

Examining Morphological Complexity in 11th Grade

English Language Arts Texts Across Genres



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Background

- Morphemes are the smallest meaningful units of language.
 - “Reteaching” has three morphemes: re-teach-ing. ‘Reader’ has two morphemes: read-er.
- Morphemes have spoken, written, and meaning-based forms, binding together vocabulary representations
 - Academic vocabulary is often polymorphemic
 - British texts contained more morphemes with increasing student age
 - Nonfiction texts were more morphologically complex than fiction texts

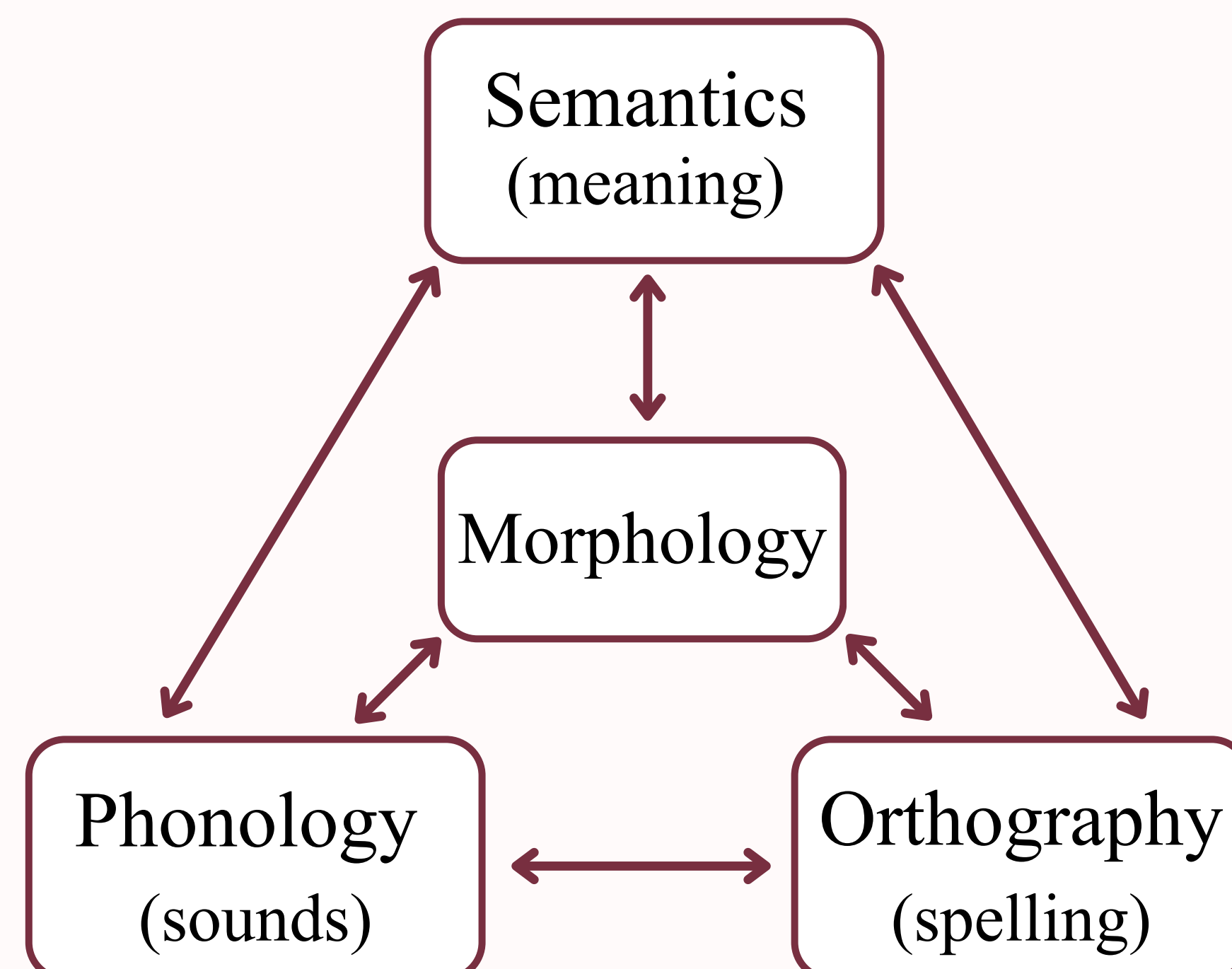


Diagram 1. The Role of Morphology in Reading

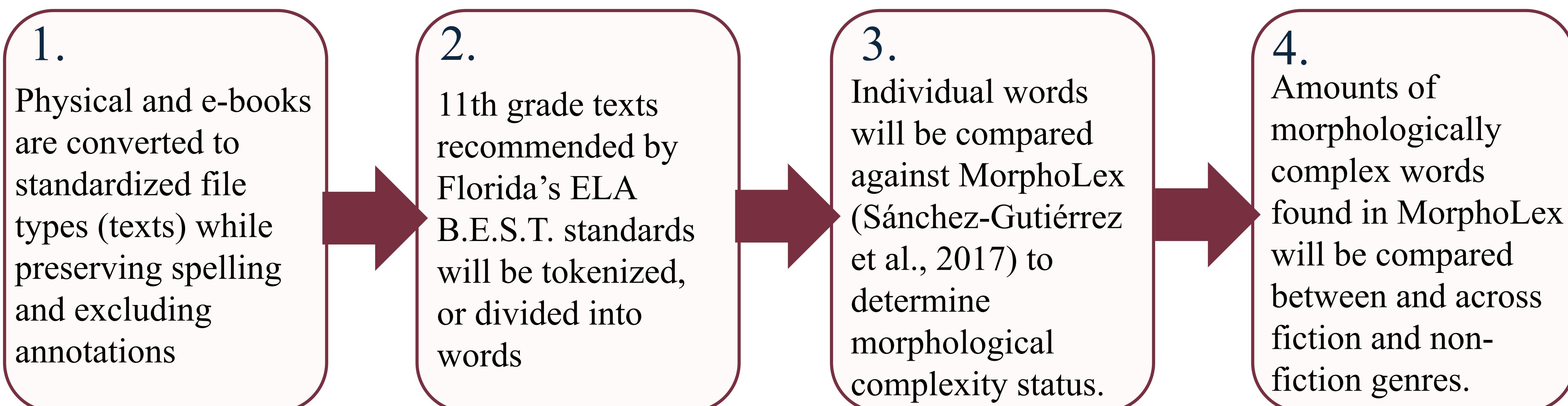
Purpose

- Less is known about the morphemes older American students encounter in school readings

To address this gap in existing knowledge, this study asks two questions:

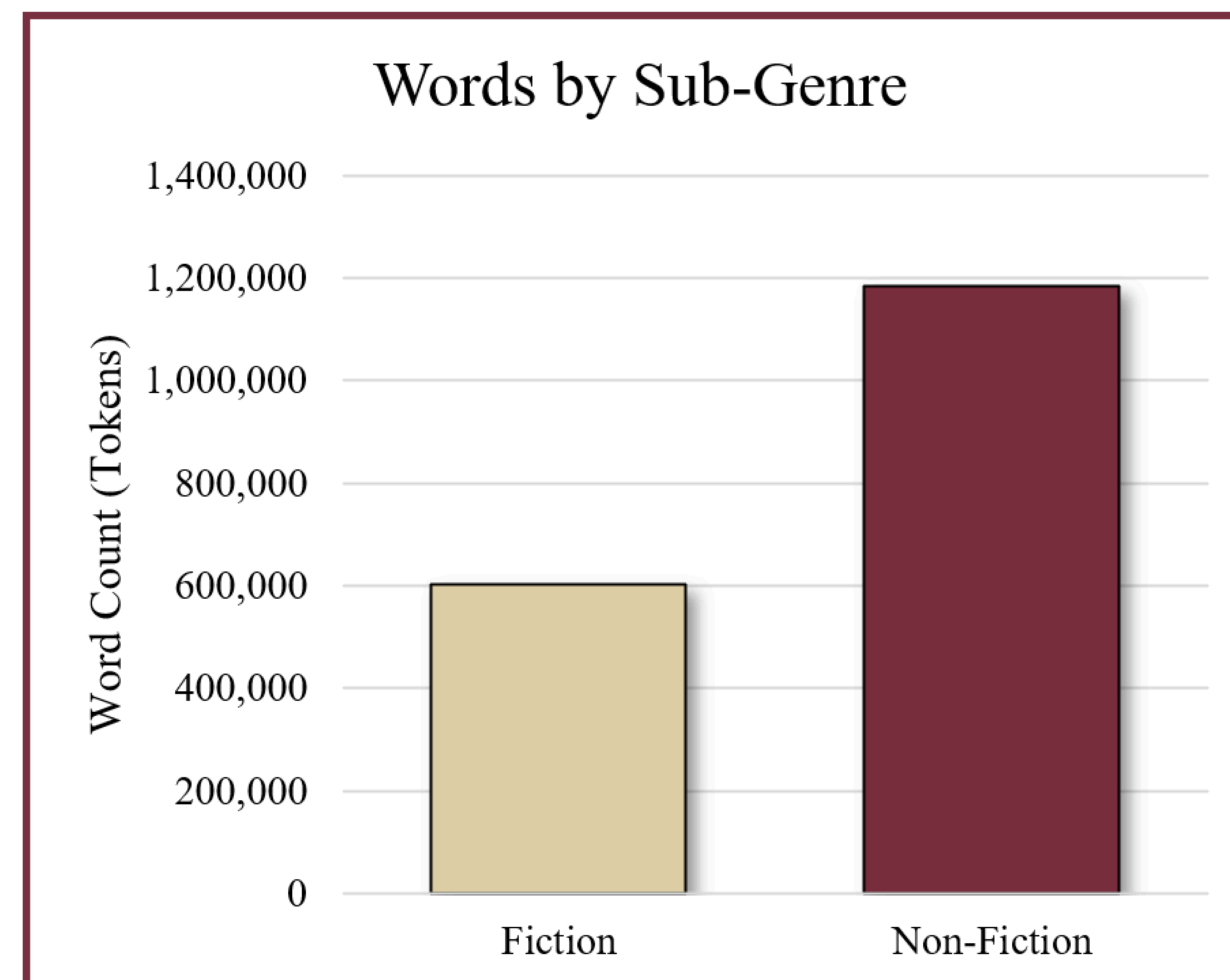
- To what extent do the morphologically complex words in American 11th grade English Language Arts (ELA) readings exceed that in texts for younger grades?
- How do morphologically complex words differ between fiction and non-fiction readings?

Methods



Word	Prefix	Stem	Derivational Suffix	Inflectional Suffix
Complexity	-	complex	-ity	-
Excluding	ex-	clude	-	-ing
Preserving	pre-	serve	-	-ing
Physics	-	phys	-ic	-s

Table 1. Morphological Analysis Table.



Graph 1. Word Count of Texts by Sub-Genre

Results

Current Data:

- 28 texts: 10 fiction, 18 nonfiction
- Total word count: > 1.8 million words

Future analyses:

Hypothesis 1:

- 11th grade texts will have more morphologically complex words than younger grade texts
 - Supporting evidence:
 - Types and tokens increase with reader age (5-16 years)

Hypothesis 2:

- Non-fiction texts will have more morphologically complex words than fiction texts
 - Supporting evidence:
 - More tokens in non-fiction than fiction
 - Social science has complex vocabulary
 - Most 11th grade non-fiction texts overlap with social science

Discussion

Innovation:

- First known measurement of morphologically complex vocabulary in American 11th grade readings
- Variability between text types to be highlighted

Application:

- Identifies text-based opportunities for vocabulary instruction
- Reveals gaps in text difficulty that may disadvantage struggling readers
- Guides curriculum development by helping educators align texts that match students' morphological readiness

References

