COMUN. MÍDIA CONSUMO, SÃO PAULO, V. 23, E3267, JAN./DEC. 2026
https://doi.org/10.18568/cmc.2026.e3267

ARTICLE

# When the *feed* arrives late: algorithmic temporality and post-mediation of sports events content on Instagram

# Quando o *feed* chega tarde: temporalidade algorítmica e pós-mediação de conteúdos sobre eventos esportivos no Instagram

*Guilherme Pessina*[1]
*Tiago Salgado*[2]
*Bruno Aragão*[1]

**ABSTRACT:** *This article investigates how algorithmic temporality on Instagram affects the visibility of content regarding sports events in Brasília. It employs systematic observation of the profile @candango_esportivo, with automated collection of the first ten posts displayed in the feed twice daily from January 19 to March 19, 2026. Out of 1,150 valid posts, it analyzes the time lapse between publication and display for 942 items. Findings show that the feed does not operate on simple chronology, as content from followed profiles, sponsored and suggested media obey distinct temporal regimes. The analysis highlights radical mediation within the feed, algorithmic kairologics in the tension between chronos and kairos, and post-mediation in statistically delayed appearances. It concludes that the visibility of local information can become untimely when algorithmic mediation prolongs, retrieves, or repositions content after publication.*

**Keywords:** *algorithmic temporality; digital communication; Instagram; post-mediation; radical mediation.*

[1]Instituto Brasileiro de Ensino, Desenvolvimento e Pesquisa – Brasília (DF), Brazil.
[2]Universidade Federal de Minas Gerais – Belo Horizonte (MG), Brazil.
**Editors:** Eliza Casadei and Gabriela Almeida

**RESUMO:** *O artigo investiga como a temporalidade algorítmica no Instagram afeta a visibilidade de conteúdos sobre eventos esportivos em Brasília. Emprega observação sistemática do perfil @candango_esportivo, com coleta automatizada das dez primeiras publicações do feed, duas vezes ao dia (19/01 a 19/03/2026). Das 1.150 publicações válidas, analisa o lapso entre publicação e exibição de 942. Constata que o feed não opera por cronologia simples, pois conteúdos de perfis seguidos, patrocinados e sugeridos obedecem a regimes temporais distintos. A análise evidencia a mediação radical no feed, a kairológica algorítmica na tensão entre chronos e kairós e a pós-mediação em aparições estatisticamente tardias. Conclui que a visibilidade de informações locais pode tornar-se intempestiva quando a mediação algorítmica prolonga, recupera ou reposiciona conteúdos após sua publicação.*

**Palavras-chave:** *comunicação digital; Instagram; mediação radical; pós-mediação; temporalidade algorítmica.*

## INTRODUCTION

The circulation of information on digital platforms has become a central issue for Communication because the availability of content no longer equates to its visibility. On online social media platforms, such as Instagram, posting, following profiles, or showing interest in a specific topic does not guarantee that the information will appear at the expected time, especially when users are caught up in filter bubble dynamics (PARISER, 2012), which impact content consumption. This shift is particularly noticeable when it comes to content about local events, such as sports competitions, whose communicational relevance depends on timeliness, recency, and synchronization with the daily lives of those who access and use such platforms.

Instagram can be understood as an online social media platform, combining technical infrastructure, an economic model, cultural practices, and mechanisms for user interaction. The literature on platformization shows that digital platforms are not merely neutral environments for connection but infrastructures that penetrate different spheres of collective life and organize cultural practices, economic flows, and forms of governance (DIJCK; POELL; WAAL, 2018; POELL; NIEBORG; DIJCK, 2020). In this context, the Instagram feed is not a chronological showcase of what has been posted by profiles users follow, but a sociotechnical interface for ordering and recommendation.

The datafication of life is a prerequisite for the existence of this dynamic. Ordinary actions such as following, liking, commenting, posting, watching, pausing, replaying, searching, and browsing become traces that feed classification and recommendation systems (BRUNO, 2013; LEMOS; PASTOR, 2020; LEMOS, 2021). These traces contribute to the formation of inferential profiles and predictive models, through which platforms calculate probabilities of interest and engagement. Thus, users' infocommunicational experience is continuously adjusted by systems that integrate data, interfaces, business models, and commercial objectives (SRNICEK, 2017; ZUBOFF, 2021).

The notion of "radical mediation," proposed by Grusin (2015), is particularly useful for analyzing this process. Unlike conceptions that view mediation as a simple intermediary between sender and receiver, radical mediation understands it as constitutive of experience and of reality itself. Mediation is not "between" pre-given points; it participates in the production of the relationships, objects, and environments that it makes perceptible. The philosophical origin of this formulation of "radical mediation" traces back to the radical empiricism of William James (1912), for whom relationships also belong to experience and cannot be excluded from analysis.

On Instagram, radical mediation indicates that algorithms do more than simply convey posts from creators to recipients. Algorithms participate in the construction of the infocommunicational environment experienced by each user, defining what gains visibility, in what position it appears, and at what moment it is presented, directly affecting the possibilities for content consumption. The personalized feed results from an interplay among users, their actions on the platform, profiles they follow, content, engagement metrics, devices, interfaces, ads, and recommendation systems (PRODANOV *et al.*, 2023). Thus, even a post from a followed profile does not reach the user as a direct result of an individual choice, but only after passing through a network of sociotechnical mediations.

In light of this, this article seeks to investigate how algorithmic temporality, radically mediated on Instagram, impacts the visibility of content about sporting events in Brasília. In this regard, it starts from the premise that there are situations on Instagram in which existing, published, and potentially relevant information about sporting events does not reach interested users at the time they expect — that is, before the event's announced date. The objective, therefore, is to analyze how the Instagram feed temporally organizes the appearance of sports content for an experimental user interested in the topic, identifying empirical evidence of radical mediation, algorithmic kairologics, and post-mediation. The hypothesis is that algorithmic recommendations not only select content

but also place it within their own temporal frameworks, potentially resulting in delayed or untimely visibility relative to the original publication date. This dynamic is hypothetically treated as post-mediation.

The significance of this article lies in shifting the analysis of algorithmic visibility from a purely spatial question — what appears at the top of the feed — to a temporal one: how and when does a post become visible? This shift makes it possible to discuss radical algorithmic mediation as a continuous process that operates before, during, and after publication, modulating the temporality of local information. To this end, this article adopts algorithmic temporality as an analytical operator and works with four analytical categories: *chronos*, *kairos*, algorithmic visibility, and content type. Empirically, the method consists of automatically collecting the first ten posts that appear in the feed of the experimental profile @candango_esportivo, after the feed automatically refreshes, twice daily between January 19 and March 19, 2026; retrieving public metadata from the posts; and analyzing the difference between the chronological time of publication and the time of appearance in the feed.

The article is organized into three parts: a conceptual section dedicated to algorithmic temporality as an operator and to analytical categories; five analytical sections presenting the method, *corpus*, results, and discussion; and concluding remarks.

## Time as an Operator

In the case of Instagram, the feed should be understood as a sociotechnical sorting and recommendation interface. The platform combines user-declared relationships, content from followed profiles, recommendations, advertising, engagement metrics, affordances (possibilities for action) for interaction, and business models based on capturing attention. Gillespie (2010; 2013) notes that platforms often present themselves as open and neutral intermediaries, even though they carry out decisive operations of selection, ranking, and organization of relevance. In this vein, the analysis of the feed does not seek to reveal the internal engineering

of the algorithm, but rather to empirically observe the effects of ordering and recommendation that become visible to the experimental user. Algorithmic temporality, therefore, is treated as an observable effect of mediation and not as a technical description of the platform's internal functioning. It is worth noting that the notion of "effect" used here does not imply a causal relationship between action and reaction or between cause and effect, but rather the performative dimension of radical mediation — that is, what it "makes people do" in action (AUSTIN, 1990; LATOUR, 2012).

The notion of "radical mediation" provides the conceptual basis for articulating platforms, data, attention, and temporality. In dialogue with James's (1912) radical empiricism, Grusin (2015) proposes understanding mediation as a process constitutive of experience, which operates materially as an object, event, or process in the world, affecting both humans and non-humans, generating and modulating affective states — both individual and collective — or structures of feeling within sets of humans and non-humans. Relationships, media, affections, objects, and environments are not merely mediated; they emerge through mediations. This perspective makes it possible to connect the communicational tradition of mediations — in which Martín-Barbero (2008) shifts the focus from media to cultural and relational processes — to an approach centered on contemporary algorithmic mediations.

Radical mediation is therefore crucial to avoiding an instrumental reading of the algorithm. Instagram is not viewed as a mere channel through which posts pass, nor is the algorithm seen as an external filter that acts after the communicative process has already taken shape. Mediation constitutes the very experience of consuming content from and within the feed: it determines which content appears, which is hidden within the observed frame, which is promoted, which is retrieved, and in what sequence it becomes visible. In this sense, temporality is not a secondary attribute of circulation, but part of the mediation process itself. Thus, the moment a post appears contributes to the production of its communicative meaning.

The temporal formulation of the problem under investigation is based on the distinction between *chronos* and *kairos*, revisited by Bucher (2020) when proposing the "kairological" approach to algorithmic media. According to this framework, the algorithms of online social media platforms extract content from chronological time (*chronos*) and reorganize it into algorithmic recommendations that follow opportune time (*kairos*), producing a specific temporal regime for each user. The main objective is to identify the best opportunities for user engagement rather than simply transmitting content instantaneously in chronological order, thereby creating a distinct algorithmic temporality. This specific ("kairologic") temporality is continuously calculated and produced through predictive analytics, feedback loops, and the platforms' commercial intentions, taking into account the algorithm's technical infrastructure, business models, the platforms' corporate interests, and the users' own daily activities, in a continuous process of radical mediation.

It is important to note that the "opportune time" discussed by Bucher (2020) refers to the temporality that the platforms' algorithms deem appropriate for each user, and not to what each user considers appropriate for themselves. This distinction is important because, when considering *kairos* as an analytical category, one can assume that the moment a post appears in the experimental user's feed following a refresh command — as applied in this study's method for collecting post data — results from the calculation of the opportune time performed by the platform's algorithms at that moment. Thus, this study considers that the time of appearance in the feed corresponds to the opportune time calculated by the algorithm, thereby highlighting the analytical category of *kairos*.

In this sense, *chronos* refers to chronological, sequential, and measurable time: in the case of this article, the date and time when a post was originally published. *Kairos* refers to opportune time: the moment when the post appears in the experimental user's feed after the refresh command is executed. The difference between these two types of time makes it possible to operationalize the time lapse and empirically observe how the feed reorganizes the chronology of posts within a specific

temporality — the kairologic one. The central point is that algorithmic *kairos* does not necessarily coincide with the user's communicational *kairos*. Bucher (2020) refers to this phenomenon as "bad timing" and describes it as the disconnect between what algorithms consider to be the opportune time and what the user actually perceives as appropriate. A post may be considered relevant by the system at a given moment and yet appear too late to fulfill its informative function, thereby losing its relevance and its communicational opportunity. It is within this scenario of disconnection in the algorithmic kairological regime — produced by radical mediation — that post-mediation can emerge.

Thus, considering *chronos* and *kairos* as complementary analytical categories, the concept of "algorithmic temporality" arises from the comparison between these categories. When the interval between the time of posting and the time of appearance widens significantly, it becomes possible to empirically discuss the existence of delayed visibility and, in statistically atypical cases, of post-mediation.

The notion of post-mediation stems from this analytical framework. Bolter and Grusin (1998) formulated remediation to understand how media mutually reconfigure one another; Grusin (2010) proposed premediation to conceptualize the anticipation of possible futures. Subsequently, Grusin (2015) broadened the debate by conceiving of mediation as a radically constitutive process. Post-mediation, in this article, does not replace these formulations. It designates a specific dimension of algorithmic mediation: its continuity after publication, constituting a delayed visibility that exceeds the temporal limit of the regime in which it is embedded and may lose its communicational relevance. The content has already been posted; it already belongs to the platform's chronological past, but it can be retrieved, repositioned, and presented in the feed's present. When this appearance occurs belatedly in relation to the temporal regime of the analyzed group, mediation does not merely distribute the content; it can alter its communicational opportunity.

Thus, post-mediation makes it possible to understand why the problem of visibility is not merely a matter of a lack of information.

Content may exist, be available, and even circulate on some profiles, yet still fail to appear to the interested user at a time that is appropriate for them. For local sporting events, this difference is central: a post about a competition, registration, schedule, or traffic changes may lose its communicational value if it appears after the moment when it could have guided the user's action. Therefore, algorithmic temporality is the operator that organizes the analysis; *chronos*, *kairos*, algorithmic visibility, and content types are the categories that make this analysis empirically possible; and post-mediation is the conceptual framework that emerges from the comparison between the time of publication and the time of its appearance in the feed.

It is important to note that the use of the prefix "post" to propose the notion of post-mediation does not mean that mediation has ended. It is a prefix derived from the Latin particle *post*, whose original meanings include "after (in space and time)" and "following," among others (GANANÇA, 2017). Thus, the use of the prefix "post" aims to clarify when content appears in the feed — much later than expected within the temporal framework in which the content is embedded — as well as to consider the potential compromise of the content's communicative relevance and timeliness. However, it is necessary to consider that verifying the loss of communicative relevance and content timeliness requires content analysis of the collected posts, which was not the focus of this study.

## An experimental profile to observe the experience

This study was designed as a quantitative, descriptive, and longitudinal study (GIL, 1989). The main procedure was systematic participant observation (MARCONI; LAKATOS, 2017) of the feed of the experimental profile @candango_esportivo, created on August 12, 2025, as a personal, noncommercial account to simulate a user located in Brasília, Brazil, and interested in sports. The profile followed accounts of local news portals, sports facilities, federations, confederations, and high-profile Brazilian

athletes; liked sports-related posts; accepted connection requests; and did not post its own content. The profile's operation did not follow a strict routine such as that established for data collection. Instead, it was operated sporadically and randomly over the course of several days, and the actions taken during the operation did not follow a preestablished pattern, simulating a typical user of the platform with interactions and reciprocity in following and being followed.

The creation of an experimental profile prevented contamination by a previous personal browsing history. Data collection took place between January 19 and March 19, 2026, when the peak of the summer vacation period had already passed and regular sporting events had begun to take place. Twice a day, at 9:00 a.m. and 9:00 p.m., an automated software module refreshed the feed and then recorded the first ten posts displayed. For each post, the following data were collected: identifier, date and time of collection, position in the feed, source profile, post type, media type, likes, comments, date and time of the original post, and the content's permalink. Since the study acknowledges the opacity of recommendation systems, its empirical unit is not the algorithm itself, but rather the feed actually presented to the experimental profile.

On March 19, 2026, the profile followed 149 accounts and was followed by 19. This configuration delimits the scope of the results: the article does not aim to statistically generalize Instagram's behavior but rather to analyze a situated experience, constructed by a specific profile, a given network of connections, and a replicable observational routine. The *corpus* comprised 1,150 valid posts. For the temporal analyses, 206 private records — for which complete metadata could not be retrieved — and two records with negative time lapses resulting from a one-time data collection inconsistency were excluded. The analysis of *chronos* and *kairos* was therefore conducted on 942 interpretable posts. The techniques included descriptive statistics, group-based analysis, Pearson and Spearman correlations, and the identification of late occurrences using Tukey's upper limit (TUKEY, 1977; KOMOROWSKI *et al.*, 2016).

## Overview of the corpus

The first piece of empirical evidence is that the observed feed did not consist solely of posts from followed profiles. Of the 1,150 valid posts, 824 were classified as "following" (71.65%), 185 as "sponsored" (16.09%), and 141 as "suggested" (12.26%), as shown in Chart 1. In other words, nearly one-third of the infocommunicational experience stemmed from advertising or recommendations from profiles the user did not follow. The presence of these three types of posts already indicates that radical mediation operates in layers: a connection declared by the user, advertising content, and algorithmic recommendations.

Chart 1 – Overview of the *corpus* – Instagram – @candango_esportivo profile, 2026.

| Dimension | Category | n | % |
|---|---|---|---|
| Post Type | Following | 824 | 71.65 |
| Post Type | Sponsored | 185 | 16.09 |
| Post Type | Suggested | 141 | 12.26 |
| Media type | Photo | 520 | 45.22 |
| Media type | Video | 360 | 31.30 |
| Media type | Unknown | 206 | 17.91 |
| Media type | Carousel | 64 | 5.57 |

**Source:** research data, 2026.

Content types also help characterize the *corpus*. The data included 520 photos (45.22%), 360 videos (31.30%), 64 carousels (5.57%), and 206 posts whose media type was unidentified (classified as unknown) (17.91%). This distribution confirms the visual and audiovisual centrality of the observed feed, but it also raises a methodological issue: a significant portion of the posts visible to the user could not be fully retrieved as analyzable metadata. For this reason, private posts were retained in

the characterization of the *corpus* but excluded from the analysis of the time lapse.

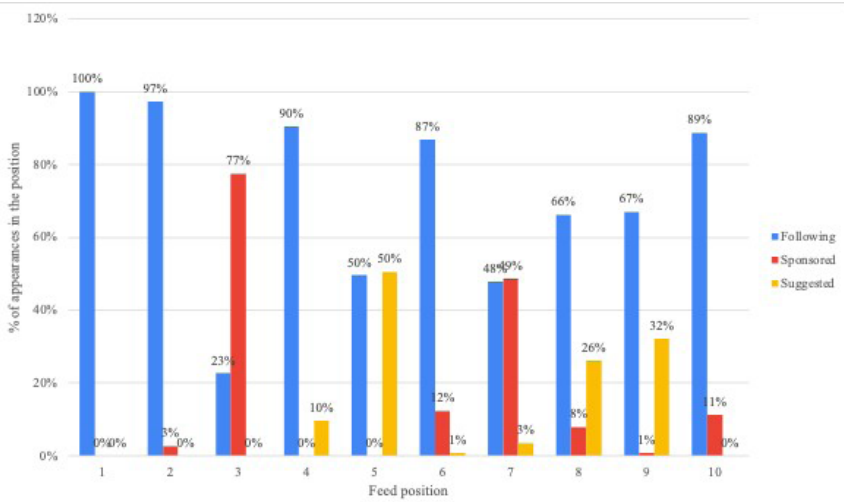
Information dispersion emerged in the supplementary count of hashtags and profiles related to sports content in Brasília, conducted on March 19, 2026, the last day of data collection. The monitoring retrieved 2,289 hashtags and tags; 56 of these appeared in the data, accounting for 697 posts and 273 identified accounts. The most frequent occurrences involved different sports and tags, such as #futeboldf, #futsaldf, #judobrasilia, #corridaderuabrasilia, #muaythaibrasilia, #tenisdf, and #eventobrasilia. These data are relevant because they show that local sports content was produced across a range of sources. The problem, therefore, was not simply the lack of information, but its dispersion across various communities, profiles, and hashtags.

## Position as Visibility and Radical Mediation

Algorithmic visibility was assessed by the position of posts among the top ten displayed in the feed. Figure 1 shows that content from followed accounts appeared in all positions, but with an uneven distribution. In the top two positions, the presence of posts from followed accounts was nearly absolute: 100% in the first position and 97% in the second position. Starting with the third position, however, the feed became more heterogeneous: the third position was occupied mostly by sponsored posts (77%), while the fifth position featured 50% suggested posts. The seventh position showed a balance between sponsored (49%) and "following" (48%) posts.

This pattern allows for an empirical observation of radical mediation without turning the analysis into speculation about the platform's internal engineering. The feed does not merely display a list of profiles followed by the user. It combines a relational layer, an advertising layer, and a recommendation layer. Furthermore, mediation operates not only through the inclusion or exclusion of content but also through the position in which it appears. In this sense, position is a form of visible prioritization.

Figure 1 – Frequency chart of post types by position in the feed - Instagram - @candango_esportivo profile, 2026.




**Source:** research data, 2026.

## The time lapse and the kairologic of algorithms

The "*chronos*" category was operationalized by the date and time of the original publication; "*kairos*," by the date and time the publication appeared in the observed feed, considered the opportune moment calculated by the algorithms. The difference between these two dimensions constitutes the time lapse. Among the 942 interpretable posts, the overall median time lapse was 0.63 days, while the mean reached 8.54 days. The gap between the median and the mean indicates a strongly asymmetric distribution: the typical appearance occurred in less than a day, but a significant number of posts appeared many days or weeks after the original post.

Table 1 shows that time frames vary according to the type of publication. "Following" content had a median of 0.39 days and a mean of 4.00 days, demonstrating greater proximity to "*chronos*." "Sponsored" publications had a median of 10.17 days and a mean of 18.69 days, revealing a more elastic time frame. "Suggested" content occupied

Table 1 – Time lapse by post type, in days – Instagram – @candango_esportivo profile, 2026.

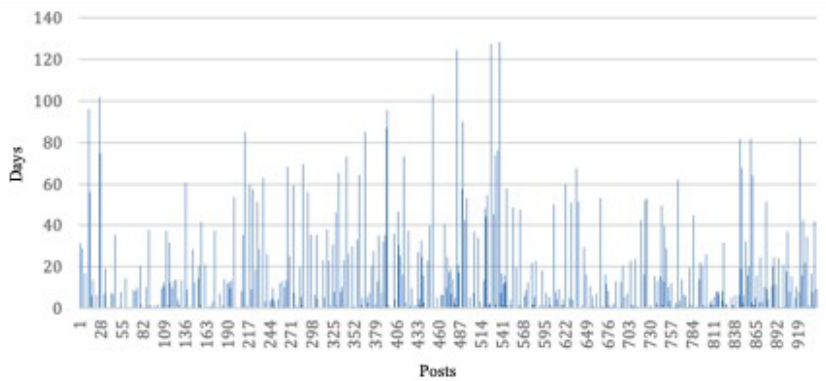
| Type | n | Q1 | Median | Mean | Q3 | Maximum | Standard deviation |
|---|---|---|---|---|---|---|---|
| Overall | 942 | 0.27 | 0.63 | 8.54 | 7.34 | 128.44 | 18.08 |
| Following | 620 | 0.15 | 0.39 | 4.00 | 0.81 | 90.00 | 12.58 |
| Sponsored | 183 | 2.82 | 10.17 | 18.69 | 24.56 | 128.44 | 24.28 |
| Suggested | 139 | 0.98 | 5.54 | 15.41 | 16.79 | 84.94 | 21.60 |

**Source:** research data, 2026.

an intermediate position, with a median of 5.54 days and a mean of 15.41 days. These values support the idea of a kairologic of algorithms: a moment of visibility deemed opportune, produced through the platform's mediation.

The chart in Figure 2 illustrates the irregularity of this temporality, showing peaks exceeding 40, 60, 80, 100, and 120 days, distributed throughout the *corpus*. This variation prevents the feed's temporality from being treated as a simple chronological decay. Instead of a continuous

Figure 2 – Time lapse per post, in days - Instagram - @candango_esportivo profile, 2026.




**Source:** research data, 2026.

line of recency, what emerges is a succession of reactivations and shifts, in a continuous construction of the specific kairologic of algorithms. For content about local events, this finding is decisive: delayed appearance can extend a post's lifespan, but it can also reduce its practical relevance when the value of the information depends on timeliness.

Based on the observation of distinct temporal regimes and the irregularity of the calculated temporality, it was possible to identify posts with atypical time lapses relative to the temporal regime in which they are embedded, indicating the existence of post-mediation.

## Tukey's upper limit and post-mediation

Post-mediation was statistically operationalized using Tukey's upper limit (TUKEY, 1977; KOMOROWSKI *et al.*, 2016). In the overall set of 942 interpretable posts, the upper limit was 17.94 days. Above this threshold, 140 posts were identified, equivalent to 14.86% of the temporally analyzable *corpus*. Post-mediation, therefore, does not correspond to an ordinary delay, but rather to a late appearance relative to the temporal pattern of the analyzed group. Table 2 presents the calculated upper limits for the overall set and for the sets of "following," "sponsored," and "suggested" posts.

The calculation of the Tukey upper limit for the "following," "sponsored," and "suggested" post groups identified distinct time frames.

Table 2 – Tukey's upper limit and post-mediation by group, in days - @candango_esportivo profile, 2026.

| Group | n | Q1 | Q3 | IQR | Upper limit | Post-mediation | % |
|---|---|---|---|---|---|---|---|
| Overall | 942 | 0.27 | 7.34 | 7.07 | 17.94 | 140 | 14.86 |
| Following | 620 | 0.15 | 0.81 | 0.66 | 1.80 | 87 | 14.03 |
| Sponsored | 183 | 2.82 | 24.56 | 21.73 | 57.16 | 11 | 6.01 |
| Suggested | 139 | 0.98 | 16.79 | 15.81 | 40.50 | 20 | 14.39 |

**Source:** research data, 2026.

The most significant result is found in the "following" posts. Since this group is closer to the most recent posts, its upper limit was only 1.80 days. Even so, 87 out of 620 posts from followed profiles exceeded this limit, corresponding to 14.03%. This finding is particularly relevant because it shows that following a profile does not guarantee timely visibility. The content belongs to the relational universe chosen by the user, but it may still appear late in the observed feed.

For sponsored posts, the upper limit was 57.16 days, with 11 cases of delayed appearance (6.01%). The lower percentage does not indicate greater timeliness; it indicates that the sponsored model itself is already more flexible in terms of timing. For suggested posts, the upper limit was 40.50 days, with 20 cases (14.39%), highlighting the possibility of delayed retrieval of content from profiles that are not followed. Post-mediation, thus, describes the continuation of mediation after publication: the content already exists, but its appearance in the feed may be delayed or reactivated at a later time based on the optimal timing calculated by the platform's algorithms, exceeding the upper limit for the temporal regime in which it is embedded.

The resulting discussion is less technical and more communicational in nature. A post about a sporting event, registration, schedule, or traffic change may continue to circulate after it is published. However, when its visibility occurs outside of socially useful time frames, algorithmic mediation ceases to be merely a matter of reach and becomes a matter of relevance. The central finding is that the platform can make relevant local content visible at a time that exceeds the normal range of the temporal regime in which it is embedded, constituting post-mediation. This moment may no longer correspond to the time when that content would be useful to the user, thereby impacting the user's content consumption experience.

Post-mediation thus complements radical mediation and the kairologic of algorithms. Consequently, radical mediation enables us to understand the feed as an infocommunicational reality produced by sociotechnical relations. The kairologic of algorithms reveals the temporal reorganization of visibility according to the algorithmic notion of the

opportune moment, even when *chronos* and *kairos* converge or become equivalent. In turn, post-mediation refers to the delayed appearances produced by this dynamic, when communicational relevance and the timeliness of content could potentially be compromised. In short, invisibility does not stem solely from the absence of content, but can result from a presence that is delayed, distributed, repositioned, or untimely.

## Concluding Remarks

This article investigated algorithmic visibility from a temporal perspective. Rather than treating the feed merely as a ranking space, it analyzed it as an environment for the production of temporalities. The analytical concept of "algorithmic temporality" made it possible to articulate the categories of *chronos*, *kairos*, algorithmic visibility, and content types to understand how posts about sporting events in Brasília appeared on the experimental profile @candango_esportivo.

The results show that the observed feed did not function as a simple chronological timeline. The experience of consuming content on Instagram combined posts from accounts the user follows, sponsored posts, and suggested posts, each with different positioning and temporality patterns. Algorithmic visibility was evident in the positional distribution of content: the top positions featured more recent content, while positions such as the third, fifth, and seventh combined a greater presence of advertising or recommendations with greater temporal disjunction. Local sports content was distributed across various hashtags, sports, and accounts. The information existed, but it circulated in a fragmented manner. The comparison between *chronos* and *kairos* highlighted the kairologic of algorithms. "Following" content was closest to *chronos*; "sponsored" and "suggested" content exhibited more flexible temporalities. These findings indicate multifactorial mediation in which no single category alone explains the feed's temporality.

Post-mediation was identified in 140 posts above the general Tukey upper limit. The most significant finding concerns posts from followed

profiles: 87 "following" posts were classified as post-mediated. Thus, following a profile does not guarantee that its posts will appear within the expected timeframe of the system in which they are embedded. For local sports content, this finding may have significant implications, as the communicational effectiveness of content published on the Instagram feed depends on its timely appearance.

The theoretical contribution of this article lies in proposing the notion of post-mediation as a category capable of describing the temporal continuity of algorithmic mediation after publication, particularly in situations where the time lapse statistically exceeds the upper limit of the identified temporal regime and where the communicational relevance and timeliness of the content may be compromised. Furthermore, it contributes to the analysis of information consumption experiences on Instagram, given that the temporality of content observed in the feed is highly elastic and heterogeneous.

The methodological contribution lies in the operationalization of the time lapse as the difference between *chronos* and *kairos*, articulated with position, post type, media, engagement, and information dissemination. As a limitation, the results correspond to a single experimental profile, observed via a web browser on a laptop on a specific online social media platform, without access to the platform's internal metrics, such as saves, private shares, viewing time, and inferred signals. Another limitation is that, to expand the notion of post-mediation to account for the loss of a piece of content's communicational relevance and timeliness, it would be necessary to analyze the content of the observed posts and, based on that, relate it to the post-mediated content identified by Tukey's upper limit. However, this study did not address this. Future research could compare multiple profiles, mobile and desktop devices, other locations, other topics, and different recommendation platforms, and conduct content analysis of the posts.

The main conclusion is that algorithmic mediation does not end when a post is published. It continues to operate afterward, modulating when, where, and under what conditions the content reappears. In the

case of local sporting events, this continuity can transform visibility into untimeliness. The communicational problem implied by the dynamics investigated is not merely failing to see; it is seeing too late.

**Conflict of interest:** none to declare.

**Funding source:** none.

**Research data availability:** The research data supporting the results are publicly available online in the folder accessible at: https://drive.google.com/drive/folders/1tIfF3bS0_7duywU-FuGCQnIcYSHOoDBWk.

**Authors' contributions:** Pessina, G.: conceptualization, data curation, formal analysis, investigation, methodology, project administration, software, validation, visualization, writing – original draft, and writing – review and editing. Salgado, T.: conceptualization, methodology, supervision, and writing – review and editing. Aragão, B.: formal analysis, supervision, and writing – review and editing.

**Use of generative artificial intelligence:** ChatGPT (OpenAI) was used to assist with textual revision, verification of editorial requirements, and formal formatting of the manuscript. The authors retain full responsibility for the content.

## References

AUSTIN, J. L. *Quando dizer é fazer:* palavras e ação. Porto Alegre: Artes Médicas, 1990.

BOLTER, J. D.; GRUSIN, R. *Remediation:* understanding new media. Cambridge: MIT Press, 1998.

BRUNO, F. *Máquinas de ver, modos de ser:* vigilância, tecnologia e subjetividade. Porto Alegre: Sulina, 2013.

BUCHER, T. The right-time web: theorizing the kairologic of algorithmic media. *New Media & Society*, v. 22, n. 9, p. 1699-1714, 2020. https://doi.org/10.1177/1461444820913560

DIJCK, J.; POELL, T.; WAAL, M. *The platform society:* public values in a connective world. New York: Oxford University Press, 2018.

GANANÇA, J. H. L. *Um estudo da prefixação em unidades lexicais neológicas coletadas de blogs da internet*. 2017. 276 f. Dissertation (Master's in Language and Literature) – Faculdade de Filosofia, Letras e Ciências Humanas, Universidade de São Paulo, São Paulo, 2017. Available at: https://teses.usp.br/teses/disponiveis/8/8142/tde-05072017-105742/publico/2017_JoaoHenriqueLaraGananca_VCorr.pdf. Accessed on: Sep. 10, 2026.

GIL, A. C. *Métodos e técnicas de pesquisa social*. 2nd ed. São Paulo: Atlas, 1989.

GILLESPIE, T. The politics of platforms. *New Media & Society*, v. 12, n. 3, p. 347-364, 2010. https://doi.org/10.1177/1461444809342738

GILLESPIE, T. The relevance of algorithms. *In*: GILLESPIE, T.; BOCZKOWSKI, P.; FOOT, K. (org.). *Media technologies*. Cambridge: MIT Press, 2013. p. 185-193.

GRUSIN, R. *Premediation:* affect and mediality after 9/11. Basingstoke: Palgrave Macmillan, 2010.

GRUSIN, R. Radical mediation. *Critical Inquiry*, Chicago, v. 42, n. 1, p. 124-148, 2015. https://doi.org/10.1086/682998

JAMES, W. *Essays in radical empiricism*. Edition: Ralph Barton Perry. New York: Longmans, Green, and Co., 1912.

KOMOROWSKI, M.; MARSHALL, D. C.; SALCICCIOLI, J. D.; CRUTAIN, Y. Exploratory data analysis. *In*: MIT LABORATORY FOR COMPUTATIONAL PHYSIOLOGY (org.). *Secondary analysis of electronic health records*. Cham: Springer, 2016. p. 185-203. https://doi.org/10.1007/978-3-319-43742-2_15

LATOUR, B. *Reagregando o social:* uma introdução à teoria do ator-rede. Salvador: Edufba; Bauru: Edusc, 2012.

LEMOS, A. Dataficação da vida. *Civitas: Revista de Ciências Sociais*, Porto Alegre, v. 21, n. 2, p. 193-202, May/Aug. 2021. https://doi.org/10.15448/1984-7289.2021.2.39638

LEMOS, A.; PASTOR, L. Experiência algorítmica: ação e prática de dado na plataforma Instagram. *Contracampo*, Niterói, v. 39, n. 2, p. 132-146, Aug./Nov. 2020. https://doi.org/10.22409/contracampo.v0i0.40472

MARCONI, M. A.; LAKATOS, E. M. *Fundamentos de metodologia científica*. 8th ed. São Paulo: Atlas, 2017.

MARTÍN-BARBERO, J. *Dos meios às mediações:* comunicação, cultura e hegemonia. 5th ed. Rio de Janeiro: Editora UFRJ, 2008.

PARISER, E. *O filtro invisível:* o que a internet está escondendo de você. Translation: Diego Alfaro. Rio de Janeiro: Jorge Zahar, 2012.

POELL, T.; NIEBORG, D.; DIJCK, J. Plataformização. *Revista Fronteiras: Estudos Midiáticos*, São Leopoldo, v. 22, n. 1, p. 2-10, Jan./Apr. 2020. https://doi.org/10.4013/fem.2020.221.01

PRODANOV, L. S.; MONTARDO, S. P.; KARHAWI, I.; AMARAL, A. R.; GROHMANN, R. Autenticidade, carisma e engajamento em plataformas. *Lumina*, Juiz de Fora, v. 17, n. 2, p. 42-61, 2023. https://doi.org/10.34019/1981-4070.2023.v17.38698

SRNICEK, N. *Platform capitalism*. Cambridge: Polity Press, 2017.

TUKEY, J. W. *Exploratory data analysis*. Reading: Addison-Wesley, 1977.

ZUBOFF, S. *A era do capitalismo de vigilância*. Rio de Janeiro: Intrínseca, 2021.

## About the authors

*Guilherme Pessina:* Master's degree in Digital Communication from the Instituto Brasileiro de Ensino, Desenvolvimento e Pesquisa (IDP). Holds an undergraduate degree in Systems Analysis and Development and a postgraduate specialization in Databases from the Universidade Católica de Brasília. Email: gmpessinamail@gmail.com

*Tiago Salgado:* Assistant Professor in the undergraduate and graduate programs of the Department of Communication at the Universidade Federal de Minas Gerais (UFMG). Leader of the research group Communication Field and Its Interfaces (CCI), registered with CNPq. Vice-coordinator of the Communication Epistemology Working Group of Compós. PhD in Communication from the Universidade Federal de Minas Gerais (UFMG), with a doctoral research period at EHESS (Paris, France). Holds a Master's degree and a specialization in Communication from UFMG, and an undergraduate degree in Advertising from PUC Minas. Email: tigubarcelos@gmail.com

*Bruno Aragão:* PhD (2019) and Master's degree (2016) in Business Administration from the Graduate Program in Business Administration at the Universidade de Brasília (PPGA-UnB). Permanent faculty member of the Master's Program in Digital Communication at the Instituto Brasileiro de Ensino, Desenvolvimento e Pesquisa (IDP). Academic Manager and Professor in the undergraduate Business Administration program at the Instituto Brasileiro de Mercado de Capitais (Ibmec). Email: bruno.aragao@idp.edu.br

Received: 08/14/2026
Accepted: 09/15/2026