



Phenomenal algorithms: the sensorial orchestration of "real-time" in the social media manifold

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Phenomenal *algorhythms*: The sensorial orchestration of “real-time” in the social media manifold

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journals.sagepub.com/home/nms**Ludmila Lupinacci** 

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Abstract

If our sociality is intertwined with the logics of social media, then the examination of the temporalities that are immanent in these technologies contributes to the understanding of our very conditions of existence. And even if algorithmic sorting is increasingly employed to deliver what is “relevant” at the “right-time,” the notion of “real-time” still permeates these platforms’ operations. Through a critical phenomenological approach, I examine the interplay of chronological and algorithmic ordering. To operationalize the idea of temporality as both subjectively experienced and always arranged by the platforms themselves, I use rhythm as an analytical device. Based on accounts of lived experience obtained through the conduction of the diary-interview method with London-based social media users, I foreground how “the algorithm” is used as a vehicle to make sense of platforms’ temporalities, reflecting struggles and negotiations over social coordination and temporal control. I argue that realltimeness is also rhythmic, and can therefore be scrutinized as a “sensorial orchestration.”

Keywords

Algorithm, digital time, experience, interviews, phenomenology, qualitative research, real-time, rhythm, social media, temporality

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Introduction

Social media platforms produce specific temporal configurations to foreground their status as always-updating structures, which in turn encourages the continuous quantifiable engagement that sustains their data-driven business models (Chun, 2017). This article starts from the premise that, even in a context in which algorithmic sorting is increasingly employed to provide users with what is “relevant” to them individually at the “right-time” (Bucher, 2020), the notion of “real-time” still permeates these companies’ operation and rhetoric. To generate the data footprint required for their profitability, platforms such as Facebook, Instagram, and Twitter continuously deploy time-sensitive prompts and socio-technical affordances that create a sense of “presentness” (Coleman, 2018b, 2020a). Even though most scholars in the humanities and social sciences seem now to agree on the plural and multiple character of temporality (Jordheim and Ytreberg, 2021), algorithm-driven social media add further layers of complexity to this debate—a discussion that matters precisely because time is a fundamental parameter for the ordering and structure of social life (Zerubavel, 1985).

Recently, there has been a profusion of scholarship discussing and theorizing the temporalities of digital platforms and practices (Wajcman, 2015), including the fluid state of the real-time, the present, and the now in social media (Coleman, 2018a, 2018b, 2020a, 2020b; Kaun and Stiernstedt, 2014; Weltevrede et al., 2014) and, alternatively, the prominence of competing temporal regimes emergent from the agency of pervasive algorithmic systems (Bucher, 2018, 2020; Carmi, 2020). My aim is to contribute to these debates by tackling an aspect that, I believe, has not been explored empirically until now—and, in turn, to use these empirical observations to refine and expand our available theorizations. Crucially, my focus is *not* on how an objective real-time is constructed (or negated) by specific platforms, interfaces, or affordances. It is, in turn, centered in exploring how it *feels* to use social media (as an environment, not as discrete applications), how these platforms *appear* to their users in their everydayness and habitualness, and whether *real-timeness* (Weltevrede et al., 2014) is ever really fulfilled in this complex interplay of chronological and algorithmic ordering.

At the core of this debate is the existential relationship between technological infrastructures and the possibilities of sensibility and intelligibility afforded by them (Bucher, 2018). That is, the power of social media is, at least partially, linked to how they control what and when we see of the world. Fundamentally, I argue, this is a phenomenological problem, marked by the dispute over “the conditions for things showing up in the world and mattering to us” (Hoy, 2012: 63). This article is, then, an attempt to respond to the demand for a critical phenomenology of social media, which is not blind to the productive and commercial forces that move those technologies while also centering the experiences of being connected through them (Couldry and Kallinikos, 2018). In broad terms, phenomenology is concerned with the examination of how the world “appears” to our stream of consciousness (Merleau-Ponty, 2012). The starting point of a critical phenomenology of social media is the understanding that, in these platforms, “appearances” are never neutral or organic (Carmi, 2020), as they “are always the result of prior processing” (Couldry and Kallinikos, 2018: 150).

Although it has traditionally been criticized for its alleged solipsistic and apolitical character, phenomenology is ultimately interested in the examination of the structures of experience (Markham and Rodgers, 2017). Experiences, although subjective and individual, are also organized in certain ways by broader forces, being always contingent on processes of orientation (Ahmed, 2006). This issue is at the heart of what Highmore (2011) calls “sensorial orchestration”—the arrangement “of what is seen or felt as notable, perceivable, valuable, noticeable” (p. 23). In this article, to operationalize the idea of temporality as both subjectively experienced and always orchestrated in certain ways by the platforms themselves, I deploy the notion of *rhythm* as an analytical device. It is the perceived temporalities of algorithmic media that I refer to as “phenomenal¹ *algorhythms*.” In this article, I explore when and how these rhythms afford a sense of realtimeness. According to my analysis, this occurs through the orchestration of different sensibilities, which I call instantaneity, simultaneity, ephemerality, and freshness.

Finally, although much of the scholarship available paints a picture in which discrete platforms can construct relatively enclosed and self-contained worlds which afford particular experiences of time, this project challenges this conception by looking at social media as an ecology of interconnected and always-shifting platforms, practices, interfaces, and sites (Madianou and Miller, 2013). Because my focus is on how social media are experienced in the context of everyday life, rather than assuming rigid use of isolated platforms, I am interested precisely in the combination of platforms and the movement and transit between them in what is now our complex “media manifold” (Couldry and Hepp, 2016).

Happening now: social media and their alleged realtimeness

Although different platforms have varied ways of sorting content (e.g. Reddit “crowd-sources” the ranking of posts through the upvote system), and even if users are sometimes given the chance to choose between “chronologic” and “algorithmic” ordering (as happens on Twitter by switching the timeline to “latest Tweets”), digital media have been generally understood to privilege real-time (Gehl, 2011). It goes without saying that real-time has a much longer tradition in the history of computation and automation (Chun, 2011). In social media, although, it generally encapsulates the promises of newness andnowness, both in terms of content presentation and user interaction (Gehl, 2011). The traction of real-time seems to capture a longing for speed (Wajcman, 2015) and immediacy (Tomlinson, 2007)—referring here to both instantaneity and non-mediacy, or a lack of mediative intervention (Scannell, 2014). In broad terms, then, real-time reflects a promised “transparent technologically mediated contact” (Chun, 2011: 88), and also entails a pledged direct experience of the “now” (Coleman, 2020a).

Despite the obvious stickiness of the term, Weltevrede et al. (2014) correctly suggest that, analytically, real-time “does not explain, it needs to be explained.” In critically examining the concept, they argue that “media do not operate in real-time,

devices and their cultures operate as pacers of real-time” (Weltevrede et al., 2014: 127). Their notion of pace focuses on the speed of change of the content presented, which directs attention to how realtimeness is organized through various infrastructures. They conclude by defining *realtimeness* as a socio-technical construction that is both embedded in and immanent to platforms and their cultures (Weltevrede et al., 2014).

The structuration of temporal experiences by social media is also the concern of Kaun and Stiernstedt (2014), who explore how Facebook’s business model—focused on speed, immediacy, and newness—is reflected in its technical affordances. According to them, as part of the now widespread strategy of engaging users for extended periods of time, Facebook’s flow emphasizes newness—even if, in practice, the order of the stream is also heavily influenced by factors other than mere currency. In summary, Facebook’s immediacy relies on the fact that the flow is characterized by rapid change and that, therefore, each post or interaction is made visible for a short period of time (Kaun and Stiernstedt, 2014).

Coleman (2018a, 2018b, 2020a, 2020b) also engages with the apparent dominance of immediacy in digital media. By examining how platforms use the rhetoric of real-time in their promotional materials, Coleman (2018a: 601) reiterates the manifoldness of this temporality—digital media’s time, although marked by the now and the immediate, “is also on-going and open-ended.” The present, then, is active, flexible, multiple, and changing (Coleman, 2018a, 2020a). Her extensive work on temporality also raises the question of “whether ‘the now’ is (or is becoming) a dominant way in which temporality is constituted and organized in today’s digital societies” (Coleman, 2020a: 1696)—a query that is central to the present article.

The contributions offered by these authors are all highly valuable for expanding our understanding of digital media’s temporality, and for the detailed scrutiny of how each platform constructs its own time, which often (but not always) privileges realtimeness. One of the remaining gaps in our theorization, however, is that while a “device” perspective is extremely useful for specifying the particular temporalization of certain sites and apps, the reality is that platforms are not often experienced in isolation, and their content frequently flows beyond and across specific interfaces. In practice, the use of social media platforms in the context of everyday life is much messier, more recursive, and fluid than documented by most of the literature on real-time.

If we go beyond platform-oriented approaches to focus on lived experience, more than simply a matter of information organization (Weltevrede et al., 2014) real-time refers to a broader expectation of social coordination—a synchronization with the events of the world and the experiences of others (Jordheim and Ytreberg, 2021). It is this referential, social nature of realtimeness, rather than a strictly technical capacity, that particularly interests me. Under this conception, real-time matters because it encompasses negotiations over social organization, “reality,” authentic connection, and control. Those disputes, which have a long legacy in the history of digital mediation (Chun, 2011; Gehl, 2011; Van Es, 2016), acquire further layers of complexity in a context of increasing algorithmic intervention, marked by opaque formulas and their concealed operation (Carmi, 2020; Kant, 2020).

In case you missed it: fluid temporalities in the algorithmic media manifold

Recently, one feature of social media has attracted unprecedented academic interest, while at the same time finding enormous traction in popular discourse: platforms' algorithmic systems—or, simply put, “the algorithm.” In this context, the term designates the (often obscured) formulas that guide the content organization of social media. Algorithmic platforms claim to offer what is relevant to us individually while veiling their very operation behind a discourse of impartiality and objectivity (Beer, 2017; Bucher, 2017, 2018; Carmi, 2020; Kant, 2020).

While it is beyond the scope of this article to offer an in-depth discussion of algorithmic infrastructures, one specific aspect of their (perceived) performativity is of central interest to my purposes: the fact that they are said to disrupt social media's previous “chronological” ordering. As indicated by Bucher (2018), the algorithmic logic means that platforms' content presentation is no longer ruled by real-time: “Algorithmic media such as Facebook are more about ‘right-time’ than they are about real-time (p. 80).” She describes a shift from focus on “nowness” or “recency” to one that privileges reaching the right user in the time in which this content will be more relevant, engaging, or interesting. While the real-time web is governed by chronology, the algorithmic one is focused on the most opportune timing for a given encounter (Bucher, 2020). Still, according to her, the logic of right-time does not completely displace the real-time, but rather incorporates it “as a function of relevance” (Bucher, 2020: 1712).

Moreover, social media are characterized by a permanent state of becoming—they are “(a)live” technologies, as their constant movement is key to their logic of the update (Berry, 2011; Chun, 2017) and their overall framing as gateways to an endlessly pulsating life (Beer, 2019). And yet, algorithmic media are said to focus not on a steady temporality guided by universal events but rather on “a series of individuals that (cor)respond in their own time to singular, yet connected events” (Chun, 2017: 27). Crucial here is the understanding that algorithms are not stable objects, as they are entities enacted by socio-technical practices which also affect human practices and experiences (Seaver, 2017).

In short, algorithmic ordering makes it difficult for users to understand the actual operation of the platforms, and to know when and where to find the content that is technically “new” or happening “now.” This alleged shift from chronological linearity to a messier, computational organization has profound consequences for our experiences of the social world—for how, ultimately, the world “appears” to us through social media—which in turn has significant implications for a phenomenological investigation.

You are up to date: from the phenomenology of time to a rhythmic politics of temporality

From a phenomenological perspective, temporality, as a situated *account* of past, present, and future, is considered to always be relational (Heidegger, 2008), and therefore “how long the present lasts will depend on the goal and the origin of the interpretive practice” (Hoy, 2012: 91). This means that temporality is seen as dependent on other aspects, including affective states—how we find ourselves in a given situation, and how

we feel, condition what and how we can perceive (Heidegger, 2008; Highmore, 2011; Hoy, 2012). I posit that a productive strategy for a phenomenological inspection of social media's temporality is to use *rhythm* as an analytical device. Rhythms are patterns of movement resultant from "sensorial orchestration" (Highmore, 2011), systematic arrangements of notes that produce a flow, and which are composed by the cyclical intercalation of rapidity and slowness, repetition and difference (Lefebvre, 2004).

In this regard, Miyazaki (2012) coined the term *algorhythm* to characterize the interplay of the computational logic of mathematical formulas (algorithms) with the rhythmic movement of cultural phenomena. Crucially, Miyazaki's reflections are centered on the measurable temporal effects of technical processing. His use of *algorhythmics*, then, is based on a software studies approach to computational working. I am, in turn, interested in the experienced, *phenomenal* rhythms produced in ordinary encounters with algorithmic media.

More recently, Carmi (2020) called *rhythmedia* the practice by which "media companies render people, objects and their relations as rhythms and (re)order them for economic purposes (p. 119)." Carmi's work illuminates the arranged character of relations that are concealed by the platforms under a foggy rhetoric of "organic" ordering. *Rhythmedia* refers to the intervention of platforms in ranking people and their relations, thus defining the very forms of "sociality" that can emerge from these technologies (Carmi, 2020). Importantly, rhythms are not natural or organic, as they result from ordering mechanisms and calculated strategies (Carmi, 2020).

Rhythm is, in short, about both perception and its arrangement—it is, in phenomenological words, the "organization of time in parts accessible to the senses" (Sachs, 1952: 387). In this regard, I posit that, instead of aprioristically subscribing to conceptions of social media as inherently chronological, "kairological" (Bucher, 2020), or even timeless, observing the experiential rhythms produced in everyday encounters with these technologies seems more generative for examining the manifold and contingent character of temporality. In examining the rhythms, I aim to identify different modalities of mediated synchronization—of temporal alignments between people and technologies (Jordheim and Ytreberg, 2021). Key here is the understanding that temporality is subjected to ordering and yet also susceptible to contestation (Jordheim and Ytreberg, 2021), which seems fruitful for an empirical analysis centered on lived experiences.

Methods

Empirically, rather than focusing on allegedly impartial depictions of a given phenomenon, phenomenology focuses precisely on individual, subjective descriptions, from which it "asks 'What is this experience like?' as it attempts to unfold meanings as they are lived in everyday existence" (Lavery, 2003: 22). The methodological stages for the project from which this article originated consisted of eliciting accounts of concrete lived experience, deploying a phenomenological sensibility to organize these accounts into themes that elucidate the questions of interest, and then presenting these themes in a detailed, evocative narrative, from which I draw conclusions.

In practical terms, I conducted a thematic analysis (Clarke and Braun, 2017) of qualitative data gathered through the diary-interview method (Zimmerman and Wieder,

1977), while embracing a phenomenological disposition. The 20 participants were adults who live in London (United Kingdom) and make use of social media. In 2019, they completed a 5-day-long qualitative diary describing their experiences with and of social media technologies, which was preceded and followed by semi-structured interviews; the analyzed dataset comprised 40 transcribed interviews (i.e. a pre-diary and a post-diary interview with each participant) and 100 diary entries. I tried to recruit individuals that could offer a greater heterogeneity of experiences—the rationale being that any evidence found would not be specific to a particular group, population, or context, but instead more likely to consist of a phenomenon that is observable across diverse cases (Robinson, 2014). Acknowledging that there is no such thing as a standard or archetypical user of social media, the aim of my analysis is to provide granular, illustrative descriptions and reflections that allow for the examination of the common structures of lived experience.

It is worth pointing out that the emphasis on “everyday life” is always at risk of underplaying significant social inequalities. In this regard, there is an increasing body of scholarship examining how experiences of and with technology are contingent on one’s gender, race, sexuality, class, and (dis)abilities, among other social categories. While I recognize and appreciate the role of these distinctions and their intersectional manifestations, one of the limitations of this article is that it only considers their role in shaping experience when they are explicitly mentioned by the interviewee. Despite the nuances intrinsic to each of these categories, a phenomenological take on mediation is premised on the idea that there is an experiential situation that is available to us all (Scannell, 2014). The analytical aim is, then, to identify patterns across the individual experiences, perceptions, and verbalizations provided by a small group of people, which then are used to inform and review wider theorizations.

To recruit participants, I used a multi-sited selection across London, complemented by online adverts. I tried to ensure the inclusion of participants from different age groups and genders, who live in diverse neighborhoods, and have different types of occupation, to increase the likelihood of obtaining a multiplicity of experiences of, and with, social media. Recruitment advertisements were distributed in coffee shops, co-working spaces, universities, pubs, and libraries in a range of locations across the city and its suburbs—Bethnal Green, Brixton, Croydon, Hammersmith, Kentish Town, Mile End, Peckham, Shoreditch, Stoke Newington, Tooting, Wood Green, and adjacent areas—supported by the sharing of a digital version of these ads on Facebook groups related to some of these neighborhoods. The recruitment process was more laborious than initially anticipated, and I attribute the difficulty in retaining participants to the diary requirement. I then started asking the participants themselves to nominate other people who they thought would be keen to take part. The profile of the 20 participants who completed the study can be found in the supplementary file.

Before the conduct of any interviews, and after research ethics review,² the prospective participants were told the general aims of the project, received a sheet containing all the relevant information, and signed an informed consent form. Whereas the data collected through the diaries and interviews were not made confidential in this project—after all, verbatim quotations are made public in the following sections—I committed to anonymize the identities of those involved. I therefore chose pseudonyms for each of the

participants, and deliberately omitted certain details about their occupation or location to prevent their identification.

Although qualitative coding is often framed as “organic,” it is important to acknowledge the active role of the researcher in the identification of themes (Clarke and Braun, 2017). Themes do not “emerge” from the data but are actually constructed according to specific interests and theoretical frameworks (Braun and Clarke, 2006). The accounts of lived experience obtained through the interviews and diaries, therefore, are never examined outside of the theoretical framework described in previous sections—even though I remained open to insights that would challenge, contradict, or complexify this framework. To flesh out the questions of interest, the final list of themes and codes was elaborated, at times to emphasize similarities between participants, and at others to highlight divergences and heterogeneities in the dataset. Rather than offering an exhaustive analysis of social media use, I focused instead on those moments in which the real-time synchronization through technology (even if only as a partially achieved or frustrated potential) seemed particularly prominent.

The platforms most frequently mentioned by the interviewees were Instagram, WhatsApp, Facebook, Twitter, Snapchat, and Messenger. Participants also cited Discord, FaceTime, Hinge, iMessage, LinkedIn, Periscope, Pinterest, Reddit, Skype, Slack, Telegram, TikTok, Tinder, Tumblr, Twitch, WeChat, and YouTube. Within these platforms, there is a vast array of formats, content, and uses. I embraced this multiplicity to explore the experienced rhythms of the social media manifold. Following the theoretical conception of temporality as both subjected to orchestration and at the same time capable of instability and contestation, the first empirical section focuses specifically on the negotiation between these in light of the perceived agency of algorithms, paving the way for the unpacking of the instances in which rhythms are experienced as marked by realtimeness.

Phenomenal *algorhythms*: social media as sensorially orchestrated

While some platforms are more transparent about the way they rank and sort content, for the most part social media now promise to tailor their stream to each individual user. The first dimension of algorithmic systems that the interviewees seem to acknowledge, therefore, is the platforms’ curational character. The interviewees’ verbalizations suggest that any chronological, “pre-algorithmic” platform was assumed to be unfiltered and exhaustive, delivering everything that was posted and shared, in real-time. In this regard, participants described noticing, based both on their own personal experiences with the platforms and from hearing or reading about it elsewhere, a transition toward an organization based on either “popularity” (dependent on the quantifiable engagement a given post gets) or “relevance”—understood as the presumed significance of a given content to the individual. Monica (26 F,³ illustrator) elaborated on this shift, which she observed on Instagram:

They have an algorithm, so it is about how people interact with your account. The people who interact more with your account are going to see your posts more often, and people who interact

the least, even if they still follow you, are going to see it least. Which basically means your post is not going to be seen by everybody.

In short, “the algorithm” (often designated by the interviewees as a singular noun) is perceived by the participants as a sentient entity that was incorporated by platforms (notably, Facebook and Instagram), and that has specific roles: identifying individual preferences, “picking up” posts according to popularity, affinity, and engagement, thus selecting what is and what is not seen by specific users, and organizing the stream of content according to an internal logic. In terms of temporality, what this means is that one’s access to real-time happenings is seen as highly contingent on following the “right people”—as explained by Anna (25 F, footwear developer):

you see what your people, you see what they are interested in. [. . .] If something is happening and people don't have interest in or don't have a strong opinion about, you might miss it and not know that it's happening.

As a result of this “new” regime, the expectation of real-time chronology is replaced by a more opaque logic.

By foregrounding algorithms in the analysis, I do not mean to suggest that they deterministically create specific temporal experiences. My point is that “the algorithm” is used in the participants’ verbalizations as a key device to make sense of social media’s temporalities, particularly when it comes to the now widespread structure of the infinite stream. My interest, then, is not necessarily in the speculative character of algorithmic performativity—the folklore or “gossip” on the operation of algorithmic visibility, as theorized by Bishop (2019)—but rather in how this speculation reflects negotiations over social coordination, temporal control, and agency. After all, as Monica wondered,

The thing of social media being about immediacy, is that I want to see what you post immediately. So it is strange that I am not seeing that post now. Why do I have to go to the profile and find out there were five things that I missed?

The participants’ speculation on the operation of algorithmic systems reflects the realization of a perceived loss of temporal autonomy—which might produce different reactions, being at times criticized for their alienating and reductive nature, and at others praised for bringing serendipity and spontaneity. That is, social media’s algorithms (both as imagined entities and as perceived through direct sensorial engagement) produce specific kinds of experienced temporal patterns, or rhythms.

My analysis suggests that one dominant characteristic of the phenomenal rhythms of algorithmic media is their perceived *homophilic harmony*—that is, the content and the people shown to you first are those attuned to your individual preferences and past engagement: “*You will see stuff that you like seeing, and it’s easy to keep looking,*” summarized Anna. Such an assessment is echoed by Simone (33 F, marketing officer): “*it shows me what I wanna see, because that’s the kind of things I follow, that’s the kind of things I like, that’s the kind of people I associate with.*” Here, then, algorithmic media are understood to be deeply contingent on one’s actions within and across platforms—rather

than independent of human agency, they are assumed to be both driven by and affecting it. As further synthesized by Alyssa (24F, customer service), if a given type of content “*keeps you looking at the platform, then they’ll keep showing it to you.*” Overall, the participants seemed pleased—comforted even—when their individual preferences are met by the recommendation systems; when the platforms manage to, as theorized by Bucher (2020), deliver the right thing at the right-time. The perceived harmony of social media, therefore, is not only homophilic, but preferably anticipatory—as illustrated by Joe’s (25M, mental health social worker) positive appraisal of YouTube: “*YouTube has the best algorithm, you’ve got to give them that. Every single time I think about a song they’re like ‘hey, are you thinking this?’*” The justification given by the platforms—and, apparently, accepted by the users—is always centered on improving and enhancing “the experience.”

Yet, sometimes, this automated harmony is seen as unfit for the messier, disharmonic reality of people’s tastes and preferences. In these cases, interviewees describe an estrangement between their “real” selves and the reductive individual predilections assumed by social media. When the algorithmic right-time does not feel like the right-time for the user (Bucher, 2020), platforms are faced with suspicion, as manifested by Alyssa when describing her attitude toward Instagram: “*I don’t trust just how the platform is built to show you certain content. I trust that it probably knows me very well, but I don’t trust that it shows me everything I want to see.*” That is, despite promises of enhanced experience, social media are frequently perceived by the users as providing a rather diminishing, monophonic, synthesized version of reality.

So rhythms are not always harmonious, precisely because they are flows composed by different paces, sequences, frequencies, and intensities. Therefore, another prominent quality perceived in everyday engagements with algorithmic media is their *repetition*: “*Many times, I find stuff that I have already read, or I see that it’s not a new story,*” described Simone. In certain occasions, this repetition is understood as a cyclical standardized pattern: as put by Anna,

you can refresh, and you go on the feed, and the same sort of people come up first. I guess that must be the people they know that the photos you’ll like, they must just know who you wanna see.

In other settings, the repetition is annoying, entrapping even, as illustrated by Arthur (41 M, education consultant):

the same stuff seems to keep coming round, so I quite often now don’t look at Facebook for a few days, and when I get back after a few days I see the same things again that I had seen before.

What this means for our analysis is that people’s emotional reaction to platforms’ harmony can range quite significantly. Repetition, as illustrated by Arthur’s comment above, might make the rhythms of social media be perceived as *slowing down*. Ratifying the role of moods and affective states in sustaining temporality, “boredom” appeared with great prominence in the analyzed verbalizations related to this perceived deceleration, especially

when associated with the platforms' apparent endlessness (a point that I have discussed elsewhere, Lupinacci, 2021a). Yet, although social media are generally perceived as “endless,” there is the acknowledgment that, due to algorithmic filtering, their rhythmic experience is also invariably finite: “*There are things that you always gonna miss. [. . .] Social media is not going to give you all of the posts,*” said Monica. If we conceive temporality as a fluvial process (Hoy, 2012), then the participants seem to be relatively accepting of the fact that this stream is unpredictable, and that they should “not expect to step into the same river twice” (Bucher, 2018: 81).

This also indicates that phenomenal *algorhythms*—the experienced patterns of movement of algorithmic media—are not purely effects of (imagined or actual) technical operation; they are also organized by the human actors involved in the process. Therefore, aspects such as frequency and intensity of use of a given platform—how often and how deep you step into the river, to appropriate the metaphor above—also impact on its rhythmic experience, as rhythms are produced in the assemblage between bodies and technologies. This point can be illustrated by Sophie (24F, au pair):

When I wake up, I'm very excited to open Instagram and see . . . it always has the people you view the stories the most first [. . .] and I'll get to a point where I'm watching stories of people I don't really care for anymore, so I'll get off that and I'll go through the posts. And then I'll do that for a little bit, and then I'll refresh it and watch more stories. And I find that's the repetition I get myself into. The stories, the posts.

Harmony, then, emerges when the rhythm of social media—the pace and composition of the content surfaced by these platforms—is perceived to be coordinated or synchronized with the right-time (Bucher, 2020) of the user's expectations. Repetition, in turn, usually means that these automated reverberations have either gone too far (the content shown is all too similar) or are too slow, and that the lived rhythms of the user have surpassed those of the platform. Despite the prevalence of harmony and repetition, the agency of algorithmic media is also understood as eventually unsettling—when you expect repetition and encounter difference, you are faced with dissonance, noise:

If you refresh it, there's these new ones straight away. But if you look at the dates, especially if you haven't been online so much, you see photos that were posted one, or two days ago, but that it hadn't shown on my feed. (Anna complained)

Although ordering in social media is never really conceived by the participants as “organic”—as they seem relatively aware of the operation and motivation behind this regime of content organization—it is in moments of breakdown (for instance, when you expect updates and get recurrence, or when you cannot find the tweet that you just read) that the perceived agency of algorithms becomes an issue.

In this regard, while “algorithms” have already been established as a productive vehicle for unveiling the ways in which the agency of social media (and processes such as mediation and personalization) is perceived by ordinary users in the context of everyday life (Bishop, 2019; Bucher, 2017, 2018, 2020; Kant, 2020; Seaver, 2017), I suggest that understanding social media's time through the lens of phenomenal *algorhythms* offers a

potentially fruitful vantage point to study the odd temporalities created when what matters at the individual and societal levels, the chronologic and the algorithmic, the popular and the relevant, seem to clash.

Real talk on real-time: instantaneity, freshness, simultaneity, and ephemerality

Having clarified what I mean by phenomenal *algorhythms*—and how context- and mood-contingent these can be—I will now focus on experiences that are understood as evoking a sense of realliveness (Weltevrede et al., 2014). This section starts from the understanding that any experience of real-time is always made and managed, and that the present is, itself, composed of different temporalities (Coleman, 2020a). Drawing on these ideas, my argument is that realliveness is also rhythmic, and can therefore be scrutinized as a sensorial orchestration.

As described by Maeve (27F, administrative officer), one of the most exciting features of platforms such as Twitter is the fact that they “*deliver messages to you without you having to look out for it. [. . .] You’re really like ‘oh that’s interesting!’—things you haven’t really thought of. You didn’t even know you wanted that information!*” This presumed “spontaneity” is, of course, striking if we consider that the business model that underlies social media is marked precisely by predictability—or, the capacity to anticipate users’ preferences and behavior for targeted advertising purposes (Carmi, 2020; Chun, 2017). People feel like they are thrown into a continuous flow in which “*all sorts of different things might come up [. . .] that’s kind of the beauty of it,*” described Arthur. What this fleeting, aimless navigation means for our possibilities for identifying empirically and theorizing the experience of real-time is that there is a messy, often chaotic combination between intended and “accidental” encounters with content (or, as respondents described, “coming across things”), and the very intentionality behind each instance impacts on their perceived realliveness. That is, real-time access to current happenings and posts might not necessarily be the main driver for the use of platforms such as Instagram, but it is perceived as something that is unintentionally encountered during this ordinary activity.

Perhaps in its most obvious conception in media and communications scholarship, real-time is the experience of accessing, through technical mediation, an event or situation as it happens, and while it unfolds. This implies a matter of speed, but also of duration. In observing if, how and when real-time is rhythmically manifested in the experiences described by my interviewees, I posit that realliveness can be more productively examined by foregrounding four specific, although interconnected, mechanisms—which I have labeled *instantaneity*, *freshness*, *simultaneity*, and *ephemerality*. In doing so, I tried to avoid reproducing supposedly objective measures (“new,” “now”) in favor of subjective, relational accounts. In this regard, “instantaneity” designates a lack of perceptible technical delays; “freshness” refers to perceived novelty—something that looks original or unprecedented, regardless of its actual recency; “simultaneity” designates coordination, or the perceived access to an event while it occurs—or at the same time as it is experienced by others; by “ephemerality” I mean the understanding that the

duration of a given experience is limited, and that therefore it must be attended to before it vanishes.

Instantaneity

Participants' definition of social media was elastic, with different people emphasizing varied dimensions. Yet, the possibility for instantaneity was often positioned as *the* crucial characteristic, as summarized by Marjorie (25 F, unemployed): "*I think it's the immediacy [. . .] It's just about seeing something, or wanting to share something that happens to me, and being able to share immediately with others.*" If we take instantaneity to mean a potential connection to the social world devoid of perceptible technical delays and, consequently, the opportunity to know what is happening at that precise instant, "right now," then perhaps the push notification is the most common trigger for its manifestation. Still, as explained by Rosie (47 F, administrator), not all notifications feel the same, and the sense of urgency—which prompts real-time connectivity—might change significantly depending on, for instance, the platform used:

I mean, with Twitter and Instagram I don't bother if the notifications stay in there. [. . .] On WhatsApp, I need to see it immediately who's messaged me. [. . .] in my head I know it's not gonna be an emergency, but I need to know what it is and what they're saying.

Certain notifications are considered more *momentous*, and therefore worthier of instantaneous attention. Whenever one of these alerts pops up, users make an assessment based on personal relevance. These decisions, although, seem deeply intertwined with habits and reflexes.

Also, the same platform might be experienced differently by diverse users and in varied circumstances. For example, although many of the participants mentioned Twitter as *the* primary source for knowing what is happening in the moment (as proclaimed by the platform itself in its promotional materials), Roger (43 M, administrative officer) thinks Facebook is much better for that—not necessarily because of the speed in which content is circulated, but due to the easier, more convenient experience of use afforded by the platform's interface:

I got fed up with Twitter; it was just . . . just about having to click on tiny URLs to get more information [. . .] It's too much effort. With Facebook, I just scroll it down, see "this is the one I'm interested in," and that's it, with pictures and everything.

That is, instantaneity is not only about the potential delivery of content at the precise moment it happens, but also about how swiftly one manages to navigate these always-updating flows in order to find the bits of information that are considered interesting. As illustrated by Roger's point above, if it requires one additional click, then the experience's instantaneity is compromised.

Moreover, the rhythmic of social media are also affected by the interplay of varied platforms—not only because the same person might use a range of applications but also because, often, the content itself overflows and fluctuates across them. Abbie

(19F, student), for instance, said, “*I don’t have Twitter, but I see things that had been posted on Twitter on Instagram. Like reposts.*” What this means is that although platform-centric analyses are indeed valuable for the understanding of the pace produced by each device separately, they inevitably fall short when it comes to providing a framework for the messier, complex ways in which these technologies are brought to life in ordinary settings.

Freshness

Overall, my analysis confirms the prominence of “currency” as a key aspect of everyday expectations of, and experiences with, social media. While there is some awareness of the different temporalizations employed by the platforms (as unpacked in the previous section), there seems to be concomitantly the taken-for-granted expectation that whatever one is seeing on social media has happened fairly recently: “*I guess it’s a bit weird, because you assume that everything is happening there and then, because you are looking at it there and then,*” said Anna. As explained by Joe, the very fact that most platforms show when a given post was shared emphasizes their time-sensitiveness:

For instance, I read about the students being caught in Hong Kong on Reddit, and the post was from six hours ago. So I was like “Oh, news being made in less than 24h! Holy shit, this is ‘hours’ recent!” [. . .] Like “this is really happening!”

In this regard, being the first to know about a given topic, regardless of its apparent frivolity, emerged as another of the main drivers of the use of social media.

However, and reflecting the multifaced character of realtimeness, the findings seem to point less to a reliance on a universal “new” and more to perceived *freshness*—that is, the excitement is situated in accessing something that, ultimately, *feels* new to you, regardless of its actual novelty. This means that the reference point for the “new” is not an assumed shared and external time but rather the unprecedentedness of the experience to the individual—in this case, “its newness is its strangeness” (Scannell, 2014: 52).

Interestingly, time-sensitiveness can also be evident even in the absence of explicit “temporal” prompts such as the exact time of the publication. In this case, social media’s quantifiable engagement is also used as *proxy for perceived freshness*. That is, the fewer people have reacted to a given content, the *fresher* it feels: “*It was, like, less than a thousand hits on this trailer on YouTube when I shared it. And I was like, oh my god, only one thousand likes, this is incredible! We’re breaking, we’re on the cusp of history,*” celebrated Joe. In other words, the number of “likes” a post gets can also be used as a chronological marker in the otherwise temporally ambiguous setting of the aforementioned phenomenal *algorithms*.

Simultaneity

Still, in moments of particularly remarkable events or crises, individual freshness does not suffice, and users find solutions to reach accounts of what is unfolding from the perspective of those who are there and then, as illustrated by Simone:

when Notre Dame was burning, I saw it and really felt I was one of the first ones in my network to read about it, because it had been just posted. [. . .] then I went on Twitter, and Twitter in general you won't really look for the reliability, you just look at what people are saying.

Synchronization, as theorized by Jordheim and Ytreberg (2021), “happens both as individuals are synchronized by some kind of external force and as they synchronize with each other (p. 11).” I use “simultaneity,” here, to designate precisely the experiences resultant from the temporal coordination that operates across these two dimensions—the perception that events are occurring as you, and others, are following them.

As I have been discussing, my analysis suggests that the participants’ experiences of instantaneity and freshness change significantly depending on the interactional situation or context—as well as on their mood. Similarly, people’s perception and expectation of simultaneity is highly contingent on the platform used—which supports the findings of available theorizations that emphasize a device-perspective on social media pace (Weltevrede et al., 2014). Arthur, for instance, manifested frustration when people misinterpret his posts on Instagram by assuming they were being shared and consumed as they happened, simultaneously,

I'll post some photos and they'll be like, “Oh, are you still there?” or, “Have a good time!” I always think, “Hm, I'm not there, I was there two weeks ago.” [. . .] I don't really want to say, “These are some photos that I took, just so you're aware, I took them about two weeks ago.”

In addition, if social media’s phenomenal rhythms—and, presumably, their opportunities for a sense of simultaneity—depend on the frequency and intensity of their use, then it seems important to highlight that these are also heavily impacted by emotional circumstances. Remarkably, although some of the respondents admitted that they are constantly accessing specific platforms to keep track of whatever is happening (“*I probably check it every hour, once an hour,*” said Joe), others adopt strategies such as temporary disconnection (Jorge, 2019) and platform curation to circumvent the emergence of certain moods. Consequently, simultaneity is something that users sometimes actively try to avoid, as explained by Anna: “*For example, Brexit, at the moment, I just can't deal with it. I'm not up to date, because it's too time-consuming, too life-consuming.*”

It is also clear from the analyzed dataset that the expectations for simultaneity vary dramatically depending on the feature of social media that is being employed—and the perceived difference between “the feed” and “stories” on Instagram is perhaps the most striking example: “*If it's like a post, you can obviously take a picture, and it's on your phone, and you can post it later. Stories are, like, as it's happening,*” described Abbie. A crucial follow-up question, then, is whether it matters at all if whatever one is seeing through these platforms is indeed unfolding “simultaneously.” The answer is, according to Abbie, “it depends,”

I mean, if it's just your friend posting a selfie or something, it's not really important if it's from now or from two weeks ago. But with stuff like news, if you're trying to keep up-to-date with something, then it would be important to know when things actually happened. [. . .] So to be informed, to fully understand a situation, it would be important to know if it's actually happening right now.

In other words, the extent to which these experiences are perceived as instantaneous, fresh, and simultaneous—and whether this synchronization is indeed considered relevant—depends not only on the affordances and operation of the platforms themselves, but also on the meaningfulness of the existing topics and relationships that are sustained through these technologies.

Ephemerality

As I previously suggested, “real-time” encapsulates not only a matter of speed but also of duration—or, more specifically, an alleged lack thereof. After all, if the main claim of a given experience is centered on its “nowness,” then we can infer there is an anticipation of a “thenness”; a time in which this experience no longer exists, and cannot be enjoyed anymore. *Ephemerality* is manifested in my informants’ verbalizations with different levels of subtlety. More obviously, platforms that have incorporated stories-like features—in which the content can be consumed for a limited time (or viewed a limited number of times) before it vanishes—tend to center the ephemeral as a key component of the experience they provide. As described by Anna, with stories, the content “*is only there for a small amount of time. And that’s, I think, why people enjoy it. They don’t want to be recorded [laughter] they don’t want a history of themselves.*”

Due to the lack of permanence, stories are understood as requiring less effort or planning, which in turn provides an overall sense of “spontaneity”: “*It’s just about what you do. It would be in the moment, just stupid stuff that I think is funny, or silly, or something like that. A bit more anything and everything,*” said Iris (24F, designer). It is worth noting that, in social media, the very brevity of so-called ephemeral affordances is usually transitory: platforms like Snapchat and Instagram use them to encourage “spontaneous” sharing, so that people can “post anything, anytime”; months later, they tend to incorporate some sort of archival tool, even if keeping the aura of casualness and authenticity. Ephemerality prompts real-time quantifiable engagement, which is convenient for these platforms’ business models (Lupinacci, 2021b).

Beyond stories, it is noticeable that ephemerality permeates more subtly the activity of sharing links and posts itself—that is, most of the time, the content circulated to friends is considered frivolous, just “silly,” “funny,” and not supposed to be paid attention to for long: “*If I see something funny, I’ll send it to like five of my friends. Like a funny picture, or a funny tweet, or a meme,*” described Siena (20F, student). That is, a big portion of what is shared and said via social media is simply “chitchat,” and therefore inherently, and intentionally, short-lived—particularly, when it comes to messaging systems. Similarly, the constantly updating flows—combined with algorithmic sorting—produce a sense of ephemerality, as it is not only difficult to keep track of things as they are presented, but also the task of retrieving a specific post becomes extremely challenging: “*You’d be like scrolling and then you’ll refresh it or something and whatever you were seeing will just disappear. And because it’s not chronological, you can’t really find it again, because it will be just lost in your feed,*” complained Abbie. In fact, the *volume* of information, and the perceived *endlessness* of the flow, creates a sense of imminent disappearance (Berry, 2011)—which prompts the user to attend to the situation “here and now.”

Concluding remarks: the sensorial orchestration of real-time

If our sociality is increasingly intertwined with the logics of social media, then the examination of the temporalities that are immanent in these platforms contributes to the understanding of our very conditions of existence today. In “ranking” particular posts in certain ways, social media determine what is worthy of attention, and affect when and how the world “appears” to us—which, I have been arguing, is a phenomenological problem.

In this article, I foregrounded some of the ambivalences and complexities in the temporal experiences emergent from the sensorial orchestration provided by platforms. To operationalize the idea of social media’s temporality as both subjectively experienced and always organized in certain ways by the platforms themselves, I employed the notion of *rhythm*. That is, I focused my observation on the description of systematic patterns of movement as experienced by users in ordinary settings. Rhythms, it is worth mentioning, are as much about space as they are about time (Lefebvre, 2004)—they depend not only on the frequency of certain “notes,” but also on the presence (and absence) of specific ones. In social media, this presence is dictated by algorithmic systems; if temporality is indeed orchestrated, my analysis suggests that “the algorithm” is perceived to be the conductor, the maestro. In this regard, the conception of phenomenal *algorhythms* aims to shed light on the interplay of historically vague notions such as “new” and “now” once computational sorting has become widespread, and on the “perceptual contestation” (Jacobsen, 2021) that characterizes the use of these platforms in everyday life.

A purely critical stance would suggest that platforms are more focused on perfecting their real-time prediction of what you want to see and on the real-time engagement resultant from this targeting than in offering an accurate reflection of what is currently happening. Yet, following my interest in the experiential, I have proposed that, phenomenologically, the realltimeness of the social media manifold can be evoked through particular orchestrations. These arrangements deploy different sensibilities, which I have named instantaneity, freshness, simultaneity, and ephemerality. Those, in turn, are heavily contingent on the user’s active engagement, on the purpose and mood of this engagement, on following “the right people,” on implicit markers of recency (such as the number of likes), on the platforms as a whole and their discrete features, and on the combination and/or overlap of different platforms.

The realltimeness of the social media manifold is not necessarily marked by a correspondence to a punctual “now”—although the technical potential for this exists, and is eventually put to work—and is instead more frequently created by rhythmicities that emphasize synchronization and social coordination through these different, but interconnected, mechanisms. Drawing on contributions from scholars focusing on the affective dimensions of digital time (Coleman, 2018a, 2018b, 2020a, 2020b) on the politics of pacing and rhythmicities in computational media (Carmi, 2020; Weltevrede et al., 2014), and on the perceived intervention of content-sorting systems (Bucher, 2020; Kant, 2020) to develop a critical phenomenology of mediation, this article ultimately argues that, in social media, any sense of realltimeness emerges not despite algorithms, but precisely due to their experienced agency. Realltimeness, as a product of sensorial orchestration, is not

necessarily replaced by algorithmic ordering; it is instead, rearranged by computational systems and users alike.

If, in following Ihde (1990), we take social media technologies to be both means and objects of experience, then their temporality becomes even more complex. When they are used as a means to an experience—to access and follow something that is happening elsewhere, for instance—then a referential real-time that corresponds to the instantaneous, linear chronology of the event becomes prominent. When they are treated as objects of experience, then an internal reatimeness—one that depends more heavily on the flow of content itself—seems to come to the fore, with freshness and ephemerality being two of its foundations. In the messy rhythmic of social media, the “clock time” and the right-time are often confounded and intertwined.

The participants’ verbalizations demonstrate the general awareness that social media might not provide direct access to everything that is happening outside the mediation context as it happens, in real-time—and therefore indicate that any perceived mediated reatimeness is, still, separate from the temporality of their lives and routines beyond social media. Indeed, as discussed throughout this article, the comparison between the perceived internal rhythms of social media and those of broader “real life” (as differentiated by many of the interviewees) also informs accounts of the former as marked by either slowness, repetition, and boredom, or by acceleration and frantic attempts to keep track of non-stop updates.

More than an objective “nowness” or “newness,” social media’s capacity for experienced reatimeness seems to depend on a perceived unpredictability: the interviewees seem to believe in, and desire the concretization of, the “happy accidents” through which platforms produce “an affective feeling of randomness of discovery” (Karppi, 2018: 57). That is, even if acknowledging the role of algorithmic personalization—which, ultimately, extracts data and organizes it in patterns to make individuals “predictable” (Chun, 2017)—the temporality of social media paradoxically foregrounds the “chanced upon.” In these *algorhythmic*s, there is a crucial conflict between predictability and orchestration, on the one hand, and spontaneity and serendipity on the other. My assessment is that this clash represents a contemporary manifestation of the historical struggle for agency in relation to communication technologies—and for maintaining a sense of autonomy even when objectification is needed for the concretization of media’s promises of enhanced experience.

In addition, although algorithmic personalization is foregrounded as the main feature of social media, I argue that these platforms also work to make people aware (and crave the awareness) of others who are (perceived to be) experiencing the same as them, irrespective of the correspondence of this ongoing event with a universal, external “present.” In this regard, I understand that these complex rhythms are always a combination of inner processes and social arrangements, being both situated and relational. From an internal viewpoint, they are contingent on our positionality as well as on our affective states; socially, they are dependent both on wider structural forces and on the coordination with the rhythms of others—even in environments that emphasize individuality.

Ultimately, in a cultural moment in which social media are often criticized for providing a hyper-curated portrayal of reality, the potential for real-time connectivity also speaks to the continuously updating desire for (and increasing commodification of)

authenticity (Banet-Weiser, 2012). The pursuit of realliveness through alternative apps,⁴ for instance, seems permeated by the wish to escape the structure dictated by powerful, profit-oriented, “algorithmic” platforms—even if this demand is often acknowledged and incorporated by the mainstream platforms themselves.⁵ Within this dynamic socio-technical environment, the perceived temporalities of algorithmic media—their *phenomenal algorhythms*—reflect and enact negotiations over social coordination, temporal control, and the direct access to “reality.” As a complex *sensorial orchestration*, the realliveness of social media depends not only on the perceived pace and tempo of the platforms’ content display, but also on how, in using these platforms, we perceive time within our lives as individuals and as part of a social world, and how this makes us feel more or less synchronized.

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Supplemental material

Supplemental material for this article is available online.

Notes

1. Please note that I use both the terms “phenomenal” and “phenomenological,” and that the former is *not* used here as a synonymous for “exceptional” or “remarkable.” I am employing “phenomenal” to designate that which is perceived (the state observed), and “phenomenological” to designate the perceptual (i.e. the nature of the observation itself).
2. The descriptive codes that follow the participants’ pseudonyms refer, respectively, to age and gender. In the case of Monica, for instance, “26F” indicates that she is a 26-year-old female.
3. Because the research did not involve vulnerable populations and/or sensitive topics (being considered of “low risk”), ethics clearance was obtained internally through the Department’s Research Ethics Review, following the research ethics policy of my University.
4. For instance, BeReal—a platform launched in 2020—claims to be a “new and unique way to discover who your friends really are in their daily life.” The app explicitly uses the rhetoric of real-time connectivity (“everyone is notified simultaneously to capture and share a photo in 2 minutes”) to promise a more authentic form of communication than that of algorithmic platforms.
5. In March 2022, Instagram announced the introduction of “Favorites and Following, two new ways to choose what you see in your feed”—a direct response to the critiques targeting the continuous and unpredictable tweaks it makes to the algorithmic systems that sort users’ feeds.

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