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Attention wars, psychopower and platform environments: An autoethnographic study on BeReal☆

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ABSTRACT

The last two decades have seen an attention war play out between digital platforms, with social media as the main battleground. This has led to the development of techniques such as the hook model to capture users' attention and subconsciously direct their behaviour towards private ends. Bernard Stiegler has called this new form of governance "psychopower". Drawing on autoethnographic research, this paper presents an analysis of the social media platform BeReal, focusing on the role of the platform's environment design in capturing users' attention. Our findings show that the platform succeeds in holding users' attention through nudges and habit formation. We also found a strong link between attention capture, emotional exchange and the experience of affects.

1. Introduction

For almost two decades, a veritable "attention war" has been raging. According to a number of studies, this war has become a new battlefront in political and economic struggles (Srnicek, 2018; Williams, 2018; Franck, 2019a, 2019b; Mears, 2023). Among the main combatants are social media platforms and apps, whose efforts to capture users' attention serve two main purposes: (a) to keep users interacting with these digital spaces for as long as possible, which enables the collection of personal data for profiling and the development of other predictive products (Zuboff, 2018), and (b) to get users to take actions in line with the platform owners' objectives, such as clicking on adverts, posting content or buying products.

Using techniques from behavioural psychology and marketing, these digital spaces are able to appeal to users' drives and emotions in order to grab their attention and trigger certain behaviours almost unconsciously (Stiegler, 2010; Zuboff, 2018; Williams, 2018). In this way, social media platforms have become a privileged space where billions of users connect every day (Williams, 2018), generating countless millions of interactions and releasing all kinds of personal data that allow platforms such as Facebook and Instagram to develop, among other things, targeted advertising to pull users' attention in the desired direction (Zuboff, 2018).

In this regard, Kosinski et al. (2013) claimed to be able to predict sensitive personal details such as age, origin and sexual orientation from 300 Facebook likes, without the user having disclosed these details to the platform. Similarly, Bachrach et al. (2012) reported that they could predict a user's personality based on information in their Facebook profile, such as the size of their friend's network, the number of photos posted or the number of events attended. Kramer et al. (2014) showed that they could induce emotional contagion in users by displaying more positive or negative content on their Facebook interfaces. It is therefore no exaggeration to say that social media platforms are the main labs for testing attention capture and direction techniques, which are mainly used to induce consumption and, of course, to manipulate public opinion. Well-known cases of this include Brexit and the US elections (Cadwalladr and Graham-Harrison, 2018).

Most studies analysing the attention war waged by social media focus on the content that users find on these platforms. At the neural level, it has been shown that scrolling through social media content

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generally acts as a stimulus that keeps users' attention while they wait for some kind of reward, which in problematic cases may lead to addiction (Moretta and Buodo, 2021). Social media platforms also prioritise visual content over verbal content because it tends to capture more attention and require less cognitive effort to process, while also eliciting emotions and visceral responses more quickly (Brubacker and Wilson, 2018). It has also been found that when content is emotionally or morally charged, it tends to attract more attention than neutral content (Brady et al., 2020a). For example, it has been shown that journalistic media tend to post clickbait with highly emotional and moral headlines and images on social media, while providing more informative content on their websites (Lamot, 2022). The algorithmic targeting of social media content also involves microtargeting (Bruno, 2013; Bentes, 2019), which appeals to the motivations of the group with which the individual identifies (Brady et al., 2020b). For example, it has been shown that some fast-food content is visually designed to specifically attract the attention of children and adolescents (Elliott et al., 2022; Ellison et al., 2023), and that celebrities share certain visual and textual content to attract the attention of specific social groups (Lalancette and Raynauls, 2019). Emotions therefore play an important role in the techniques used to attract users' attention.

Despite all these studies on social media content, there is not much social science literature on how these platforms' environments are designed to attract users' attention. In other words, there is a lack of evidence on whether the most fundamental weapon in the attention war may be platform design itself. Existing approaches point to the hook model developed by Nir Eyal (2014) as the paradigmatic design for platforms in terms of directing users' attention by exploiting cognitive automatisms (Williams, 2018; Bentes, 2022; Morato and Nunes, 2023).

As part of a broader research project on how individuals' behaviour is driven by attention, this paper is framed within the above debate and aims to empirically analyse how the environment of the social media platform BeReal is designed to capture users' attention. To this end, an autoethnographic study of BeReal was conducted, with a particular focus on how features related to the hook model succeed in capturing attention. In the following sections, we will first conceptualise the meaning of attention through Bernard Stiegler's proposal on psychopower. We will then describe the hook model (the main framework used to analyse BeReal's environment) and link it to nudging and habit formation. Next, we will review the dialogue between mood, environment and atmosphere to see how the circulation of affects and emotions is shaped in both virtual and physical space. Following this, we will explain our research methodology and present our data and analysis. Finally, we will discuss our conclusions and future research directions.

2. Why pay attention to attention?

In *Taking Care of Youth and the Generations* (2010), Stiegler explores the concept of attention in depth, associating it with adult life in two ways. On the one hand, it refers to the ability to consciously focus on a human or non-human object. On the other, it refers to the ability to attend to (or take care of) such objects according to socially agreed moral norms, which Stiegler calls tertiary retentions. These retentions provide a common social measure of what is worthy of attention and frame individual desires. They have been passed down through history in various ways: through oral tradition, writing and the mass media. Tertiary retentions are thus part of a kind of power directed straight at the minds of individuals, called psychopower, which draws attention and care to particular objects and forms. For Stiegler, psychopower always appears in the form of *pharmakon*, i.e. as both cure and poison. It provides a common framework of what is socially desirable, which serves as a guide. However, in order to avoid becoming toxic, it must also allow for conscious reflection on this framework in order to enable critique and change. To pay attention, then, is to consciously focus on an object while maintaining the ability to critically reflect on that object of attention, which implies taking care of it.

With the advent of mass media, and even more so with the advent of digital and social media, psychopower may be responsible for society having lost much of its ability to pay attention, both in the sense of consciously focusing on an object and in the sense of taking care of it. Psychopower may have grown toxic because the objects and information that individuals interact with in the digital environment are designed by a myriad of professionals who use behavioural psychology techniques to attract attention by activating cognitive drives and automatisms that bypass conscious reflection (Stiegler, 2010; Williams, 2018).

In this way, current events are characterised by a form of psychopower which, rather than preventing critical reflection on what we pay attention to, seemingly short-circuits attention itself, i.e. disables the very ability to pay attention. The environment and content design of digital platforms captures attention in order to direct it towards the goals of corporations and institutions, which tend to serve private rather than social interests. The automation of attention thus also implies an incapacity for social and community care, due to the lack of a common political project to focus our attention on what we consider important. For this reason, we argue that social sciences today should pay more attention to the ways in which attention is directed. This paper contributes to this debate by showing how the environment of the social media platform BeReal succeeds in capturing attention.

3. The hook model

The hook model was developed by behavioural designer Nir Eyal (2014), who sought to provide a method for digital platforms to hook their customers on the products and services they offer. The method has four phases: trigger, action, variable reward and investment. These are designed to create a habit of using a particular platform and to direct users' behaviour towards a desired goal.

A habit is broadly defined as an automatic behaviour triggered by a cue in a particular context, requiring the same behaviour to have been repeated several times in the past in an identical or similar context (Lally and Gardner, 2013; Kilb and Labudek, 2022). The action must be easy to perform and unconsciously associated with pleasure seeking or pain avoidance, as these aspects are key to habit formation (Verplanken, 2018). Eyal (2014) found that negative emotional states such as boredom, loneliness and frustration are particularly prolific in this regard, with people creating habits that associate platform use with the avoidance of these states. Facebook, for example, claims to be able to identify the vulnerable emotional states of teenagers based on their posts in order to display advertisements at the right time (Levin, 2017).

Once users have made a habit of using a platform, they need to be prompted to behave in the desired way. This is achieved through nudges. A nudge is any aspect of the environment design that steers people's behaviour in a particular direction without restricting their freedom of choice or resorting to obligations or prohibitions (Sunstein and Thaler, 2009). By exploiting automatic tendencies such as preference for the default option, social influence, or the tendency to pay more attention to what is visible, environments can be designed to subtly nudge people's behaviour in a particular direction.

Bentes (2022) pointed to the hook model as the power technology equivalent of Bentham's panopticon in the field of discipline. Whereas surveillance in the panopticon operated on the basis of small, normalising sanctions on bodies, the hook model is based on the use of small, mainly emotional rewards that modulate automatic patterns of behaviour to form habits that capture users' attention. Meanwhile, Seaver (2019) compared the methods used by digital platforms to captology and trapping, arguing that environments are algorithmically designed to lure users down certain paths in order to trap them.

4. Platforms and atmospheres

When exploring the link between emotion, affect and space, we find a three-tiered dialogue between mood, environment and atmosphere

(Anderson, 2009; Bille et al., 2015). Mood refers to an individual's emotional state and affect, while environment refers to the affect that a place exerts from the perspective of its objecthood. Atmosphere is created in a dialogue-interface between the mood of the individual and the environment of the place. Once created, atmosphere affects and modulates mood and environment. Whereas mood and environment last for a period of time, atmosphere is more ephemeral, changing and mobile. For example, walking down a dark alley (environment) may generally make one feel afraid (mood), but if it is full of people behaving in a way that is perceived as friendly, the atmosphere will be different than if it were empty. In the same way, environmental design affects the resulting atmosphere (Davidson and Milligan, 2004; Healy, 2014). If the city were to change the environment by installing street lighting, this would foster an atmosphere that creates a sense of greater safety. In this way, any atmosphere will also help to guide the direction of attention: the object of attention will not be the same when one feels safe as when one is in a mood of insecurity.

Similarly, certain atmospheres are also created in virtual space (Pearce, 2019; Downing et al., 2021), affecting the mood of platform users. Although we have not explored the dynamics of digital platform environments, the interesting dialogue that occurs between the physical place and the virtual space has been explored in depth, showing that the resulting atmospheres are the product of the two together (Hughes and Mee, 2019; Downing et al., 2021; Harris and Whiting, 2024). In the following pages, we will use the case of BeReal to illustrate the link between the hook model and an environment designed to affect individuals' moods and direct their attention. In doing so, we will consider the dialogue between physical place and virtual space in the creation of atmospheres.

5. Methodology

The empirical material used for our analysis was gathered through autoethnographic research carried out by the first author on BeReal between January and July 2023. We chose this social media platform for four reasons: (1) It was launched only a few years ago and has experienced tremendous growth, and very little literature has been written about it. (2) It is novel in terms of how it works and how it is structured, and both of these aspects allow us to draw a clear connection with the capture of attention and affects. (3) The point of the application and the main attraction for users is attention, specifically the ability to capture it for a few minutes several times a day: users are encouraged to be particularly real and authentic for a few seconds on the premise that they will attract the attention of people who are interested in that authenticity. (4) In the attention war, BeReal has managed to carve out a space where it can capture attention for a few minutes a day continuously over time.

Autoethnography is a research method in which the everyday experiences of the researcher are used as data to analyse or explain a phenomenon beyond the self (Adams et al., 2015). In this respect, it departs from the positivist paradigm, which argues that there must always be a distance between the researcher-subject and the object of research in order to produce valid knowledge (Haraway, 1991; Mitra, 2010; Adams et al., 2015). The autoethnographic method has been used primarily for two occasionally overlapping purposes: (a) to produce scientific narratives that are distinct from the Western, white, heterosexual, middle-class experience that is assumed to be universal and objective (Ellis et al., 2011; Brown, 2019), and (b) to collect, analyse and give value to embodied experiences, such as affect and emotion, that are often dismissed by the positivist paradigm as irrational and lacking in objectivity (Butz and Besio, 2009; Humberstone, 2011).

The use of autoethnography in this research serves purpose (b), as the researcher sought to record his embodied experience of how BeReal's environment would capture his attention, while also attending to related emotions and affects. The reflexivity and self-analysis involved in this method allow for an exercise in identifying and becoming aware of behaviours that are performed automatically without rational thought. Without this sustained exercise, we believe it would be difficult for users to recognise these experiences and express them, for example, in interviews.

This study also fits into what has been called "technography". Broadly speaking, whereas ethnography is concerned with how culture and human relations shape and sustain social life, technography attempts to approach the same phenomenon from the perspective of human-technology connections (Kien, 2008; Jansen and Vellema, 2011). Building on Latour's (2005) thinking, technography understands technical objects as active subjects with agency, rather than as passive objects used as tools by humans. Thus, in addition to describing the characteristics of the technology, our main aim is to show its connections with people and other technologies, in order to analyse how they actively participate in the construction of social life. In this line, we consider BeReal's environment design as a technology and aim to provide information, based on the embodied experience of the first author, on how this technology contributes to capturing and directing social attention (psychopower). This would therefore be a case of autotechnography.

Stepping out of the positivist paradigm also entails an exercise in reflexivity for the author, particularly when conducting autoethnography (Mitra, 2010; Adams et al., 2015). This involves reflecting on the context and place from which knowledge is produced and the implications this has for data collection and interpretation. In this case, it is important to describe the position of the researcher as a knowledge producer in relation to the use of social media. Firstly, as a Millennial born in the first half of the 1990s, the researcher belongs to Generation Y, which lies between those who have spent most of their lives outside current digital media and those who were born into them. Although Millennials born in the 1990s are practically digital natives, they tend to prefer offline social interactions to digital ones, unlike Generation Z, for whom digital communication is part of normal daily life (Levickaite, 2010). The researcher identifies with this description. Although he has been using and participating in social media such as Instagram for some time, his communication on these platforms usually consists of sharing videos with his friends. He does not usually post pictures of his everyday life. When he does post pictures, they are usually of him with other people. He rarely shares photos of himself alone and admits to feeling some embarrassment when taking photos in public. The above means that his need for social acceptance does not usually involve the use of social media, which may lead to a difference in the attention he pays to BeReal compared to, for example, a Gen Zer.

This difference in attention may be exacerbated by the fact that the researcher identifies as male. Duggan and Brenner (2013) showed that women tend to use more social media than men, which could mean that they culturally direct more attention to these platforms or that these platforms are specifically designed to engage one gender more than the other. Discrimination against non-binary groups has also been reported, for example when it comes to creating profiles (Spiel, 2021). Similarly, as a white Westerner,[1] the researcher will not experience racial bias, such as increased difficulty in adapting cameras and filters to non-white facial features (Riccio and Oliver, 2023) or exposure to racist comments (Mozafari et al., 2020). In this regard, the research data will not shed light on how the variables of gender and race relate to the ways in which BeReal's environment design captures attention. This does not detract from the validity of our research data and conclusions, but it will be important for other studies to provide information on the influence of these variables.

Data were collected using a field diary in which the researcher recorded his daily interactions on the social media platform, as well as some internal reflections and observations on the behaviour or posted

[1] The autoethnography was carried out mainly in Barcelona, with Catalan as the main language of interaction on the platform.

content of other users. The overarching aim was to record any thoughts or actions on the part of the researcher towards BeReal, mainly in relation to its environment design. The field diary was not always on hand to record interactions, so these were sometimes annotated on the spot on the researcher's smartphone or, where this was not possible either, committed to memory for later inclusion in the diary. As the notification to post arrives at a random time each day, the researcher often found himself jotting down his entries in the notes section of his mobile phone.

The data collection was structured around six types of entries: "effects of receiving the notification to post", "effects of posting", "effects of receiving notifications of interactions with other users", "effects of interactions with other users", "effects of thoughts about the platform not related to a notification", and "other observations and reflections". Entries consisted of short one- or two-line sentences describing these "effects", understood as the actions, interactions, thoughts, emotions and sensations that each of these situations triggered in the author. The final category included anything that fell outside the other entry types, such as reflections on patterns, on the behaviour of other users or on specific features of the social media platform.

The analysis, which was carried out together with the second and third authors, involved linking the collected data to BeReal's environment design, taking into account the hook model, nudging and habit formation. A parallel analysis of the platform was also carried out, focusing on the specifics of how it works, the format of the posts and the possibilities for interaction between users, among other aspects. From the collected data, a dense description was constructed, which is presented in the following sections. The construction of a dense description (Geertz, 1992) implies an exercise in "densifying" descriptions by combining them with explanations that make them understandable. In this case, the aim is to paint a picture of how BeReal manages to capture its users' attention through its environment design. The results presented below represent a first analysis of the material, focusing specifically on how the hook model works on this platform, without exploring other types of considerations unrelated to this model.

6. HOW does BeReal work?

BeReal is a French digital platform that launched in December 2019, although it did not become popular until the spring of 2022, with an increase in users and funding (Boffone, 2022). In August of that year, it became the most downloaded app on the Apple Store in the United States, with 20 million daily users (Clarke, 2022). BeReal is considered a spontaneous online social network (SOSN), the main characteristic of which is the aim to ensure that user-generated content is as real and authentic as possible (Bulchand-Gidumal, 2023). This is achieved through the application's environment, which does not permit image filtering, for example.

Once a day, the application sends the user a "Time to BeReal" notification, indicating that it is time to post and that there are 2 min left to do so. A key feature of BeReal is that the posting time changes every day and is unknown to users, who all receive this notification at once. A BeReal post includes a photo taken by the front-facing camera of the user's phone (which captures the context) and another taken by the back-facing camera (which shows the user). When the user prompts it to do so, the app automatically takes the two photos within a few seconds of each other, giving the user just enough time to aim at their surroundings and then pose for the selfie. The app also automatically edits the photos together, so the BeReal is ready to share in no time. Users can also write a short caption, share their location and, as of May 2023, link to a song on Spotify. There is also the option to share the post via Instagram and WhatsApp.

Users cannot post freely on this social media platform. In fact, they can only upload one BeReal per day, and they cannot see their friends' posts until they have posted themselves that day. In this way, the digital platform relies on the scarcity of posts to ensure authenticity (Boffone, 2022). If the BeReal is not uploaded within the 2-min time limit, it also shows how late it was posted. If the BeReal is uploaded within the given 2 min, the user is rewarded with two bonus BeReals that can be posted at any time.

Users can interact with other people's posts through comments and "RealMojis". RealMojis are selfies taken by the user to mimic the emojis they want to react with. After uploading their daily post, users can see the photos of their BeReal friends, as well as the comments and RealMojis that a given post has received. When a new notification to post is received, the previous day's BeReals disappear. Only the posts uploaded by the user are stored in their Memories section.

7. It's time to be real: hooking users' attention

The way BeReal is used differs from other social media platforms such as Instagram or Facebook. In the researcher's experience, while on the latter a lot of time is usually spent viewing other users' stories and scrolling through the platform's content, on BeReal content is scarce and users only open the app to look at their friends' posts when the platform sends them notifications. The researcher's daily activity on the platform was limited to browsing his friends' BeReals and interacting through comments or RealMojis. On no day during the research period did he spend more than an hour on the platform. This minimalist approach appears to work, inviting participation because of its simplicity and the low effort required.

7.1. Nudging

We identified three main nudges associated with the call to post daily. The first is the notification telling users that they have 2 min to post. The researcher often found himself waiting expectantly for this notification. Similarly, when he put off posting because it was not a good time or because he did not feel like it at the moment, he would spend the rest of the day thinking about the fact that he had not yet posted his BeReal. The feeling he experienced was like a sense of duty, as if it were a task that had to be completed every day.

In the researcher's experience on the digital platform, the sense of duty to post was constantly triggered by a second nudge: notifications that his friends were posting their BeReals. Every time a friend posts, the application sends a notification. If a user enters the platform without having uploaded that day's BeReal, they will find their friends' photos blurred out and covered by a message encouraging them to share their own post. Clicking on this message takes them directly to the camera function. On many occasions, receiving these notifications prompted the researcher to post his own BeReal, as if they were a constant reminder that he had a job to do. The same appeared to be true for his friends: if the researcher posted hours after receiving the initial notification, one or more of his friends would also post their BeReal within a few minutes.

The third nudge is that users can post two bonus BeReals if they upload the first one within the 2-min time limit. On most days the researcher waited for an interesting opportunity to post his BeReal. However, the possibility of uploading two bonus BeReals tempted him on more than one occasion to take his photos in the 2-min window, sometimes without paying much attention to the content, knowing that he could capture other, more interesting moments later on.

7.2. Habit formation

We found that participating on the platform required some conscious effort in the first month, but later became something of a habit. Rather than experiencing the platform as having no particular purpose, as is the case with Instagram, for example, the researcher developed a habit of posting every day and regularly checking his phone for the notification to capture his daily BeReal. He also noticed a certain dependency on posting, especially when the notification arrived in situations where he could not take photos, leaving him feeling somewhat anxious about

when he would be able to do so. He also engaged in some mental planning, i.e. thinking about the most interesting time of the day to post his BeReal. In this respect, on most days, he uploaded his post several hours after the notification, as he waited for a good opportunity to take the photos. The researcher felt a kind of need to share everyday moments that might be interesting to his friends in order to increase his chances of attracting interactions. However, this need depended on his motivation on any given day, as he sometimes took his photos on the spot without thinking about whether the context was attractive or not. Here we find a first link between the researcher's mood and BeReal's ability to capture attention: although the habit of posting is at play, there is also a dialogue between mood and the attention paid to posting.

The actions that the researcher had to perform within BeReal were also perceived as very simple and straightforward, a factor that is strongly related to habit formation. As mentioned in the methodology section, the researcher is not in the habit of posting on social media and has some difficulty taking photos in public places, as he feels slightly embarrassed and uncomfortable taking photos in places where there are strangers and when posing in public. Whenever he was in these situations, he tried to take the photos as quickly as possible. In this respect, BeReal is very fast and easy to use. On one occasion, the researcher was at the gym when he received the notification to post. He was a little embarrassed to take a photo there, but finally worked up the courage to post his BeReal. It took him no more than 10 s to finish.

This set a precedent: on future occasions he felt more confident using the platform to take photos in situations where he was not entirely comfortable, such as travelling on public transport or having a drink in a bar. In this sense, the ability to take photos quickly is key to posting in certain contexts, as evidenced by the posts of other users who uploaded their BeReals at work, for example. As noted above, there is a dialogue between the physical environment of the place and the virtual space in shaping the atmosphere, which has a profound effect on where people's attention is focused. On one occasion the researcher was lecturing to a group of adolescents when the students suddenly called out that they needed a moment to post their BeReal. The teacher agreed to stop the class for a few seconds so that they could take their photos. In this case, the nudge from the platform managed to attract attention and change the atmosphere of the class. The lecture then resumed without any problems and the atmosphere in the classroom was restored.

7.3. Investment

In the researcher's experience, investment in BeReal mainly consists of posting every day and interacting with the posts of users added as friends on the social media platform. Both investments are directly related to the transmission of emotions. In the first case, BeReals include a photo of the context and, ideally, a photo of the user's face. In the selfie, the user typically tries to facially express a context-related emotion. For example, the researcher uploaded many posts while at work, and thus paired the context photo with selfies in which he appeared tired or sad, but sometimes also happy about having completed a task. He often found it difficult to capture the emotion he wanted to convey because the photo was not well taken, forcing him to retake it on several occasions.

In his experience, however, emotions within BeReal flow primarily through RealMojis. It is through these reactions, rather than comments, that interactions take place on the platform, helping to create an atmosphere of emotional exchange between users. There are six types of RealMoji, each of which, as noted above, is associated with a photo of the user: the first represents like, the second joy, the third surprise, the fourth love, the fifth laughter, and the sixth, symbolised by a lightning bolt, is a snapshot taken on the spot. Notably, there is no RealMoji for sadness. RealMojis received by a post become part of it, meaning that all of the user's friends can see them.

When a RealMoji is received, the platform sends a notification to the user. Throughout the research experience, receiving these reactions from other users became the researcher's main motivation for continuing to participate. What's more, his participation on BeReal increased on the days he received RealMojis. In addition to a sense of social acceptance, he also experienced a degree of indebtedness to the people who reacted to his post, which on many occasions led him to react to their posts with his RealMojis. This was also experienced in the opposite direction: when the researcher reacted to his friends' BeReals, they often reacted to his post as well. RealMojis were thus observed to be an important part of the platform environment in terms of creating a proactive mood among users, drawing their attention to BeReal and getting them to participate in its dynamics.

8. Discussion: platform environment design, attention capture and affects

From the data collected, we can draw three conclusions about how the hook model is used as a psychopower technology in BeReal.

Firstly, BeReal's design succeeds in capturing users' attention by sending notifications that act as nudges to post daily. The habit formation induced by the environment of this social media platform seems to be aimed not so much at getting users to invest a lot of time in it, but at getting them to engage with it every day by posting. In the researcher's experience, using the platform is seen as a kind of duty or task to be completed every day, which is reinforced by the reward of social acceptance that comes from interacting with other users. Not posting means not being able to participate on BeReal and not receiving this social reward. In this way, the platform's environment encourages users to pay attention to it every day, even if only for a short time, but it also facilitates this by simplifying the process of posting and interacting with other users from anywhere. In this sense, it has been shown that BeReal is able to temporarily alter the atmosphere of a place, attracting attention to post in environments that would not normally be suitable, such as classrooms or workplaces. We can therefore conclude that the social media platform fulfils two key characteristics for habit formation: the action is easy to perform and there is a social reward (Verplanken, 2018).

Secondly, BeReal's environment design has been shown to direct and capture attention through nudges. In this regard, the notifications sent by the platform every time another user posts or interacts with the user's own post attract attention and act as a distractor (Williams, 2018). Meanwhile, the ability to post two bonus BeReals if the first one is uploaded within the 2-min time limit allows users to pay a kind of "careless" attention to the first post and more in-depth and planned attention to the others. It is also worth noting how attention is directed towards planning the best time of day to post, which is also related to habit formation (Verplanken, 2018). This perceived need to plan is tied to BeReal's operational design: the scarcity of content nudges users to think about the best context to attract the attention and interactions of other users. Here we see a clear correlation with the idea of captology described by Seaver (2019).

Thirdly, the way in which BeReal's environment captures attention is linked to the flow of emotions and affects, mainly related to social interaction. When it comes to emotions, BeReal is primarily designed to enhance their expression. We see this in the platform's own post format, which includes a selfie where users tend to express their emotions, and in the interactions through RealMojis, which express an emotional reaction to other users' posts. Emotional exchange, as some authors have pointed out (Stiegler, 2013; Han, 2017), contributes to individuals interacting more impulsively with each other, resulting in a greater number of interactions on social media. As we have noted, this emotional exchange through RealMojis was the researcher's main motivation for engaging with BeReal. In terms of affects, we believe that these are mainly activated through nudges, such as notifications, and are related to the way in which each individual makes a habit of using the platform. For the researcher, these affects appeared as a mood of social duty to engage with the platform and some concern about capturing a

context that would be attractive enough to generate social interactions. These two affects – duty and concern – drew his attention to BeReal. As affective turn theories suggest, affects and emotions mobilise individuals through bodily sensations more than through rational thought (Massumi, 2002; Ahmed, 2004; Blackman and Venn, 2010). Their power lies in their contagiousness, not only between people, but also from technology to people (Blackman, 2008). In this sense, BeReal's environment is designed to encourage the flow of emotions and affects that contribute to individuals' engagement with the platform.

9. Conclusions and future research

Drawing on autoethnographic research, this paper has analysed how BeReal's environment is designed according to the hook model to capture its users' attention, which can potentially be exploited to direct individuals' behaviour towards private ends. Stiegler's (2010) concept of psychopower has been used as a framework to characterise power that operates on the psyche of individuals to modulate their behaviour. According to our findings, the social media platform manages to attract users' attention every day through a unique strategy built around spontaneity and scarcity of content. This strategy is combined with an environment designed to induce habit formation and nudge users in the desired direction. With respect to habit formation, our findings point to three factors: BeReal encourages daily use by sending notifications to post, makes it easy for users to take photos, and provides a social reward that can only be obtained through participation. In terms of nudging, our research has shown that the notifications sent by the platform about other users' activity attract attention and act as a distractor, and that users are incentivised to post within the 2-min limit set by BeReal through rewards. We also observed a close relationship between the researcher's emotions and affects and BeReal's approach to capturing attention. Its post format and RealMojis lead to interactions between users that are primarily driven by emotional exchange. The platform's ability to attract attention was also found to be linked to the experience of affects, which in the case of the researcher manifested as a mood of social duty and a concern to capture a socially attractive context. BeReal's ability to penetrate the environment of physical places and temporarily influence their atmosphere was also observed. Based on these findings, we can hypothesise that BeReal, and presumably most social media platforms, are designed to maximise the flow of affects and emotions. Such a hypothesis would be in line with authors who have argued that the contagion of affects and emotions is a key factor in governing behaviour through the digital environment (Stiegler, 2013; Han, 2017).

In light of the above, our future lines of research will examine how techniques such as affective computing (Picard, 1997, 2003; D'Mello et al., 2011) could be used to datify users' emotions and affects in relation to specific environments, in order to induce them in contexts to direct users' attention and behaviour. BeReal's environment design is paradigmatic in this respect, as the format of posts and user interactions enables a very direct link between emotions and their contexts. Moreover, facial recognition in photos has proven to be a powerful tool, not only for interpreting affects and emotions, but also for inferring personal information such as age, gender, race and sexual orientation (Bueno, 2020). This future research would make it possible to empirically link the use of psychopower to the forms of algorithmic governance that have been developing over the past two decades (Rouvroy and Berns, 2013).

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CRediT authorship contribution statement

Joan Rovira Martorell: Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Francisco Tirado:** Writing – review & editing, Validation, Supervision, Formal analysis, Conceptualization. **Ana Gálvez:** Writing – review & editing, Formal analysis, Conceptualization.

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