)

3.2 Blends

A blend is a "word formed by joining the beginning of one word to the end of

another" (Matthews, 42). Examples include *smog* (from *smoke* and *fog*), and *brunch* (from *breakfast* and *lunch*). More so than compounds, blends require a certain amount creativity to form them, and may not be understood immediately, especially outside of context. It is also difficult to ascertain if a particular nonce-word is a blend or not, as the structure of a blend, by definition, only includes a small part of each combined word. Of the 377 words in the data, I found only four words which could be considered blends. They are given here in their context:

And that spot was so sticky... It was gummy and gicky. (Bippolo, 48)

You're making *smogulous* smoke! (Lorax, 40)

... a Stroodel, who's sort of stork, but with fur like a poodle. (Eggs, 18)

A Thneed's a Fine-Something-That-All-People-Need! (Lorax, 18)

The first, gicky, could be a blend of gummy and sticky (or possibly icky), or Seuss could have simply chosen the word to rhyme with sticky and alliterate with gummy. As for meaning, we can only surmise from the context that it is somehow unpleasant. The second word, smogulous, seems to be a blend of smog and ridiculous. As it contains the entire word smog, however, it may not technically be a blend. The third, Stroodel, is an imperfect blend of stork and poodle, with the r of stork joining the consonant cluster at the beginning of the word, giving it the same pronunciation as the German pastry Strudel. Finally, Thneed is likely a blend of thing and need. This word is also interesting in that the consonant cluster thn does not occur in English. All in all, it seems that Seuss preferred compounds over blends, and even these four blends are not entirely transparent in their structure.

3.3 Rhyme

Next, we will look at the influence that rhyme has on the formation of Dr. Seuss's nonce-words. Consider the following passage from *Did I Ever Tell You How Lucky You Are?*:

He has to paint flagpoles on Sundays in Grooz. How lucky you are you don't live in *his* shoes! (15) An Analysis of the Nonce-Words of Dr. Seuss (Daniel TEUBER)

Of the 33 books considered for this project, 30 were written in verse, and of the three written in prose, two contained sections written in verse which also contained nonce-words (the magical chants mentioned earlier in *The 500 Hats of Bartholomew Cubbins* and *Bartholomew and the Oobleck*). It therefore seems natural that rhyme would have an influence on the formation of the nonce-words. In fact, of the 377 nonce-words, 217 (57.6%) were attached to a rhyme. An additional 32 words (8.5%) were rhymed with another nonce-word. This is represented in figure 2 below.

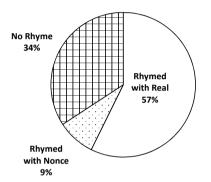


Figure 2. Percentage of nonce-words contained in a rhyme.

Without question, Seuss created many of his nonce-words to fit a rhyme. This is most easily seen in his book *There's a Wocket in My Pocket*, which was part of his Beginner Books series. In it, a child lists off the names of various strange creatures living in his house. Each creature's name rhymes with the place they are found:

I like the ZABLE on the TABLE. And the GHAIR under the CHAIR

But that BOFA on the SOFA... Well, I wish he wasn't there. (16-17)

In another Beginner Book, *One Fish Two Fish Red Fish Blue Fish*, we can see more examples of this, as in the following:

It is fun to sing / if you sing with a Ying

My Ying can sing / like anything. (40)

It seems clear that in these examples the nonce-word is chosen to match an existing word. In other cases, it is not as clear. It is possible, though perhaps unlikely, that Seuss came up with a nonce-word that he liked and then found an existing word to rhyme with it. Consider the following, from *Did I Ever Tell You How Lucky You Are?*, in which an old man explains to a young man why he should feel fortunate:

And you're so, so, So lucky you're not a left sock,

Left behind by mistake in the Kaverns of Krock! (42)

Before this passage, the old man's examples refer to other people or creatures (and, in one case, a radish). Here, the old man compares the boy's situation to that of an inanimate object, the "left sock." Therefore, the argument could be made that *sock* was inserted to rhyme with *Krock*, and not the other way around. Still, in most cases of rhyming, the nonce-word seems to be formed from the existing word.

3.4 Alliteration

Now, consider the following passage, noting the alliteration of the b-words:

Be glad you don't work on the Bunglebung Bridge

That they're building across Boober Bay at Bumm Ridge. (Lucky, 4)

In addition to rhyme, alliteration plays a role in Seuss's nonce-words, but to a smaller extent. Alliteration is the repetition of sounds at the beginning of a word or syllable (e.g. *Mickey Mouse*), and for this study I will consider alliteration between whole words (e.g. *the Valley of Vung*) as well as within a multi-syllabic word (e.g. *Zinn-a-zu*). Of the 377 nonce-words, 107 (28%) alliterate with another word. 14 percent of these words are also alliterations within themselves (e.g. *tuttle-tuttle tree*). A further 32 of the 377 (8.5%) are alliterations in themselves but not with other words. This is represented in figure 3 below:

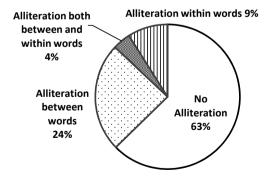


Figure 3. Percentage of words found in an alliteration.

In a sense, rhyming and alliteration are complements of each other. In a rhyme, the ends of two words are the same, but the beginnings are different. In alliteration, the beginnings are the same. It therefore follows that the more words are influenced by rhyme, the less they will be influenced by alliteration, and vice-versa. In practice, however, words may be influenced by both rhyme and alliteration, as the following example from *There's a Wocket in My Pocket* shows:

Some of them are very friendly. Like the YOT in the POT.

But that YOTTLE in the BOTTLE, Some are friendly. Some are NOT. (14-15)

Yot and *Yottle* rhyme with *pot* and *bottle*, and also are alliterations with each other, though a bit distant. A clearer example can be found in *Dr. Seuss's Sleep Book*:

At the fork of a road / In the Vale of Va-Vode (44)

Here *Va-Vode* is an alliteration with *Vale* (and within itself) and also rhymes with *road*. Likewise, in the example below, the alliteration *Juggling Jott* rhymes with *not*:

And you'll see in this spotlight / A Juggling Jott

Who can juggle some stuff / You might think he could not... (Circus, 18)

In fact, almost 19 percent of all the nonce-words from the data are influenced by both alliteration and rhyme. All in all, alliteration and rhyme, either working together or separately, influence roughly 84 percent of the nonce-words. This is illustrated in figure 4 below, which shows the percentage of rhyme influenced words (including rhyme with another nonce-word) and alliteration influenced words (including alliteration within a word).

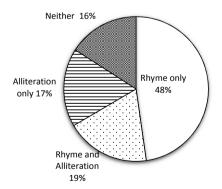


Figure 4. Percentage of nonce-words influenced by rhyme and alliteration.

Looking more closely at alliteration, we can see that there is influence on noncewords, such as the examples of *Juggling Jott* and *Vale of Va-Vode*. However, it should 大阪産業大学論集 人文·社会科学編 34

be noted that many nonce-words are in alliteration only with *other* nonce-words, as in the examples of *YOTT* and *YOTTLE*. In fact, of the 107 words found in alliteration with other words, 37 are alliterations with other nonce-words. Next, consider the case of alliteration within a word. Altogether, about 13 percent of nonce-words in the survey contain intra-word alliterations (e.g. *Zizzer-zazzer-zuzz*). However, strictly speaking, one-syllable words cannot have alliterations within themselves (although an argument can be made for words like *Zummz*). If we eliminate the one-syllable words, we find alliteration in 22 percent of multi-syllable words. If we also include reduplications (e.g. *Yuzz-a-ma-Tuzz, Zike-Bike*), we can account for 30 percent of the multi-syllable noncewords. This data suggests that alliteration plays a role, not only in determining the initial letter of a nonce-word, but also the internal form of the word.

3.5 Orthography

3.5.1 Phonetic Spelling

As we saw earlier, rhyme had an influence on the coinages of Dr. Seuss. However, the nonce-words almost invariably follow phonetic spelling, even when Seuss was rhyming them with words that do not. As examples, /i:/ is almost always rendered *ee*, and /u:/ as *oo*. This is illustrated in the examples below.

... And the GEELING on the CEILING... (Wocket, 28)

And the very next second, I groaned, "Oh good grief!" When the Nupper called out to a pair of WILD WHEEF (*Bippolo*, 45)

And JOGG is my letter for spelling Jogg-oons Who doodle around in the far desert dunes (*Zebra*, 43)

And, under the trees, I saw Brown Bar-ba-loots frisking about in their Bar-ba-loot suits as they played in the shade and ate Truffula Fruits. (*Lorax*, 14)

Due to the phonetic spelling, the pronunciation of the nonce-word is unambiguous. This is clearly helpful to children reading the nonce-word for the first time, and I would argue that this is the primary reason that phonetic spelling was employed. An Analysis of the Nonce-Words of Dr. Seuss (Daniel TEUBER)

3.5.2 Double Consonants

Seuss employs double consonants following a short vowel to end a word. In English, double letters are usually used word-medially to distinguish short vowels and long vowels. Words ending in double letters are not uncommon in English, especially words ending in *ff* (*staff*), *ll* (*ball*), *ss* (*less*), and *zz* (*jazz*) or in proper names (*Webb*, *Todd*, *Gregg*, *Finn*, *Grimm*, *Depp*, *Burr*, *Matt*), but they are less common among common nouns or other parts of speech. Table 2 lists the English words ending in double consonants (excluding *ff*, *ll*, *ss*, and *zz*).

Table 2English Words Ending with a Double Consonant (Excluding ff, II, ss, and zz)

Consonant	English Words
bb	ebb
dd	add, odd
gg	egg
nn	inn
pp	app (shortened from application)
rr	err, purr
tt	mitt (shortened from mitten), mutt (shortened from muttonhead), putt

Notably, of the eleven words listed above, seven are three-letter words. The doubleletters in these cases are due to a well-known rule in English that lexical words must have at least three letters (Crystal, 263). In three other cases, the word maintained its double letter after a shortening occurred. Clearly, word final double-letters are very limited in English. As we shall see now, Dr. Seuss did not place that same limitation on his own creations.

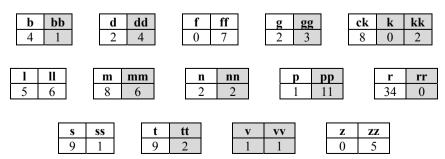
Table 3 below expands on the previous table with a third column including the nonce-words of Dr. Seuss.

Table 3
English words and Dr. Seuss Nonce-Words Ending with a Double Consonant (Excluding ff,
II, ss, and zz)

Consonant	English Words	Dr. Seuss Nonce-Words
bb	ebb	Nubb
dd	add, odd	Jedd, Mercedd, Nadd, tudd
gg	egg	Blogg, Chuggs, Jogg
kk	-	Glikk, Yekk
mm	-	Bimm, Bumm, Frumm, Snumm, Zumms, Zummz
nn	inn	Dinn, Flunn
рр	app	gluppity-glupp, Ham-ikka-Schnim-ikka-Schnam-ikka Schnopp, Krupp, Mupp, Na-Nupp, schlopp, Schloppity- Schlopp, slupp, Snipps, Vipp, yopp
rr	err, purr	-
tt	mitt, mutt, putt	Jott, Slottz
vv	-	snuvv

Dr. Seuss seemed particularly fond of pp, using it on eleven occasions. Among his onomatopoeia coinages (not included this study's data) we see words like *Klopp* (cf. *clop*) for the sound of horse, and *Dibble Dopp* (cf. *dribble* and *drop*) for the sound of rain (*Moo*, 5, 9). In only one occasion in the data does Seuss use a single p after a short vowel. Seuss also employs double consonants that are nonexistent word-finally in English: the double k and the double v. In addition, Seuss uses the unusual single vin *snuv* (different in meaning from *snuvv* given above). For the remaining consonants, Seuss's use of double consonants is somewhat more conservative, as we can see in table 4 below. The highlighted boxes represent uncommon patterns in English.





Again, Seuss's use of *pp* is noticeable when compared to the other letters, but generally Seuss is content to use both single or double consonants.

There are at least three plausible explanations for these spelling choices by Seuss. First, Dr. Seuss was a third-generation German American (Cohen, 12–15), and many of his nonce-words have a noticeable German influence. For example, several of his noncewords contain consonant clusters present in German but rare in English. These include the word-ending *-tsch*, found in his nonce-word *Squitsch*, *-mpf* found in *Humpf-Humpfa-Dumpfer*, and *-tz* in *Glotz* and *Schnutz*. In addition, Seuss uses the consonant clusters *schn-* and *schl-* in such nonce-words as *Schnacks*, *Schnutz*, *Schloppity-Schlopp* and *schlopp*. Besides these consonant clusters, we can find other German "borrowings" including the nonce-words *Biffer Baum Birds*, *Herk-Heimer Falls*, and *Zweiback Motel* from *Dr. Seuss's Sleep Book* (6, 8, 30). A fuller list of words seemingly influenced by German is provided in table 5 below.

Table 5
Dr. Seuss' s German-Influenced Nonce-Words

Cluster	Examples
Schl-:	Schloppity-Schlopp, schlopp, Schlottz
Schn-:	Ham-ikka-Schnim-ikka-Schnam-ikka Schnopp, Schnacks, Schnutz
-pf:	Humpf, Humpf-Humpf-a-Dumpfer
-tsch:	Squitsch
-tz:	Glotz, Klotz, Schnutz, Zatz-it, Zatz, Spritz, Skritz, Schlottz
Others:	Biffer-Baum Birds, Herk-Heimer Falls, Hippo-Heimer, Zweiback Motel

Given the above information, it does not seem unreasonable to conclude that the wordending double consonants may also be a German influence, as German employs some double consonants word-finally following a short vowel. However, this explanation does not account for Seuss's use of *bb*, *dd*, *gg*, *kk* and *vv*, which are not found word-finally in German (see table 6 below).

cons.	German	Dr. Seuss			
bb	-	Nubb			
dd	-	Jedd, Mercedd, Nadd, tudd			
gg	-	Blogg, Chuggs, Jogg			
kk	-	Glikk, Yekk			
mm	Kamm, krumm, Lamm, etc.	Bimm, Bumm, Frumm, Snumm			
nn	Mann, dann, denn, etc.	Dinn, Flunn			
pp	knapp, Tipp, Mopp, etc.	gluppity-glupp, Ham-ikka-Schnim-ikka-Schnam- ikka Schnopp, Krupp, Mupp, Na-Nupp, schlopp, Schloppity-Schlopp, slupp, Vipp, yopp			
rr	Herr, starr,wirr, etc.	-			
tt	platt, Rabatt, Tablett, etc.	Jott, Slottz			
vv	-	snuvv			

German words and Dr. Seuss Nonce-Words Ending with a Double Consonant (Excluding ff, II, ss, and zz)

Table 6

A second explanation is that Seuss used double consonants word-finally to make the intended pronunciation of the nonce-word clear. As stated earlier, English uses double letters word-medially preceding a short vowel. By employing this convention word-finally, Seuss may have been indicating the pronunciation of the preceding vowel. This would make sense, as young readers encountering a strange word for the first time might struggle with the pronunciation. As noted in section 3.5.1, we know that Seuss rendered the vowels of his nonce-words phonetically, presumably to make the pronunciation clear. It would follow that Seuss used double consonants for the same reason. Further evidence for this is in the fact that Seuss did not use double consonants following a long vowel.

The final explanation is that the double consonants are used for a special effect: to make the words funnier, more unusual, more interesting. The interesting features of the spelling match the interesting features of the creature being described. David Crystal, in his book *Spell It Out*, argues that irregular spelling makes words stand out, and for that reason they become more attractive and memorable (224). He also cites Dr. Seuss's nonce-words saying, "I delight in every one of the names," (while making the case that the non-standard spellings are an unneeded hurdle for young learners) (228). This explanation accounts for the unusual v and vv endings, as well as the kk ending. Further support comes from the nonce-work *snarggle*, where the extra g does not provide any

extra clarity about the preceding vowel, which is already determined by the r. It may also explain Seuss's liberal use of z, of which we will go into detail in the next section.

3.5.3 Letter Frequency

An astute reader of Dr. Seuss may notice the prevalence of the letter z in his works, or at least in certain books. For example, three of the nine creatures in *One Fish Two Fish Red Fish Blue Fish*, and eight of the 34 creatures in *There's a Wocket in My Pocket* begin with the letter z. One third (9 out of 27) of the nonce-words in *Scrambled Eggs Super!* contain the letter z. A passage from *Scrambled Eggs Super!* illustrates how widely the letter z was used by Dr. Seuss:

Then I went for some Ziffs. They're exactly like Zuffs, But the Ziffs live on cliffs and the Zuffs live on bluffs. And, seeing how bluffs are exactly like cliffs, It's mighty hard telling the Zuffs from the Ziffs. But I *know* that the egg that I got from the bluffs, If it wasn't a Ziff's from cliffs, was a Zuff's. (38)

The letter z is the least used letter in the English alphabet (Sacks, 360). To give the reader an idea about the prevalence of the letter z, I calculated the letter frequencies from four works of children's literature: *Alice's Adventures in Wonderland, The Secret Garden, Little Women,* and *The Adventures of Tom Sawyer*. Ignoring punctuation marks, there were roughly 1.5 million tokens in total. The letter z was the least common letter, accounting for 0.04% of the total. The entire alphabet is shown in figure 5 below.

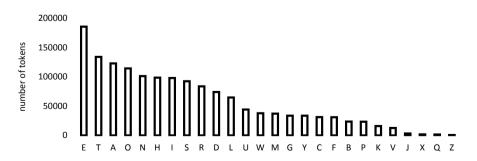


Figure 5. Frequency of letters in four children's books.

This frequency distribution is, however, skewed by non-lexical items such as *a*, *the*, and *to* which appear more often than lexical items. Since we will be comparing our nonceword data (essentially a word list), frequency distributions were also created from two other online word lists: the 3000 most common English words (figure 6) and the top 1000 American surnames (figure 7), containing roughly 19,000 tokens and 6000 tokens, respectively. In the 3000 most common words, the letter *z* represents 0.1% of all letters. In the surnames list, *z* is more common, representing 1.02% of all tokens, likely owing to the prevalence of Spanish names in America (*Rodriguez, Martinez, Hernandez, Lopez,* and *Gonzalez* are found in the top 25).

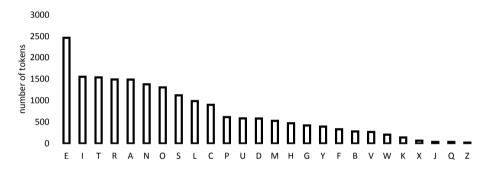


Figure 6. Frequency of letters in the most common 3000 words of English (data from Education First "3000 Most Common Words in English | Learn English." EF, www. ef.edu/english-resources/english-vocabulary/top-3000-words/.)

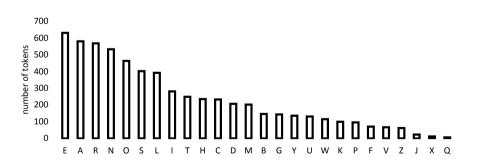


Figure 7. Frequency of letters in the top 1000 American Surnames (data from U.S. 2000 Census provided at Mongabay. "Most Common Surnames [Last Names] in the United States (Top 1000)." Mongabay.com, names.mongabay.com/most_ common_surnames.htm.)

There are some differences between the frequencies, but generally the same letters are

found on the top end and bottom end of each distribution. Now let us compare these to the Dr. Seuss nonce-word data. The 377 words in the data are made up of 2556 letters. The distribution is shown in figure 8 below, with the letter z highlighted.



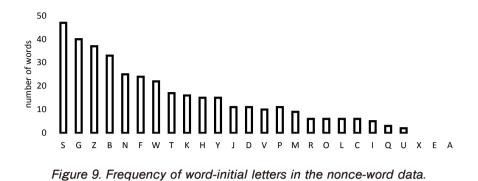
Figure 8. Frequency of letters in Dr. Seuss nonce-words.

In the Dr. Seuss nonce-words, the letter z is the tenth most common letter, and accounts for 4.42% of the total, a striking difference from the other distributions. Other letters whose frequencies differed widely from the other frequency lists are k (4.3% of Seuss words, compared to 1.1% on average in the other lists) and u (5.6% in Seuss, 2.7% average in others), both which are used more often in the Seuss nonce-words, and e (8.1% in Seuss, 11.9% average in others) and t (4.3% in Seuss, 7% average in others), both which are used less nonce-words. In addition, the shapes of the distributions show that the variance in letter frequency in the Seuss nonce-words is lower than that in the other lists.

3.5.4 Word-Initial Letter Frequency

Next, let us look at the word-initial letters in the nonce-word data. Figure 9 below shows the frequency of each letter appearing as the first letter of a word. Consonants are counted here whether they appear alone in the onset of the word (e.g. <u>Sala-magoox</u>), or as the first letter of a consonant cluster (e.g. <u>Skritz</u>, <u>Snoo</u>). Again, the letter z is high on the list. The top four letters (s, g, z & b) account for over 40 percent of all words.

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Each of these four letters also cluster with other consonants, which, especially in the case of s, may explain why the numbers are high. The letter z, however, occurs only once in a cluster, in the irregular formation *zlock*. If we look at each possible onset, whether a single consonant or a consonant cluster, and include words that begin with a vowel, we end up with 61 different word beginnings. Figure 10 below shows the top twenty-four beginnings, which account for 80 percent of all the words.

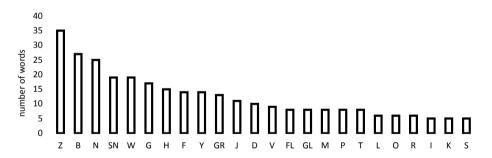


Figure 10. Top word beginnings, treating single consonant and consonant clusters as separate entities.

Looking beyond the letter z, we see that the letters b and g are also used frequently in nonce-words (see fig. 9, 10), besides both being relatively low in frequency in English (see fig. 5–7). This suggests that perhaps in their relative rareness, they are appropriate for nonce-words. First, less common letters are less likely to already exist as a word. For example, if you want a nonce-word that rhymes with *school*, your options are limited: *cool, fool, pool, rule, stool, spool, tool,* and *yule* already exist, but *bool, snool,* and zool do not.

Secondly, especially for the letter z, I feel that their rarity adds a sense of oddity to the nonce-word, which could possibly be what Dr. Seuss intended. This idea is supported by Sacks, who states that due to historical avarice to the letter, "Z retained an aura of foreignness or mystery... If creative media minds chose a Z-word, it usually was for that effect... on 1950s TV, the hero Zorro's name seemed almost as exotic as his Z-slash calling card" (362).

3.6 Syllable and stress patterns

As noted earlier, rhyme was a large influence on the nonce-words, as the majority of books written by Dr. Seuss were written in verse. There is a similar influence from stress patterns. Figure 11 shows that the one-syllable and two-syllable words are the most common in the data, accounting for 77 percent of the words. However, it is in the multi-syllabic words where we see the influence of stress patterns on the nonce-words.

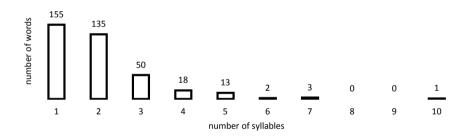


Figure 11. The number of words by the number of syllables in the word.

As was the case in phonetic spelling, Dr. Seuss seems to have written his noncewords in ways that makes the stress pattern clearer, in particular, with his use of hyphenation. Of the 222 multi-syllable words, 81 (36%) include hyphenation, usually preceding a stressed syllable (e.g. Da-**Dake**, **Zin**niga-**Zan**niga). Over 64 percent of noncewords of three or more syllables are hyphenated words, and of the 37 nonce-words which contain four or more syllables, 33 (89%) contain a hyphen, three contain a space before the stressed syllable, and only one contains neither space nor hyphen. In addition, many of the unstressed syllables share a common feature: an optional single consonant followed by the letter a, as in table 7 below.

2-syllable words	3- or more syllable words					
	-a- syllable	-ma- syllable	<i>-ba- / -fa</i> - syllable			
Ba-zoo	chuck-a-luck	Fizza-ma-Wizza-	Bar-ba-loot			
Da-Dake	Humpf- Humpf-a-	ma-Dill	Brigger-ba-root			
Fa-Zoal	Dumpfer	Katta-ma-Side	Motta-fa-Potta-fa-			
Ga-Zair	Itch-a-pods	Sala-ma-goox	Pell			
Ga-Zayt	Lass-a-lack	Sala-ma-Sond				
Ga-Zoom	Zinn-a-zu	Yuzz-a-ma-Tuzz				
Ka-Troo	Zoom-a-Zoop	Zomba-ma-Tant				
Na-Nupp	1					
Va-Vode						

Table 7		
List of Words Containing Unstressed,	Hyphenated Syllables	Ending in the Letter A

These words alone account for over thirty percent of all hyphenated words in the data, and eleven percent of all multi-syllabic words in the data. Similar syllables are found in the data, including multiple cases of *no* (e.g. *Bippo-no-Bungus*) and *ikka* (e.g. *Jill-ikka-Jast*), and hyphens occurring immediately after *er* (e.g. *Fiffer-feffer-feff*) and *le* (e.g. *Zumble-Zay*) are seen several times as well. In addition, there are cases where the letter *a* precedes a stressed syllable, though not isolated with hyphens (e.g. *Boola Boo, Neeka-tave*).

Seuss's use of the letter *a* to represent the unstressed vowel /ə/ follows convention, as we see this in English renderings such as *gonna* and *gotcha*. Interestingly, the *-a-* syllables in table 7 above mostly follow a stress pattern of *stressed-unstressedstressed*, whereas the *-ma-* syllables have a *stressed-unstressed-unstressed-stressed* pattern. The *-ma-* syllables, in fact, seem to be influenced by the (unusual sounding) American city *Kalamazoo*, in particular *Sala-ma-goox*, although only *Sala-ma-Sond* and *Zomba-ma-Tant* actually refer to (imaginary) place names. Lastly, the two-syllable words all follow an *unstressed-stressed* pattern, which suggests again that Seuss, through hyphenation, was making clear to the reader the intended stress pattern.

4. Conclusion

Examining Dr. Seuss's "pure" nonce-words (those not made up of existing morphemes), we find that more often than not, a rhyme with another word influences its form. Alliteration is influential to a lesser degree, but besides influencing the onsets of words, is also important word-internally in multisyllabic nonce-words. Dr. Seuss's nonce-words are often written phonetically, but may contain unusual orthography, most prominently of which are word-final double consonants. Dr. Seuss seemed particularly fond of using the letter z word-initially in his nonce formations, and may have chosen such lesser used letters partly out of necessity, and partly for their oddity. Finally, multisyllabic words, particularly those of four syllables or more, seem to be influenced by the stress pattern of the verse.

There are other influences that I did not consider here, including sound symbolism. In addition, a fuller lexicon of Dr. Seuss nonce-words, which includes onomatopoeia, compounds, and other nonce formations, may reveal more about Seuss's overall use of nonce-words. These are potential directions for further study.

Appendix

Full list of the nonce-words chosen for this study, listed alphabetically, and including sources (abbreviated) and page numbers. Except when the source word was in all caps, capitalization reflects the usage in the source material.

balber	500 Hats	31	Bunglebung	Lucky	4	Flummox	Circus	21
Bar-ba-loot	The Lorax	14	Bustard	Zoo	14	Flunn	Zebra	45
Ba-Zoo	Lucky	34	chuck-a-luck	30 Tigers	48	Flunnel	Zebra	45
Bazzim	Zebra	36	Chuggs	Zoo	33	Flustard	Zoo	14
Beezlenut	Kwuggerbug	20	Crandall	Sleep Book	25	Foodle	Sleep Book	48
beft	Oh, the Thinks	35	cruffulous	The Lorax	40	Foo-Foo	l Can Read	21
bellar	Wocket	26	(Mt.) Crumpit	The Grinch	38	Foon	Circus	14
Ben-Deezing	Circus	25	Crunk-Car	Mooney	21	Foona-Lagoona	Sleep Book	34
berk	The Sneetches	9	Da-Dake	Oh, the Thinks	16	fotichee	500 Hats	31
Biffer-Baum (Bi	rds) Sleep Book	6	Dake	Yertle the Turtle	32	Frink	Sleep Book	17
Biggel-Ball	Sleep Book	18	Dawf	Eggs	42	Frumm	Circus	13
Bimm	The King's Stilts	1	dellar	Wocket	26	Fuddle	Zebra	24
Bingle	Thidwick	2	Dinn	Oobleck	3	Fuddle-dee-Dud	ldle Zebra	24
bipping	Horton Hears	52	Dippo-no-Dungu	is Zoo	49	Gack	One Fish	58
Bippolo	Bippolo	11	Dofft	Sleep Book	38	gase	Wocket	3
Bippo-no-Bungu	is Zoo	49	Dooklas	Lucky	13	Gasket	Zoo	38
Blogg	The Shape of Me	61	Drize	Lucky	1	Ga-Zair	Lucky	8
bloog	Oh, the Thinks	12	duddled	Fox in Socks	59	Ga-Zayt	Lucky	6
bloop	Circus	21	Dutter	Birthday	43	Ga-Zoom	Mooney	28
bloozer	Circus	21	faddle	Lucky	21	geeling	Wocket	28
bofa	Wocket	17	Fa-Zoal	Eggs	22	Gekko	Zebra	48
Bolster	Circus	21	Fibbel	Circus	21	gellar	Wocket	26
Boober	Lucky	4	Fiffer-feffer-feff	ABC	16	ghair	Wocket	16
Boola Boo	Solla Sollew	54	findow	Wocket	2	Gherkin	Zoo	38
Borfin	Lucky	16	fista	Oobleck	10	Gick	Lucky	11
Brickel	The Sneetches	48	Fizza-ma-Wizza	-ma-Dill Zoo	50	gicky	Bippolo	48
Brigger-ba-root	Circus	17	Floob	Zebra	38	Gizz	Lucky	33
Bumble-Boat	Mooney	27	Floob-Boober-B	ab-Boober-Bubs		gleap	500 Hats	31
bumble-tub	Sleep Book	42		Zebra	38	gleeks	Solla Sollew	20
Bumm	Lucky	4	floop	Circus	21	Glik	Zebra	26
bummbeling	Circus	20	flubbulous	Solla Sollew	30	Glikker	Zebra	26

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Glotz	Oh Say	24	lota	Zoo	86	Mazurka	Zoo	34
	The Lorax	24 47	ltch	Zebra	oo 47	McFuzz	200 Yertle the Turtle	34 30
glump Glunk		47 37	ltch-a-pods		47		Sleep Book	30 14
	30 Tigers	44		Zebra Zoo	47	Mercedd mista-cuff	Sieep Book Oobleck	14 10
gluppity-glupp	The Lorax	44 11	lt-kutch		40 37			10
Goor	Lucky		Jedd	Sleep Book		Motta-fa-Potta-f		
Gox	One Fish	38	jertain	Wocket	8	muddle-dee-puo		24
Grice	Eggs	22	jibboo	Oh, the Thinks	25	Mulligatawny	Zoo	26
Grickily Gractus		36	Jicker	Solla Sollew	25	Mupp	Sleep Book	26 22
Grickle	Bippolo	43	Jill-ikka-Jast 	Eggs	46	Nadd	500 Hats	23
grickle-grass	The Lorax	1	Jivvanese	Lucky	28	Na-Nupp	Oh, the Thinks	14
Grinch	The Grinch	3	Joats	Zoo	18	Natch	Zoo	41
Grinchy	The Grinch	4	Jogg	Zebra	43	Nazzim	Zebra	36
Grin-itch	The Sneetches	44	Jogg-oons	Zebra	43		obleck	13
Gritch	Bippolo	42	Jorn	Circus	11	nellar	Wocket	26
Grooz	Lucky	15	Jott	Circus	18	Nerd	Zoo	47
grox	Oh Say	9	Kartoom	Zoo	40	Nerkle	Zoo	47
grush	Wocket	19	Katroo	Birthday	1	nink	Wocket	12
gruvvulous	The Lorax	9	Ka-Troo	Zoo	46	Nippo-no-Nungi	us Zoo	49
Gucky	Lucky	41	Katta-ma-Side	Eggs	22	Nipswich	Zebra	52
guff	Oh, the Thinks	5	Keck	Sleep Book	1	Nitch	Zebra	28
Gusset	Zoo	38	klay	500 Hats	31	nizzards	The King's Stilts	5
Gwark	Zoo	50	klonk	The Sneetches	9	Nobsk	Zoo	42
Hakken-Kraks	Oh, the Places!	34	Klopfer	Birthday	35	Nolster	Circus	21
Ham-ikka-Schnii Schnopp	n-ikka-Schnam-ikka Eggs	- 32	Klotz	Oh Say	24	nook	Wocket	3
Hawtch-Hawtch		24	Krock	Lucky	42	Nool	Horton Hears	1
Herk-Heimer	Sleep Book	8	Krox	Sleep Book	28	nooth	Wocket	19
Hil	Zebra	52	Krupp	Sleep Book	10	noozer	Circus	21
	rthday	47	Kweet	Eggs	16	Nubb	Zebra	52
High Gargel-oru		52	Kwigger	Eggs	19	Nuh	Zebra	28
Hinkle-Horn	Sleep Book	14	Kwong	Eggs	21	nupboards	Wocket	18
Hippo-Heimer		18	Kwuggerbug	Kwuggerbug	19	Nupper	Bippolo	44
Hippo-no-Hungu	-	49	Lass-a-lack	Eggs	10	nureau	Wocket	6
Hoobub	Kwuggerbug	52	Lerkim	The Lorax	4	Nutches	Zebra	28
Huffle	Circus	21	Lolla-Lee-Lou	Yertle the Turtle	31	Obsk	Zoo	42
Humpf	Zebra	23	Lorax	The Lorax	1	Offt	Sleep Book	38
	-Dumpfer Zebra	23	Lunks	Zoo	19	o'Grunth	Zebra	45
			Lurch	Circus	21	Olf	Circus	12
Hut-Zut	l Can Read	31	malber	500 Hats	31	Once-ler	The Lorax	3

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Oobleck	Oobleck	1	smoke-smugger	ed The Lorax	52	tinkibus	500 Hats	31
Palooski	Zoo	44	snarggle	The Lorax	40	Tizzle	Eggs	7
Pelf	Eggs	24	Snarp	Circus	21	Tizzy	Eggs	32
piffulous	Lucky	13	Snee	Zebra	30	Tobsk	Zoo	42
Poo-Boken	Lucky	31	Sneedle	Zebra	30	Truffle	Circus	21
Poogle-Horn	Lucky	31	Sneelock	Circus	6	Truffula (tree)	The Lorax	12
poozer	Solla Sollew	35	Sneetch	The Sneetches	1	tudd	500 Hats	31
Prax	The Sneetches	25	snergelly	The Lorax	10	tuttle-tuttle (tree)	ABC	46
Preep	Zoo	46	snerl	Zoo	32	tweetle	Fox in Socks	49
Proo	Zoo	46	Sneth	Eggs	40	Um	Zebra	20
puffle	Zebra	52	Snide	The Sneetches	50	Umbus	Zebra	20
punkerish	Lucky	45	Snipe	Circus	32	Vail	Sleep Book	26
Quan	Zebra	32	Snipps	500 Hats	20	Va-Vode	Sleep Book	44
Quilligan	Solla Sollew	6	Snoo	l Can Read	21	Vipp	Oh, the Thinks	32
quimney	Wocket	22	snookers	Birthday	43	vipper	Oh, the Thinks	32
Redd-Zoff	Sleep Book	20	Snoor	Lucky	11	Vlad-i-koff	Horton Hears	24
rink-rinker-fink	Oh, the Thinks	22	Snumm	Circus	13	voom	Cat Comes Back	57
rippulous	The Lorax	15	snuv	Oh, the Thinks	8	Vroo	Zebra	51
Rolf	Circus	12	snuvv	The Lorax	9	Vrooms	Zebra	51
Ronk	Lucky	41	Snux	Lucky	11	vug	Wocket	20
Roover	The Sneetches	46	Solla Sollew	Solla Sollew	12	Vung	Solla Sollew	1
Sala-ma-goox	Eggs	4	Soobrian	Circus	32	Wah-Hoo	Solla Sollew	12
Sala-ma-Sond	Yertle the Turtle	1	Spazz	Zebra	36	Walloo	Circus	15
schlopp	Oh, the Thinks	7	Spazzim	Zebra	36	wamel	Lucky	21
Schloppity-	opp The Lorax	44	Spritz	Eggs	10	wasket	Wocket	5
Schlottz	Lucky	18	spuggle	30 Tigers	47	wellar	Wocket	26
Schnacks	Oh Say	16	Squitsch	Eggs	22	Wheef	Bippolo	45
Schnutz	30 Tigers	51	Stroodel	Eggs	18	Who	The Grinch	1
Screebees	500 Hats	22	Strookoo	Eggs	28	Who-bub	Birthday	17
Seersucker	Zoo	48	Swomee-Swans	The Lorax	12	winkibus	500 Hats	31
shlump	Lucky	16	tellar	Wocket	26	Winna-Bango	Thidwick	1
Skeegle-mobile	Zoo	12	Thidwick	Thidwick	2	wista	Oobleck	10
Skrink	Solla Sollew	10	Thnad	Zebra	35	Wocket	Wocket	1
Skritz	Solla Sollew	10	Thnadner	Zebra	35	Wogs	Eggs	16
Skrux	Lucky	11	thneed	The Lorax	18	Woo-Wall	Solla Sollew	54
slippard	Solla Sollew	53	Throm-dim-bu-la	ator Lucky	11	woset	Wocket	7
slupp	The Lorax	10	Thwerll	Zoo	32	wub	Solla Sollew	14
smogulous	The Lorax	40	tidder	500 Hats	31	Wubble	Solla Sollew	12

wubble-some	Solla Sollew	14	Zinzibar-Zanziba		44
wuddled	Fox in Socks	59	Zizzer-zazzer-zu	JZZ ABC	63
Wum	Zebra	19	Zizzer-Zoof	Sleep Book	44
Wumbus	Zebra	19	Zizzy	The Cat's Quizzer	1
Wump	One Fish	18	zlock	Wocket	9
Yekk	Zebra	48	Zomba-ma-Tant	t Zoo	14
Yekko	Zebra	48	zong	Oh, the Thinks	21
yent	What Pet?	26	Zoom-a-Zoop	Circus	25
yeps	Wocket	24	Zoop	Circus	25
Yerka	Zoo	34	Zom	Birthday	1
Yertle	Yertle the Turtle	1	zower	Wocket	29
Ying	One Fish	40	Zozzfozzel	The Cat's Quizzer	1
Yink	One Fish	42	Zuff	Eggs	38
Үор	One Fish	44	Zuks	Eggs	27
уорр	Horton Hears	57	zum	Birthday	38
yot	Wocket	14	Zumble-Zay	Mooney	25
yottle	Wocket	15	Zummer	Birthday	38
Yupster	Zebra	52	Zumms	Eggs	27
Yuzz	Zebra	16	Zummz	Eggs	27
Yuzz-a-ma-Tuzz	Zebra	6			
zable	Wocket	16			
zall	Wocket	23			
zamp	Wocket	13			
Zans	One Fish	37			
Zatz	Zebra	41			
Zatz-it	Zebra	41			
Zax	The Sneetches	25			
Zayt	Lucky	6			
Zeds	One Fish	55			
Zeep	One Fish	62			
zelf	Wocket	10			
zellar	Wocket	26			
Ziff	Eggs	38			
Zike-Bike	Mooney	16			
zillow	Wocket	30			
Zind	Zoo	26			
Zinn-a-zu	Thidwick	6			
	Bippolo	20			

Works Cited

Alcott, Louisa May. Little Women. Project Gutenberg, 1996.

Bauer, Laurie. Morphological Productivity. Cambridge UP, 2001.

Burnett, Frances Hodgson. The Secret Garden. Project Gutenberg, 2008.

Carroll, Lewis. Alice's Adventures in Wonderland. Project Gutenberg, 2008.

- Cohen, Charles D. The Seuss, the Whole Seuss, and Nothing but the Seuss: A Visual Biography of Theodor Seuss Geisel. Random House, 2004.
- Crystal, David. Spell It Out: the Story of English Spelling. Profile Books, 2012.
- Geeraerts, Dirk. "How Words and Vocabularies Change." The Oxford Handbook of the Word, edited by John R. Taylor, Oxford UP, 2017, pp. 416–30.
- Lathem, Edward Connery, comp. Who's Who & What's What in the Books of Dr. Seuss. Dartmouth College, 2000.
- Matthews, P.H. The Concise Oxford Dictionary of Linguistics. 2nd ed., Oxford UP, 2007.
- Murat, Judith. "Lexical creativity as a marker of style in science fiction and children's literature." *Lexical Creativity, Texts and Contexts,* edited by Judith Murat. John Benjamins, 2007, pp. 163–85.
- Sacks, David. Language Visible: Unraveling the Mystery of the Alphabet from A to Z. Broadway Books, 2003.
- Seuss, Dr. Bartholomew and the Oobleck. Random House, 1949.
- ---. The Bippolo Seed and Other Lost Stories. Random House, 2011.
- ---. The Cat in the Hat. Random House, 1957.
- ---. The Cat in the Hat Comes Back. Random House, 1958.
- ---. The Cat's Quizzer. Random House, 1976.
- ---. Did I Ever Tell You How Lucky You Are? Random House, 1973.
- ---. Dr. Seuss's ABC. Random House, 1963.
- ---. Dr. Seuss's Sleep Book. Random House, 1962.
- ---. Fox in Sox. Random House, 1965.
- ---. Green Eggs and Ham. Random House, 1960.
- ---. Happy Birthday to You! Random House, 1959.
- ---. Horton and the Kwuggerbug and More Lost Stories. Random House, 2014.
- ---. Horton Hatches the Egg. Random House, 1940.
- ---. Horton Hears a Who! Random House, 1954.

An Analysis of the Nonce-Words of Dr. Seuss (Daniel TEUBER)

- ---. How the Grinch Stole Christmas! Random House, 1957.
- ---. I Can Lick 30 Tigers Today! And Other Stories. Random House, 1969.
- ---. I Can Read with My Eyes Shut! Random House, 1978.
- ---. I Had Trouble in Getting to Solla Sollew. Random House, 1965.
- ---. If I Ran the Circus. Random House, 1956.
- ---. If I Ran the Zoo. Random House, 1950.
- ---. The King's Stilts. Random House, 1939.
- ---. The Lorax. Random House, 1971.
- ---. Mr. Brown Can Moo! Can You? Random House, 1970.
- ---. Oh Say Can You Say? Random House, 1979.
- ---. Oh, the Places You'll Go! Random House, 1990.
- ---. Oh, the Thinks You Can Think! Random House, 1975.
- ---. On beyond Zebra. Random House, 1955.
- ---. One Fish Two Fish Red Fish Blue Fish. Random House, 1960.
- ---. Scrambled Eggs Super! Random House, 1953.
- ---. The Sneetches and Other Stories. Random House, 1961.
- ---. There's a Wocket in My Pocket! Random House, 1974.
- ---. Thidwick, the Big-Hearted Moose. Random House, 1948.
- ---. What Pet Should I Get? Random House, 2015.
- ---. Yertle the Turtle and Other Stories. Random House, 1958.

Twain, Mark. The Adventures of Tom Sawyer. Project Gutenberg, 2006.