0. Statement

After identifying autoplay capitalism as a 'killing rhythm,' our instinct was to introduce an intervention to expose this phenomenon. However, a simple disruption may only be effective for abled users, while for differently abled people – particularly neurodivergent individuals – it may be either ineffective or overwhelming. Therefore, rather than merely revealing manipulation, we must consider their cognitive challenges and design a more inclusive solution.

Through this exploration, I realised that the core issue with autoplay lies in how it exploits attention vulnerabilities, subtly stripping users of their autonomy – neurodivergent individuals being among the most affected. Naturally, then, our objective should be to help them regain control. The pop-up plugin is designed to wake users from this trap, making them aware of the platform's influence and allowing them to reclaim their own decision-making. This also provides a direction for further development: could we offer more open-ended choices?

References such as Duolingo also reminded us, as practitioners, that a humorous approach is often more effective than a serious reminder. For those who are particularly sensitive to psychological triggers, positive and engaging interventions can better encourage their active participation.

Ultimately, design is not just about exposing hidden mechanisms or correcting user behaviour; it is about creating an environment where individuals can make choices freely and engage with willingness.

(from the reading list)
 Gerbaudo, P. (2012) 'Introduction', in *Tweets and the Streets: Social Media and contemporary activism*. London: Pluto Press, pp. 1–17.

2. (from the reading list) McLuhan, M. and Fiore, Q. (1967) *The medium is the massage: An inventory of effects*. Berkeley: Gingko Press.

Gerbaudo argues that social media is not merely a communication tool but actively choreographs collective action. This idea provides a useful framework for understanding how streaming platforms influence user behaviour. In our project, we explore autoplay's role in shaping viewing habits, using YouTube as a case study.

On the surface, influencers appear to guide user choices. However, the true choreographers are the platforms themselves. YouTube uses autoplay, algorithmic recommendations, and binge culture to structure content consumption. While users are presented with multiple interactive options, these choices often create an illusion of control. As users are continuously exposed to an endless stream of content, they experience decision paralysis, making it increasingly difficult to break away from the viewing cycle.

For neurodivergent users, this choreography is even more impactful. Their difficulty in regulating attention makes it harder to resist autoplay's seamless transitions, drawing them further into autoplay capitalism. Ultimately, the platform orchestrates a large-scale, passive collective viewing experience, ensuring prolonged engagement while reinforcing its economic model.

As McLuhan suggests, media as an environment is invisible; it permeates our lives like air, subtly shaping our perceptions, behaviours, and social structures. As mentioned earlier, users' attention is guided by platforms, immersing them in personalized content. These platforms sell attention, converting it into advertising revenue. Users become numb and lose their decision-making ability, surrounded by an overwhelming amount of information. Autoplay and algorithmic recommendations create an invisible media environment that subtly alters users' perception of time and behaviour. There is no clear way to see through the invisibility of streaming platforms or their commercial interests. Therefore, in our project, we aim to disrupt autoplay by installing plugins and generating pop-ups, revealing this hidden manipulation and helping distracted users regain control over their minds and bodies.

Furthermore, the book's analysis of traditional media provides a useful contrast to streaming platforms. Traditional media consumption was structured: TV had scheduled programs, newspapers had editions, and books required intentional reading time. Attention was directed linearly, with clear start and stop points. However, modern digital platforms operate differently. Streaming services, social media, and gaming now function on demand, resulting in fluid and boundless content consumption. The shift from scheduled to algorithmic engagement removes the natural cues that once dictated when to stop consuming. We chose pop-ups as an intervention because they are disruptive, intrusive, and impossible to ignore, making them ideal for breaking or forcibly interrupting the autoplay loop.

3. (outside the reading list) Newport, C. (2019) 'Introduction', *Digital Minimalism: Choosing a Focused Life in a Noisy World*, New York: Portfolio/Penguin, pp. 1-10; 'Part 1: Foundations', pp. 11-50. 4. (outside the reading list)
 Harris, T. (2019) *How technology is hijacking your mind-from a former insider,* Medium.
 Available at: <u>https://medium.com/thrive-global/how-technology-hijacks-</u>peoples-minds-from-a-magician-and-google-s-design-ethicist-56d62ef5edf3

(Accessed: 26 February 2025).

This article further helps us understand the negative impact of autoplay and algorithmic recommendations from the user's perspective. These features are not just functions; they are economic strategies designed under capitalist control to exploit human psychology. The continuous stream of new content triggers dopamine release, creating a cycle of instant gratification that traps users in endless consumption. Moreover, in the attention economy, user attention is a commodity, and autoplay is one of the key tools for harvesting it. Platforms like YouTube maximize screen time through these strategies, converting prolonged user engagement into a product sold to advertisers.

Therefore, our plugin not only interrupts autoplay but also uses pop-up messages to raise awareness – especially for neurodivergent users – about these manipulative mechanisms. Besides, in our YouTube Attention Statement letter, created in response to feedback, we translate time spent on the platform into a financial bill, reminding users how their attention is being commodified.

Beyond deepening our understanding of autoplay and algorithmic recommendations, this book also led me to reconsider the design of our pop-up plugin. Since the goal is to help users regain control of their attention, we may need to find a balance between functionality and user experience. If pop-ups are too intrusive or appear too frequently, they might become an additional distraction – especially for neurodivergent users.

Regarding the analysis of mechanisms, the previous references have provided detailed explanations, and this article also explains it in relatively accessible language. In summary, autoplay is a bottomless design that eliminates natural stopping points and the opportunity for users to make active choices, forcing them to passively accept content.

Therefore, we aim to break this passive state by reintroducing choice. For example, each time a pop-up appears, users are required to actively choose whether to continue watching or stop. However, some of the options we provide only allow users to stop watching. While this might be effective in helping users escape the platform's control during the initial use of the plugin, could it become a new form of coercion over time? For neurodivergent users, we may need to consider whether the plugin could create excessive psychological pressure on them.

Currently, the pop-ups focus more on reminding users that their attention span is being commodified and helping them become aware of the manipulative mechanisms of autoplay. However, we overlook another psychological issue for users: the anxiety caused by missing updates, which is Fear of Missing Something Important (FOMSI). Therefore, our pop-ups could also include related prompts, such as: 'You've watched enough; you won't miss any trending content.' 5. (project) Zhou, M. (2016) *Fragmented Time* [Film]. Available at: <u>https://www.behance.net/gallery/45820185/Fragmented-Time-</u> (Accessed: 27 February 2025).



This project provides a strong visual example of reflecting on neglected behavioural patterns. The video starts with a single To Do List window, gradually opening more and more unrelated windows. In the end, a huge number of To Do List windows return, reminding users of their original purpose and subjective thoughts. It also offers the option to turn off Wi-Fi, helping users break away from this distraction.

Throughout the video, the interface stretches, colours shift, and window elements behave strangely (such as moving away on their own). I assume that each unconventional change symbolizes the struggle between the real and virtual worlds under the overload of online information, as these disruptions constantly interrupted my viewing – yet I didn't find them frustrating. This suggests that noticeable disruptions might be necessary to escape control, which is why we chose to design pop-ups in irregular, unpredictable forms.

Additionally, absurdity plays a crucial role in our design considerations. The pop-up plugin itself is already an intervention tool – if users find it annoying, they might reject it. To avoid this, our simulation video includes an extreme number of pop-ups, playful text, and exaggerated visual changes. Humor captures attention, and through this absurd yet lighthearted design, we hope to remind users of their behaviour in a way that feels engaging rather than forced or oppressive.

6. (project) Duolingo (2012) Duolingo [Software]. Available at: <u>https://www.duolingo.com</u> (Accessed 27 February 2025). Mansur, O. (2023) How we developed our addictive and delightful widget, Duolingo Blog. Available at: <u>https://blog.duolingo.com/widget-feature/</u> (Accessed: 27 February 2025).



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Our pop-up design has been greatly inspired by the Duolingo app. It features a green owl named Duo as its icon. When users install the Duolingo widget, they can see the bird's varied expressions and appearances, such as happiness, encouragement, anger, and even 'death'. This emotional design enhances the app's appeal and motivates users to continue learning through continuous, progressive emotional feedback. Therefore, we aim to create pop-ups with rich variations that can interrupt autoplay in an engaging way, reclaiming users' active attention. At the same time, while the pop-ups vary in form, they feature text with different tones and images with varying levels of intensity. To further refine the pop-up plugin, we could also consider implementing progressive reminders. For example, if a user watches videos for an extended period, the pop-ups could escalate from gentle reminders to stronger demands. If the user repeatedly ignores the reminders, the plugin might not just generate pop-ups but could more aggressively close the window.

The Duolingo widget is designed to be very simple and easy to understand, so we need to be mindful of whether our pop-ups might be too complex, potentially hindering user comprehension. For neurodivergent users, it is crucial that pop-ups are direct and easy to understand and use. Overly complex pop-up designs could increase the barrier to entry for users.

Beyond pop-up design, we could also build a complete ecosystem, similar to Duolingo. Multi-channel reminders would be more effective, such as sending emails to notify users when their viewing time is excessive and they should stop watching.