

Using Networks to Navigate a Corpus of Reader Reviews

An Explorative Study of Absorption Expressions in Different Genres

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Research Questions

- Do texts of different genres elicit a specific response in readers (or do readers with specific preferences seek out texts that incorporate these dimensions)?
- Are reviews of the same genre more similar than reviews of different genres?
- Can network analysis help in finding meaningful collections of reviews?

Story World Absorption

- Attention:** Effortlessly achieved deep concentration
- Mental Imagery:** Visual representations emerging in one's mind while reading a Story
- Emotional Engagement:** Feelings shared with or directed towards the characters
- Transportation:** Sensation of entering a story world
- Impact:** (Longer-lasting) effects on the reader

Data

199 reader reviews on 49 novels from Goodreads

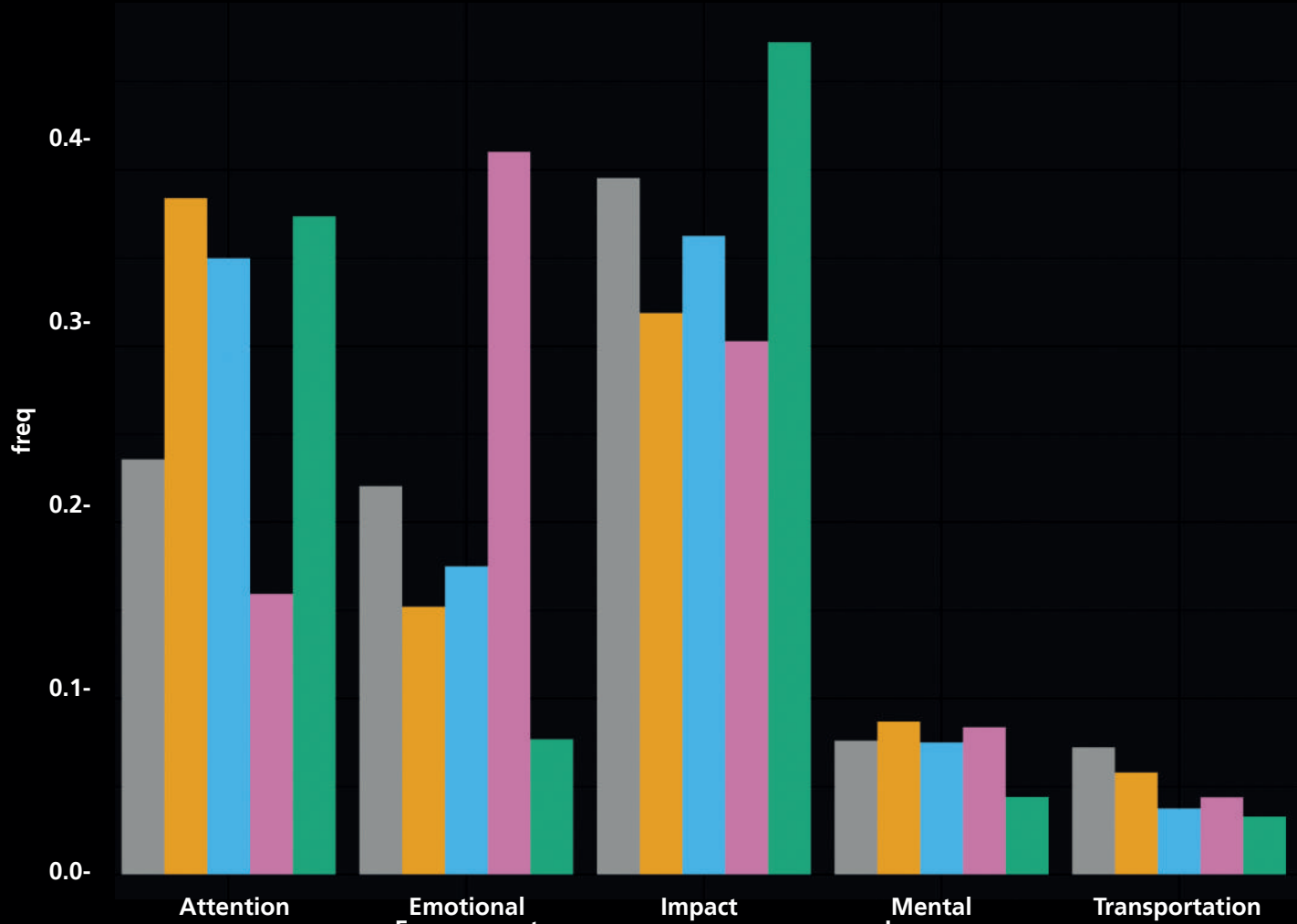
- Genres: Fantasy, Romance, Horror/Thriller, Mystery, Science Fiction
- Part of the AbsORB corpus¹
- Manually annotated for statements of absorption

Methods

- Analysis of absorption distribution across genres
- Data cleaning: Exclusion of names and story-specific terms
 - Semi automatic approach using NER and manual review
- Computation of text-similarity using TF-IDF and the cosine method
- Graph visualization and clustering using the louvain algorithm²
- Selection of clusters for further analysis
- Analysis of absorption distribution across clusters
- Qualitative analysis of the clusters using term-keyness, concordances, and close reading

- Absorption dimensions across different genres in the whole corpus (left) show distinct patterns.
- Most clusters (right) follow the distribution of their dominant genre, reviews deviating from that pattern tend to form separate clusters.
- In a first attempt of network construction, Fantasy reviews could be identified as a disturbance to the overall classification of genres. Therefore, they were excluded from the corpus and a rerun of the analysis resulted in clearer clusters.

SWAS-Dimensions in different Genres



Cluster 08 - Horror/Science Fiction	
Category	Keyword
Genre	science, fiction, horror
Experience	creepy
General descriptors	idea, concept, essay, society, genre, ill
Content	device, astronaut, machine, human, animal
Additional information	movie, film, october
Other	produce, recommend

Cluster 12 - Romance 2	
Category	Keyword
Genre	none
Experience	love
General descriptors	funny, romantic, perfect, adorable, amount, wonderful, sweet, shy, horrible
Content	king, future, guitar, love, castle, play, show
Additional information	none
Other	make, but, totally, please

Cluster 04 - Mystery	
Category	Keyword
Genre	mystery
Experience	thrilling, interesting, solve (1), figure, pay, happen, author
General descriptors	book, different, twist, clue, puzzle, information, really
Content	panel, host, solve, mystery, happen
Additional information	series, version, copy, happen, author

Cluster 11 - Romance 1	
Category	Keyword
Genre	romance, ya
Experience	love, heart, cry, tear, experience
General descriptors	incredible, hot, strong, smart, vulnerable, weak
Content	man, love, brother, heart (1), loss, experience
Additional information	love;
Other	who, how, each, although

Cluster 07 - Horror/Mystery	
Category	Keyword
Genre	none
Experience	reader, mind, world
General descriptors	layer, tale, third, person, text
Content	present, human, apocalyptic, person, vampire, human, animal, year, use, gender, language, small, mind, ago, body, world
Additional information	year, ago, final

Cluster 01 - Science Fiction	
Category	Keyword
Genre	sci, fi
Experience	feel, satisfying, enough, chill, able, terrifying, seat
General descriptors	half, random, really, main, character
Content	police, checkpoint, campus, camp
Additional information	podcast, sequel

Categories per Community



Results

Network Structure

- Mystery, Science Fiction, and Horror/Thriller are more closely connected with each other than with Romance
- Reviews of Mystery and Romance form more homogeneous clusters
- Fantasy seems to be a much broader category than the other genres

Absorption

- Deviating absorption patterns tend to show in separate clusters
- Absorption statements frequently show inside the keywords of the clusters

Qualitative Analysis

- Science Fiction and Horror/Thriller reviews are clustered less by genre than by reader preference (atmosphere, characters, style, narration)
- Romance reviews are written in a distinct affective style, seemingly following conventions (emphasis on emotional and bodily reactions, focus on characters, slang)
- Mystery readers showcase an emphasis on active cognitive involvement

Conclusion

- Genre is not the main factor in forming clusters
- Deviations in absorption patterns seem to have an influence on review similarity
- Network analysis is a useful tool for the identification of underlying structures in reader review corpora

1) Kuipers, M. M., Rehora, S., Lendvai, P., Lassetti, M., Ruh, L., Vogelsanger, J., & Ternes, T. (2023). Absorption in Online Book Reviews: Presenting the English-Language AbsORB Metadata Corpus and Annotation Guidelines. [Data set]. <https://doi.org/10.1008/1742-5468/2008/10/P10008>

2) Blondel, V. D., Guillaume, D., Lambiotte, R., & Lefebvre, E. (2008). Fast unfolding of communities in large networks. *Journal of Statistical Mechanics: Theory and Experiment*, 2008(P10008). <https://doi.org/10.1088/1742-5468/2008/10/P10008>

