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SCREENSHOT METHODOLOGIES TO COLLECT AND ANALYSE SOCIAL MEDIA PLATFORM ADVERTISING

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Background

Digital advertising on social media platforms is hyper-targeted, ephemeral and emerges through complex processes of algorithmic curation. These three qualities render digital advertising largely unobservable to researchers, regulators and civil society. Researchers have developed technical interventions to improve transparency of social media platform advertising such as ad observatories (Burgess et al., 2022) and user data archives (Keegan, 2024). While these interventions enable analysis of the digital advertising ecosystem, they also detach the experiences of individual users from their data. In an effort to explore how the ad model classifies and targets users, and how those users make sense of the ads they see, we leverage mobile screen capture as a data collection technique and as a basis for co-analysis with participants.

In this paper, we present three projects that combine participatory and digital methods to study dark and ephemeral forms of digital advertising. In these approaches, participants are crucial to capturing ads and co-analysing the algorithmic flow of advertising situated within their own lives and cultural settings. Each project invites participants to collect ads on social media platforms, either by taking screenshots on their smartphones (in the first two studies) or running a purpose-built, automated advertising collection app (in the third study). We then critically engage with screenshot

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methods as a form of digital advertising observability, as a prompt for co-analysis of data with participants, and as a mobilisation of contemporary forms of subjectivity. We reflect on the use of the 'screenshot' as an everyday practice of noticing, capturing, and co-analysing the otherwise fast-moving, dark and ephemeral digital feeds that immerse us.

Our studies

In the first project, we explore young people's experiences with and exposure to 'harmful' industry advertising (e.g., alcohol, fast food and gambling) on social media platforms. Over the two-week data collection period, 204 Australians aged 18 to 25 captured screenshots of 5169 digital ads. Participants completed pre- and post-data collection surveys on attitudes toward digital advertising and reflected on their experience in the study through SMS chats with the research team.

The second project explores how digital alcohol advertising on social media platforms relates to nightlife and alcohol consumption practices. We recruited 30 young people to collect data in two contexts. First, they took screenshots of ads they saw for alcohol and reflected on their consumption practices over a month. Afterwards, they interpreted their collected ads in an interview. Second, informants invited two friends to also screenshot ads over a weekend while attending an event where they typically consume alcohol, such as a music festival, party, or night out at bars and clubs. We discussed their findings in a group interview and used the collected ads as prompts.

The third study employs a mobile application which automatically captures ads from social media platforms as they appear within the users' feed (Obeid, 2024). This ongoing project explores where alcohol advertising materialises within flows of ads on social media platforms alongside other brands and products. Participants, including Author 1, collected digital advertising from Facebook over one week. The automatic screen capture through the app ensures comprehensive collection of advertisements without relying on manual screenshotting and can detect nuances such as how long the ad was visible on the screen. Although the screenshotting is automated, participants can review and remove images before choosing to send them. At the conclusion of data collection, participants and researcher reflect on the collected ads in individual sessions.

Screenshotting as a participatory method

The participatory approach in each of these projects developed as the researchers collaborated on the work and reflected with each other. We contend that screenshot methodologies, exemplified in our three studies, are valuable because a) the participatory ethos of working with research participants to notice, collect, curate, and co-analyse their digital traces allows us to study material that is otherwise difficult to observe; b) participant consent and privacy are built-in to the approach; and c) through discussions we are able to reveal vernacular understandings of algorithmic models (i.e., 'algorithmic gossip' (Bishop 2019)) and the relationship between users and patterns of content over time.

The value of screenshotting as a method is that it captures dark and ephemeral advertising through an everyday practice of archiving and analysis. The research

process leverages the everyday practice of capturing screenshots of digital feeds to send and discuss with friends (van der Nagel, 2021) for research purposes. The screenshot serves as a form of platform observability that participants can practically undertake and ethically understand as a reflective and sense-making practice. As Jaynes (2019) explains, screenshots operate as a form of 'evidence' in digital cultures and come with their own set of ethics and etiquette for different social groups. In both a research and everyday sense, screenshotting is a pragmatic response to the dark, fast-moving, and ephemeral character of digital feeds. If ads are only seen for a moment by the person targeted, then the screenshot is a tactic for collectively documenting and making sense of them.

Our approach builds on the scaffolded consent and participatory co-analysis in 'scrollback' methods (Robards & Lincoln 2017; Møller & Robards 2019). Where the scrollback offers a mode for making sense of what is archived over time on participants' personal profiles, the screenshot is a method for capturing and making sense of what isn't archived (and indeed what is ignored or skipped over in the case of ads) in the increasingly live, customised and ephemeral flows of digital media platforms. In our conceptualisation of screenshot methodologies, consent is scaffolded up first through explanatory statements and informed consent processes, second through prompts and guidance around what should and should not be screenshotted (including training videos and on-boarding sessions), and then ultimately through what the participant decides to send us via SMS (study 1), upload into the project folder (study 2), or agrees to be sent off (study 3).

By facilitating observability of digital advertising, these methods generate a novel research object: collections of digital ads illustrating the *output* of social media platforms content curation models. As the platforms' models respond to and endeavour to preempt user engagement with the platform, advertisements are dynamically generated, selected and curated. While users only typically see one post at a time, screen capture methods highlight patterns within digital content targeted to individual users. Through our reflections with participants, we can understand how users make sense of processes of algorithmic curation and classification.

Conclusion and implications

These three projects use screenshots to enable participatory data collection and analysis of digital advertising on social media platforms. Discussions of how consent is scaffolded, the role of participants as co-analysts, and the ethics of what is captured and who is visible must be key to screenshot methodologies. While our focus has been on algorithmic advertising, screenshot methodologies can be applied in a range of research areas to understand an array of digitally mediated social phenomena. Through our formulation of screenshot methodologies, we can begin to apprehend the ways individual users experience the datafication and commodification of themselves on social media platforms and how it is refracted back to them in the form of advertising.

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