

Unsilencing and Unsilencing Online Reader Reviews

Mapping Reception of Fiction Novels Across Cultures and Languages

[short paper]

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Introduction

An emerging international consortium aims to build a corpus of online reviews of novels that enables the cross-cultural investigation of fiction book reviewing across six languages (English, Korean, Chinese, Dutch, Italian, and German). Such a corpus is needed for literary research and cultural analytics, as existing data and analysis are heavily skewed towards English language platforms. We report on the results of the first workshop on mapping online book reception across cultures and languages, organized by this consortium in Bielefeld.

Background

Through web-based platforms, book reception has become a digital practice producing online reviews at an unprecedented scale: millions of so-called ‘wreaders’ (Landow 2006, p. 302) interact with each other on digital reviewing platforms. Although some inroads have been made, this relatively new mass phenomenon is still in need of basic research. Who likes what type of books and why? How do different languages and cultural backgrounds shape reception preferences and evaluation of novels? How can collected reviews be analyzed reliably, especially across languages and cultures? What ethical and technical limits and constraints shape the mining of online reviews?

Initial contributions to studying online reviews have been made in various disciplinary areas: cultural analytics (Koolen, Boot, and Zundert 2020; Walsh and Antoniak 2021), library and information sciences (Bartley 2009; Lu, Park, and Hu 2010; Worrall 2015), literary history (Bourrier and Thelwall 2020), reader reception studies (Kuijpers 2022), computer-supported cooperative work (Antoniak, Walsh, and Mimno 2021; Rezapour and Diesner 2017), social network analysis (Maity, Panigrahi, and Mukherjee 2017; Nakamura 2013), literary studies and linguistics (Chik and Taboada 2020), business research (Maity, Panigrahi, and Mukherjee 2017; Lee et al. 2021). Additionally, fake, sponsored, biased reviews as well as professionally written reviews have been broadly identified and studied in research areas like computer science and information systems (Jiang and Diesner 2016; Lappas 2012; Lappas, Sabnis, and Valkanas 2016; Wang, Ghose, and Ipeirotis 2012; Wu et al. 2020), enhancing the quality of analysis (Hu et al. 2022).

Nevertheless, much work remains to be done to provide a corpus that facilitates cross-cultural comparative research with online reader reviews.

Results

Examination during the workshop highlighted the following issues:

1. A lack of non-English datasets. Alignments and comparisons are still largely limited to English materials and Western perspectives (Dimitrov et al. 2015; Kotin et al. 2021; Long 2021; Maity, Panigrahi, and Mukherjee 2017; Newell et al. 2016; Worrall 2015). Non-English speaking readers and their reviews remain underrepresented in existing scholarship.¹ For instance, based on a dataset of nearly 1.9 million Goodreads users, readers from primary Chinese-speaking areas only make up approximately 0.8% of all the users, while users from four English-speaking areas make up 50% (Sabri and Weber 2021).
2. Platform policies and algorithmic moderation influence which reviews are filtered and displayed, influencing the data available for collection and analysis. User-generated reviews are furthermore subject to manipulation, trolling, extortion scams, review bombing, collective fandom action, and other undesirable effects (Antoniak and Walsh 2020; Hu et al. 2012; Lappas, Sabnis, and Valkanas 2016; Luca and Zervas 2016; McCluskey 2021; Murray 2021; Antoniak and Walsh 2021).
3. Books that have been intensively reviewed, reported, and recommended are mostly books with distinguished popularity or prestige, such as Western classics, popular references in academia, mass market bestsellers, prize winners, viral books (from BookTok/BookTube), etc. (Bourrier and Thelwall 2020; Kovács and Sharkey 2014; Maity, Panigrahi, and Mukherjee 2017; Ptuaabhof and Da 2018; Antoniak and Walsh 2021). Biases due to classism, elitism, sexism, racism, and colonialism raise questions about the inclusiveness and representativeness of prior studies on book reviews.
4. For a viable study of reader response we need to be able to distinguish evaluative (e.g. thoughts, feelings, and judgements by readers) from non-evaluative (e.g. plot description) parts of reviews. This poses considerable computational linguistics challenges. Furthermore, findings from reviews should be validated against other forms of reader response, like in-depth interviews, and vice versa (Fialho 2012; Kuiken et al. 2004; Sikora et al. 2011).
5. Empirically validated measures are needed for gauging readers' reception from their reviewing practices (Kuijpers 2022; Jacobs and Kinder 2019). This is another complicated challenge due to many entangled issues. For instance, reader impact signals occur in a log-log relation to the length of a review, while the length of reviews versus number of reviews demonstrates a log-linear relation, complicating numerical comparison. The varying length of reviews also induces structural elements that appear to be related to the "genre" of online

¹ This is a problem also known in the field of NLP more broadly, where an astonishing part of research is built on English datasets (Søgaard, Anders. 2022).

reviews. These structural conventions are rooted partly in professional-reader review practices (e.g. literary critics), and partly in online-community consensus. Furthermore, the structure of born-digital data with multiple dependencies constituted by the distribution of reviews and comments across distinct book genres, authors, books, and platform users poses challenges for statistical analysis (Rebora, Herrmann, Messerli, and Jorschick 2022; Van Zundert et al. 2022).

6. During the workshop it proved difficult to apply evaluative concepts, e.g. pragmatic, cognitive, social (Kuijpers et al. 2014; Fialho 2019), consistently for annotation. Moreover, concepts related to reader experience do not translate between languages and cultures easily or unambiguously.
7. Book reviews are user-generated content protected by copyright and commercial laws in many countries and they may also contain personal and sensitive demographic data. Datasets created for research purposes cannot be freely shared without a careful assessment of the ethical and legal aspects involved (Walsh 2023; Hu et al. 2023). So far, there is no corpus that follows best practices in terms of personal data protection and open science policy (Samberg et al. 2021).

Future work

We conclude that curating and analyzing a six language cross-cultural annotated corpus of online reader reviews is a large, complex, and methodologically daunting challenge. Our aim is to work towards a multi-partner grant proposal to secure adequate resources. Two preparatory meetings are planned: (1) A meeting open to all interested connected to the Computational Humanities Research conference 2024; (2) A second workshop in early 2025 has been proposed at the Lorentz Center in Leiden.

References

- Antoniak, Maria, and Melanie Walsh. 2020. "The Crowdsourced "Classics." *And the Revealing Limits of Goodreads Data*. <https://doi.org/10.17613/7k61-eg23>.
- Antoniak, Maria, Melanie Walsh, and David Mimno. 2021. "Tags, Borders, and Catalogs: Social Re-Working of Genre on LibraryThing." In *Proceedings of the ACM on Human-Computer Interaction 5*, CSCW1:1–29.
- Bartley, Peishan. 2009. "Book Tagging on LibraryThing: How, Why, and What Are in the Tags?" In *Proceedings of the American Society for Information Science and Technology 46*, 1:1–22.
- Bourrier, Karen, and Mike Thelwall. 2020. "The Social Lives of Books: Reading Victorian Literature on Goodreads." *Journal of Cultural Analytics 1*, 1: 12049.

- Chik, Sonya, and Maite Taboada. 2020. "Generic Structure and Rhetorical Relations of Online Book Reviews in English, Japanese and Chinese." *Contrastive Pragmatics* 1: 143–79. <https://doi.org/10.1163/26660393-bja10008>.
- Dimitrov, Stefan, Faiyaz Zamal, Andrew Piper, and Derek Ruths. 2015. "Goodreads versus Amazon: The Effect of Decoupling Book Reviewing and Book Selling." In *Ninth International AAAI Conference on Web and Social Media*, 602–5.
- Fialho, O.D.C. 2012. "Self-Modifying Experiences in Literary Reading: A Model for Reader Response." Doctoral thesis, Edmonton: University of Alberta. <https://doi.org/10.7939/R3561V>.
- Fialho, Olivia. 2019. "What Is Literature for? The Role of Transformative Reading." Edited by Anezka Kuzmicova. *Cogent Arts & Humanities* 6 (1): 1692532. <https://doi.org/10.1080/23311983.2019.1692532>.
- Hu, Nan, Indranil Bose, Noi Sian Koh, and Ling Liu. 2012. "Manipulation of Online Reviews: An Analysis of Ratings, Readability, and Sentiments." *Decision Support Systems* 52, 3: 674–84.
- Hu, Y., G. Layne-Worthey, A. Martaus, J.S. Downie, and J. Diesner. 2023. "Research with User-Generated Book Review Data: Legal and Ethical Pitfalls and Contextualized Mitigations." In *International Conference on Information*, 163–86. Cham: Springer Nature Switzerland.
- Hu, Y., Z. LeBlanc, J. Diesner, T. Underwood, G. Layne-Worthey, and J.S. Downie. 2022. "Complexities Associated with User-Generated Book Reviews in Digital Libraries: Temporal, Cultural, and Political Case Studies." In *Proceedings of the 22nd ACM/IEEE Joint Conference on Digital Libraries*.
- Jacobs, Arthur M., and Annett Kinder. 2019. "Computing the Affective-Aesthetic Potential of Literary Texts." *AI* 1, 1: 11–27. <https://doi.org/10.3390/ai1010002>.
- Jiang, Ming, and Jana Diesner. 2016. "Issue-Focused Documentaries versus Other Films: Rating and Type Prediction Based on User-Authored Reviews." In *Proceedings of the 27th ACM Conference on Hypertext and Social Media*, 225–30.
- Koolen, Marijn, Peter Boot, and Joris J. Zundert. 2020. "Online Book Reviews and the Computational Modelling of Reading Impact." In *CHR 2020: Workshop on Computational Humanities Research*. Amsterdam, The Netherlands. <http://ceur-ws.org/Vol-2723/long13.pdf>.
- Kotin, Joshua, Rebecca Sutton Koeser, Carl Adair, Serena Alagappan, Paige Allen, Jean Bauer, Oliver J. Browne, Nick Budak, Harriet Calver, and Jin Yun Chow. 2021. "Shakespeare and Company Project Dataset: Lending Library Events." <https://doi.org/10.34770/39sq-bm51>.
- Kovács, Balázs, and Amanda J. Sharkey. 2014. "The Paradox of Publicity: How Awards Can Negatively Affect the Evaluation of Quality." *Administrative Science Quarterly* 59, 1: 1–33.
- Kuijpers, Moniek. 2022. "Bodily Involvement in Readers' Online Book Reviews: Applying Text World Theory to Examine Absorption in Unprompted Reader Response." *Journal of Literary Semantics* 51, 2: 111–29.
- Kuijpers, Moniek M., Frank Hakemulder, Ed S. Tan, and Miruna M. Doicaru. 2014. "Exploring Absorbing Reading Experiences: Developing and Validating a Self-Report Scale to Measure Story World Absorption." *Scientific Study of Literature*. John Benjamins. <https://www.jbe-platform.com/content/journals/10.1075/ssol.4.1.05kui>.
- Kuiken, D., D.S. Miall, and S. Sikora. 2004. "Forms of Self-Implication in Literary Reading." *Poetics Today* 25 (2): 171–203.
- Landow, George P. 2006. *Hypertext 3.0: Critical Theory and New Media in an Era of Globalization*. Rev. ed. of *Hypertext 2.0* 1997. Parallax Revisions of Culture and Society. Baltimore: The John Hopkins University Press.

- Lappas, Theodoros. 2012. "Fake Reviews: The Malicious Perspective." In *International Conference on Application of Natural Language to Information Systems*, 23–34. Springer.
- Lappas, Theodoros, Gaurav Sabnis, and Georgios Valkanas. 2016. "The Impact of Fake Reviews on Online Visibility: A Vulnerability Assessment of the Hotel Industry." *Information Systems Research* 27, 4: 940–61.
- Lee, Heeseung Andrew, Angela Aerry Choi, Tianshu Sun, and Wonseok Oh. 2021. "Reviewing Before Reading? An Empirical Investigation of Book-Consumption Patterns and Their Effects on Reviews and Sales." *Information Systems Research* 32 (4): 1368–89. <https://doi.org/10.1287/isre.2021.1029>.
- Long, Hoyt. 2021. "Culture at Global Scale." <https://culturalanalytics.org/post/1160-Culture-at-global-scale>.
- Lu, Caimei, Jung-ran Park, and Xiaohua Hu. 2010. "User Tags versus Expert-Assigned Subject Terms: A Comparison of LibraryThing Tags and Library of Congress Subject Headings." *Journal of Information Science* 36, 6: 763–79.
- Luca, Michael, and Georgios Zervas. 2016. "Fake It till You Make It: Reputation, Competition, and Yelp Review Fraud." *Management Science* 62: 12.
- Maity, Suman Kalyan, Abhishek Panigrahi, and Animesh Mukherjee. 2017. "Book Reading Behavior on Goodreads Can Predict the Amazon Best Sellers." In *Proceedings of the 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining*, 451–54.
- McCluskey, Megan. 2021. "How Extortion Scams and Review Bombing Trolls Turned Goodreads Into Many Authors' Worst Nightmare." <https://time.com/6078993/goodreads-review-bombing/>.
- Murray, Simone. 2021. "Secret Agents: Algorithmic Culture, Goodreads and Datafication of the Contemporary Book World." *European Journal of Cultural Studies* 24, 4: 970–89.
- Nakamura, Lisa. 2013. "Words with Friends": Socially Networked Reading on Goodreads." *PMLA/Publications of the Modern Language Association of America* 128, 1: 238–43.
- Newell, Edward Daniel, Stefan Dimitrov, Andrew Piper, and Derek Ruths. 2016. "To Buy or to Read: How a Platform Shapes Reviewing Behavior." In *Tenth International AAAI Conference on Web and Social Media*.
- Ptuabhof, Lambodara, and Phool Rani Da. 2018. "Goodreads Ratings and Reviews Analysis of Booker Prize Titles." In *ICDT 2018: Publishing Technology and Future of Academia*, 363–71. Segment Publication.
- Rebora, Simone, J.Berenike Herrmann, Thomas Messerli, and Annett Jorschick. 2022. "Dealing with Messy Data. A Methodological Solution for Analysing Unbalanced Social Media Datasets." In *Panel "Books' Impact in Digital Social Reading: Towards a Conceptual and Methodological Framework". In Book of Abstracts of International Conference DH2022 Tokyo*, 96–97. <https://dh2022.dhii.asia/dh2022bookofabsts.pdf>.
- Rebora, Simone, Moniek Kuijpers, and Piroska Lendvai. 2019. "Mining Goodreads. A Digital Humanities Project for the Study of Reading Absorption." In *Sharing the Experience: Workflows for the Digital Humanities. Proceedings of the DARIAH-CH Workshop 2019*. Neuchâtel: DARIAH-CAMPUS. <https://doi.org/10.5281/zenodo.3897251>.
- Rezapour, Rezvaneh, and Jana Diesner. 2017. "Classification and Detection of Microlevel Impact of Issue-Focused Documentary Films Based on Reviews." In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing*, 1419–31.
- Sabri, N., and I. Weber. 2021. "A global book reading dataset." *Data* 6 (8): 83.
- Samberg, R., T. Vollmer, S. Althaus, D. Bamman, S. Benson, B. Butler, B. Cate, et al. 2021. Building Legal Literacies for Text Data Mining. <https://escholarship.org/uc/item/2vw807vb>.

- Sikora, S., D. Kuiken, and D.S. Miall. 2011. "Expressive Reading: A Phenomenological Study of Readers' Experience of Coleridge's *The Rime of the Ancient Mariner*." *Psychology of Aesthetics, Creativity, and the Arts* 5 (3): 258.
- Søgaard, Anders. 2022. "Should We Ban English NLP for a Year?" In *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*: 5254–5260, Abu Dhabi, United Arab Emirates. Association for Computational Linguistics.
- Van Zundert, Joris, Marijn Koolen, Julia Neugarten, Peter Boot, Willem Van Hage, and Ole Musmann. 2022. "What Do We Talk About When We Talk About Topic?" In *Proceedings of the Conference on Computational Humanities Research 2022*, 398–410. Antwerpen: CEUR Workshop Proceedings. <https://doi.org/urn:nbn:de:0074-3290-8>.
- Walsh, M. 2023. "The Challenges and Possibilities of Social Media Data: New Directions in Literary Studies and the Digital Humanities." *Debates in the Digital Humanities*.
- Walsh, Melanie, and Maria Antoniak. 2021. "The Goodreads 'Classics': A Computational Study of Readers, Amazon, and Crowdsourced Amateur Criticism." *Journal of Cultural Analytics* 4: 243–87.
- Wang, Jing, Anindya Ghose, and Panos Ipeirotis. 2012. "Bonus, Disclosure, and Choice: What Motivates the Creation of High-Quality Paid Reviews?" In *ICIS 2012 Proceedings*. Citeseer.
- Worrall, Adam. 2015. "Like a Real Friendship": Translation, Coherence, and Convergence of Information Values." In *LibraryThing and Goodreads. iConference 2015 Proceedings*.
- Wu, Yuanyuan, Eric W.T. Ngai, Pengkun Wu, and Chong Wu. 2020. "Fake Online Reviews: Literature Review, Synthesis, and Directions for Future Research." *Decision Support Systems* 132: 113280.