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## TACTICS OF ALGORITHMIC LITERACY: HOW YOUNG PEOPLE UNDERSTAND AND NEGOTIATE ALGORITHMIC NEWS SELECTION

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With the growing centrality of the smartphone in everyday life, the news and public information that young people consume is increasingly subject to algorithmic curation. From the apps and websites of legacy news media to widgets from aggregators such as Apple News and Google News to social media, more and more spaces through which young people access news are being personalized and optimized for what are assumed to be their personal preferences (Newman et al., 2019). Algorithms thus have a growing impact on how young people build up understandings of the public world. Yet, little is known about how news users actually understand the workings of algorithmic news curation and how and under what circumstances they engage with these selections. Most studies on algorithmic culture start from the perspective of the technology itself in order to understand how algorithms influence citizens' everyday life (e.g. Beer, 2017; Willson, 2017). Studies that consider how users themselves perceive and engage with the algorithmic curation of content, however, still remain scarce, in relation to the consumption of news in particular.

This paper contributes to this literature by exploring how young people experience the algorithmic selection of the news they receive via their smartphones, and how and under what circumstances they aim to negotiate these decisions. Drawing upon De Certeau's (1984) distinction between strategies and tactics, it explores how users' perceptions of algorithms affect their practices on personalized news media and through what practices they aim to intervene in news personalization. Although the structures of social media, search engines and other algorithmically-tailored platforms limit young people's opportunities to actively influence news personalization, users are not completely powerless either. After all, the algorithmic selection of content does not occur in a social vacuum, but is the result of users' interactions with these technologies (Bucher, 2016; Kitchin, 2017). These interventions might be explicit (using manual personalization options, such as clicking a "Hide" or "Snooze" button) or implicit (such as changing browsing behavior).

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Understanding these tactics is important, as people's practices on personalized media in turn help shape these algorithms themselves, and thus, may consequently affect the information that users encounter (Bucher, 2017; Cotter & Reisdorf, 2020). Yet, previous explorations of algorithmic power often downplay such expressions of user agency (Van der Nagel, 2018). Moreover, the little existing work that does consider users' practices around algorithms often remains limited to relatively highly digitally-literate subgroups such as social media influencers (Bishop, 2019; Cotter, 2019). These have a commercial incentive to maximize online visibility and thus might be more likely to seek opportunities to "game the system".

Therefore, this paper adopts a wider focus to understand how young smartphone users in general perceive, negotiate and resist algorithmic news selection, focusing on social media in particular. In-depth interviews with 22 young Dutch news users aged 16-26 were combined with the walk-through method (Light, Burgess & Duguay, 2018), in a three-step data collection process. First, participants were asked to scroll through two or three of their most used social media apps, while thinking aloud about the selection of the stories presented to them. Second, respondents were asked how they imagine algorithmic curation, prompting them with a number of factors that might influence what "news" is displayed on their timelines (i.e. pages and accounts followed, prior browsing behavior, etcetera). Finally, a follow-up interview connected the previous parts, by having participants reflect on how their perceptions of algorithms affect their online practices and behaviors.

The study finds a variety of practices that users employ to adapt their media environments to their personal preferences. The paper argues that these tactics can be considered as expressions of people's "algorithmic literacy" (Bruns, 2019; Cotter & Reisdorf, 2020). This subcomponent of news literacy is becoming increasingly important, now that most of the news and public affairs information that smartphone users encounter has become subject to algorithmic curation. However, the results also show that while direct experiences with news personalization form an important source of algorithmic knowledge (DeVito et al., 2018; Rader & Gray, 2015), frequent usage of personalized media does not automatically translate into higher algorithmic literacy, due to algorithms' opacity.

Young people's algorithmic literacy varies considerably and is context-dependent: for example, while algorithmic curation on Facebook and the impact of friends' engagement with content on young people's own timelines is relatively well-known, some were unaware that news on Apple News or journalistic news apps was (partially) subject to similar mechanisms. This not only affects whether users actually employ tactics to intervene in news personalization on social media, but also the composition of their overall news media repertoires.

These findings raise concerns about young people's practices of informed citizenship. If youth do not know about the mediating role of algorithms on these platforms, they remain ill-equipped to assess the completeness, accuracy and balance of the news they encounter. Moreover, deficiencies in algorithmic literacy may lead to less satisfactory news experiences, which might cause youth to tune out from certain news media. Hence, the paper advocates for broadening media literacy education beyond the critical

evaluation of content. It argues such programs should also equip young people with tactics that help them to effectively, efficiently and consciously access news, to empower them to navigate an increasingly personalized media landscape.

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