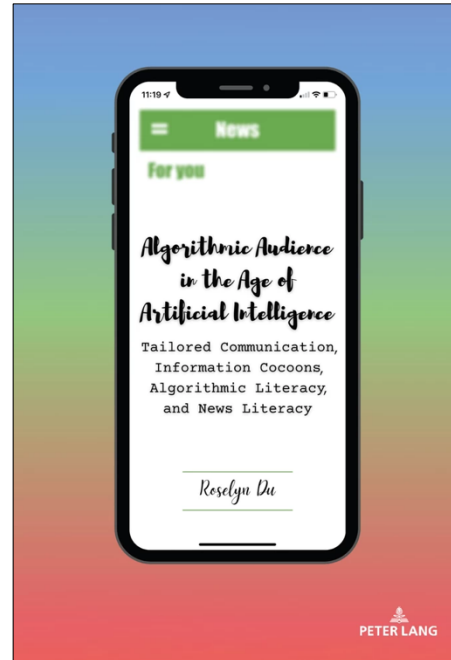


Roselyn Du, **Algorithmic Audience in the Age of Artificial Intelligence: Tailored Communication, Information Cocoons, Algorithmic Literacy, and News Literacy**, 2023, Oxford, UK: Peter Lang, 164 pp., \$40.95 (paperback).

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Artificial Intelligence (AI)-powered news recommendation apps play a central role in today's news consumption. Prominent examples of such apps are the Google News app and Apple News, along with apps offered by online aggregators and established news media such as CNN and *The New York Times*. One central feature of these apps is their capacity for personalization: These apps automatically prioritize news based on previous interactions with the app while also allowing users to actively tailor their news selection. This personalization can be both a blessing and a curse. Personalized news selection can make audiences more engaged and could make it easier for audiences to remember what they are exposed to. However, concerns have been raised that personalized news selection fosters filter bubbles or information cocoons, wherein users become isolated from news and perspectives that do not fit their worldview.



Algorithmic Audience in the Age of Artificial Intelligence: Tailored Communication, Information Cocoons, Algorithmic Literacy, and News Literacy by Roselyn Du makes a strong case that discussions about the potential effects of AI-powered news apps are largely speculative rather than based on empirical facts. Additionally, such discussions seem to focus more on the technical features and possibilities of the apps rather than on how the audience uses them. To fill this research gap, the book presents the results of a multimethod research project analyzing news apps from the audience perspective. The book gives an in-depth analysis of user experiences with news apps. It studies the relations between news-app use and the audience's news appreciation, news literacy, and public agenda. These empirical results make up the core of the book and are unfolded in chapters 4 to 9. Before that, the first three chapters of the book set the scene by introducing the research topic and objectives, placing news recommendation apps in a historical context, and presenting the data on which the book is based.

Chapter 4 offers a first dive into the effects of news-app use, based on a survey among college students. Contrary to concerns about such apps creating filter bubbles, college students who use news apps know significantly more about current affairs than nonusers. They also have more appreciation for the news that they access. This leads to the conclusion that news apps facilitate rather than constrain news consumption, at least for this particular demographic.

One highly interesting method of data collection applied in the book is a quasiexperiment presented in chapter 5. A group of 37 college students volunteered to take part in an intervention and not use news recommendation apps for one month. Over this period their appreciation for the news they accessed went up. This suggests that there is a group of people who benefits from a more traditional news diet with more proactive searches for news rather than tailored recommendations. Some of the participants experienced negative feelings when they stopped using news apps, such as a fear of missing out. At the same time, they often felt ignorant. This was interesting to observe because they did know as much about public affairs as those who did use news recommendation apps. Strikingly, many participants reinstalled news apps again after the experiment. The chapter demonstrates that these types of intervention studies offer great potential for studying news recommendation apps' effects.

Chapter 6 studies the generalizability of the college students' results among a larger sample of 1,156 MTurk users. This chapter confirms that regular users of news apps appreciate the news more but did not report that they have more current affairs knowledge. This chapter includes one of the most interesting findings of the book: People who are heavy users of news apps seem to be agenda resistant, as they had strikingly different views of the important issues facing the country. Compared to light app users, they placed more emphasis on the COVID pandemic and international conflicts, while worrying less about income inequality and climate change. This could indicate that news-app users get exposed primarily to episodic news rather than thematic news.

Chapters 7, 8, and 9 further unpack news-app use by analyzing which apps are used most, who uses them, and (qualitatively) how users reflect on their news-app use. This includes an overview of the most used news apps, where Google News, Apple News, and Microsoft News form the top three. Among the survey respondents, 75% uses news apps almost every day, with the caveat that these numbers might be inflated because the survey is done among tech-savvy MTurk users. Overall, news-app users have positive sentiments about their app-use experience, appreciating personalization and accessibility. A small group of respondents expressed concern about potential biases in the sources selected and worry about missing out on new information when recommendations are based on what news one previously engaged with. Underlining the important gatekeeping role of news apps, respondents generally felt that news-searching activities were reduced since using news apps. Still, they remain selective in which of the suggested news stories they actually read. This shows that news-app users are not passive news users.

The concluding chapter starts very strongly with a personal reflection of the author drawing on her experiences as an app user, parent, and former journalist. These personal reflections center around a real challenge for any scientific project analyzing the role of algorithms and automation in news and news consumption: the need to reconcile worries and negative future scenarios about automated news with the empirical evidence we currently have around these concerns. I appreciate this reflection that the author states she had to remind herself of again and again during the research project. In this light, I believe that it was a good decision to take an exploratory approach in this book.

The book includes many interesting lessons about news apps and filter bubbles. Supporting concerns about filter bubbles are the findings that heavy app users seem to be agenda resistant and that some people appreciate news more when they stopped using news apps. Speaking against filter bubble

concerns, heavy app users were not less informed about current affairs, and several users took active ownership to counter potential negative consequences of using news apps. This was for example done by using several apps, curating apps, or in some cases dropping news apps altogether. These findings should not be taken as an excuse to ignore potential negative future effects of algorithmically curated news apps.

Algorithmic Audience in the Age of Artificial Intelligence is an empirically rich book addressing a highly relevant topic. When reading the book, it is important to consider that some of the research was conducted as early as 2020, when news apps were still a rather new phenomenon. For this reason and the reasons mentioned above, the exploratory nature of the project is in a way inevitable. At times, however, the reader might have wished for more stringent theoretical models, directional hypotheses about the relations between the different variables included in the study, and a more focused presentation of results. Some of the statistical analyses could have benefitted from including more control variables to mitigate problems such as spurious relationships or reversed causality. Still, these caveats should not take the focus away from the important insights that this book offers on news-app usage and the creative ideas on how to study this topic empirically.

The book's approach of studying algorithmically curated news from an audience perspective should be followed up by future research. The rich empirical findings, of which only a small selection has been mentioned in this book review, open up a variety of avenues for future research that no doubt will impact future studies on the influence of news apps.