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The Theme of Self Integrated in Children's Books Across Time



LOL Lab

Language Of Learning Lab

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Background

The Words Children Hear: Picture Books and the Statistics for Language Learning
Jessica Montag

Original paper:

Jessica Montag: studied lexical diversity in children's books vs child directed speech

- Mirrored and partially replicated
- Link between rare/complex sentence types and comprehension of them in children and adults
- Used book corpus – determine lexical diversity

EARLY CHILDREN'S BOOKS

- Purpose: studying religion (Byrd Pinkerton - NPR)

SHIFT IN SOCIETY - LATER BOOKS

- Purpose: creativity, exploration, adventure, and childhood innocence

Current Research

OUR GOAL:

Study children's books effect on childhood perception of self-image across publication dates

Methods

100 Children's Picture Book Corpus

Text from 100 books containing 68,103 words

- Montag chose the books for study from:
 - Library Lists
 - Best Seller Lists

Email correspondence to gain access to corpus

Procedure

- Data collected was put into categories:
 - The title
 - Author
 - Original publishing date (originally_published)
- Websites used to collect data:



Natural Language Processing (NLP)

TAALED: TOOL FOR THE AUTOMATIC ANALYSIS OF LEXICAL DIVERSITY

- Lexical Diversity Indices

TAALES: TOOL FOR THE AUTOMATIC ANALYSIS OF LEXICAL SOPHISTICATION

- Word Counts

SINLP: THE SIMPLE NATURAL LANGUAGE PROCESSING TOOL

- # of Words per Sentence

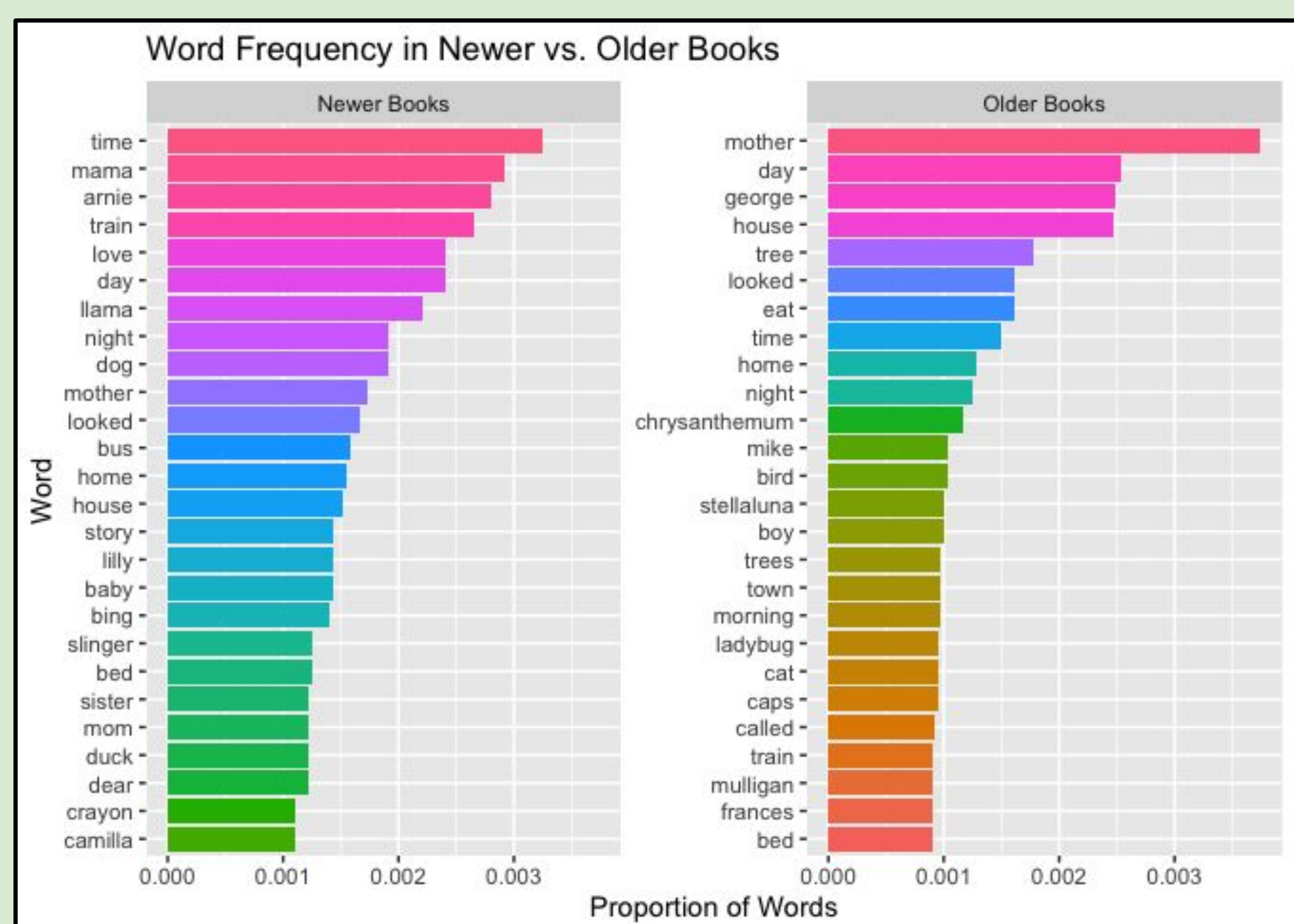


Self_GI	Our_GI
I	Let's
I'm	Our
Me	Ours
Mine	Ourselves
My	Us
Myself	We
Oneself	

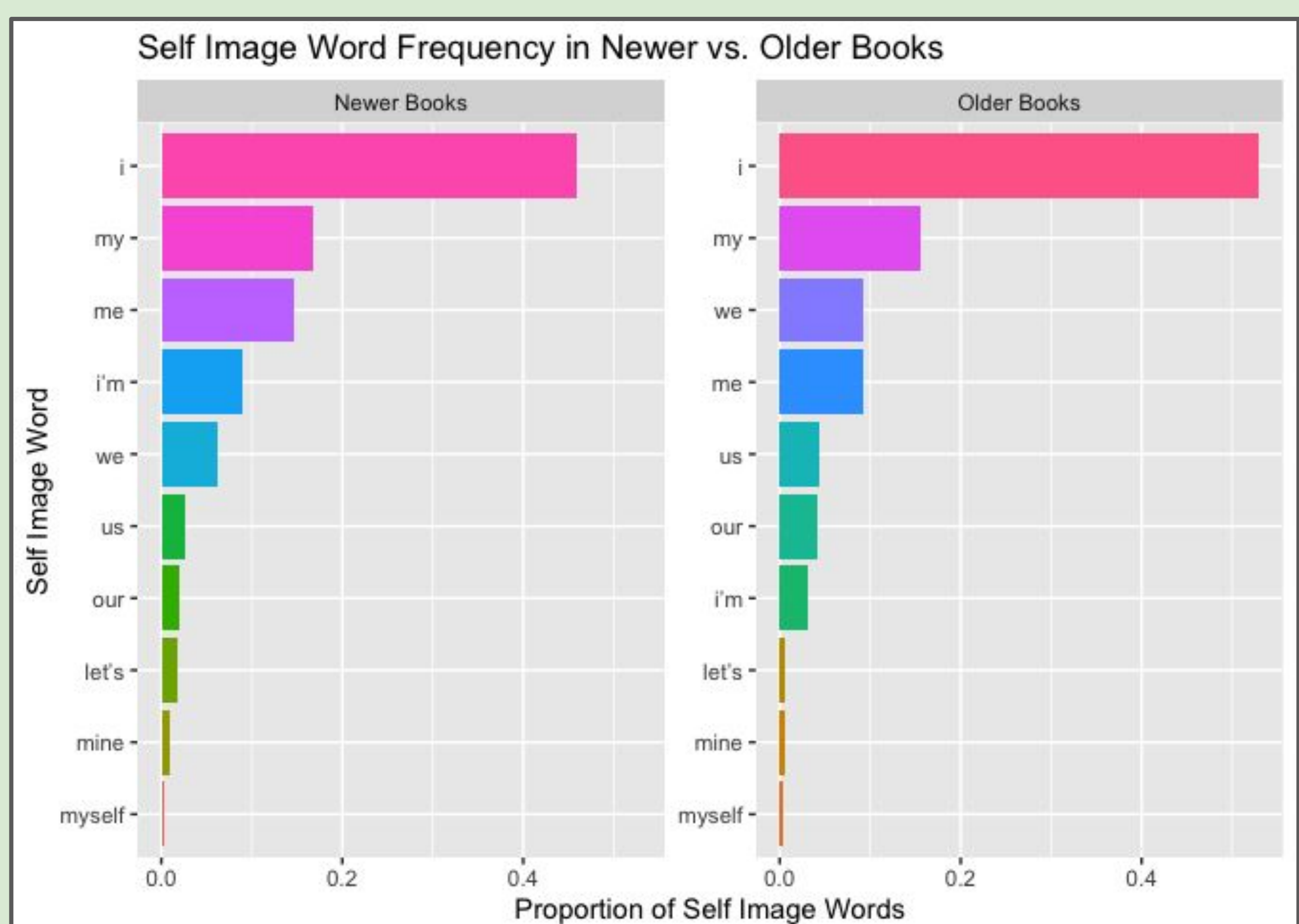
We searched on Seance with sentiments like "total_self_sing" with counted the total amount of 'Self_GI' words were in each book.

Results

- Correlations between:
 - Self_GI words & Publishing Date
 - Main effects
- Interactions between the number of referential words and linguistic features of books across time



	Year Published	% Self Words	% Our Words	% Unique Self Words	% Unique Our Words	Word Count	# Words per Sentence	Content Tokens	Lexical Density Tokens
Year Published	1.00	0.09	-0.02	0.09	0.09	-0.32	-0.27	-0.26	0.28
% Self Words	0.09	1.00	0.30	0.76	0.76	-0.06	-0.12	-0.10	-0.40
% Our Words	-0.02	0.30	1.00	0.10	0.10	0.23	-0.05	0.23	-0.06
% Unique Self Words	0.09	0.76	0.10	1.00	1.00	-0.27	-0.16	-0.31	-0.30
% Unique Our Words	0.09	0.76	0.10	1.00	1.00	-0.27	-0.16	-0.31	-0.30
Word Count	-0.32	-0.06	0.23	-0.27	-0.27	1.00	-0.07	0.98	-0.24
# Words per Sentence	-0.27	-0.12	-0.05	-0.16	-0.16	-0.07	1.00	-0.07	0.05
Content Tokens	-0.26	-0.10	0.23	-0.31	-0.31	0.98	-0.07	1.00	-0.13
Lexical Density Tokens	0.28	-0.40	-0.06	-0.30	-0.30	-0.24	0.05	-0.13	1.00



Discussion

Across publishing dates:
Significant changes in lexical style but NOT in self-referential words

Higher word frequency in newer books

- Development of mental models
- Shape actions and behavior
- Broaden lexical and semantic diversity
- Societal perception and worldview
- **SENSE OF SELF**

More research needed to prove significant changes in theme of self through children's books

Future Directions

- Investigate current socio-cultural variables and its impact on children's books/a child's sense of self
- Elaborate on different self-referential words, potentially a wider range and further investigate their relevance across time

Acknowledgments

Montag, J. L. (2019). Differences in sentence complexity in the text of children's picture books and child-directed speech. *First Language*, 39(5), 527-546. <https://doi.org/10.1177/0142723719849996>

Montag, J. L., Jones, M. N., & Smith, L. B. (2015). The Words Children Hear: picture books and the statistics for language learning. *Psychological Science*, 26(9), 1489-1496. <https://doi.org/10.1177/0956797615594361>

Scholastic. (2022). *Scholastic: book wizard*. Book Wizard: Find and Level Books for Your Classroom. <https://bookwizard.scholastic.com/>

- explored the influence on children's books to lexical diversity compared to child directed speech.
- We used the picture book corpus provided by Montag to analyze lexical diversity/styles over different publishing dates.
- "There are strong links between exposure to rare or complex sentence types, and subsequent comprehension and production of those sentence types in children and adults"
 - o (Montag, 2015)
 - o In an article written by Byrd Pinkerton published by NPR, the author writes about how in early children's books, the aim was not so much about entertaining the child through storytelling but for the purpose of studying religion.
- Through later children's books however, it became more important to incorporate fantasy and adventure into children's books to allow children to embrace creativity. The books became an indication of the shift in societal views on childhood.
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