

Facebook as a promotional tool for Spanish museums 2016-2020 and COVID influence

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1.- Abstract

As Waller & Waller (2019) stated, Social Media produces an intense effect on culture-based institutions' practice. As a direct effect, the close relationships between Cultural Institutions and Social Media generate new services provided through their communications, access to their collections, and how they develop their customer engagement.

Technology in general and social networks, in particular, promote the concept of a digital social museum, defined as one that takes advantage of the opportunities offered by digital technologies to deepen the achievement of a genuinely close museum, enriching the visitor's experience, personalizing the interaction, favoring accessibility to the exposed knowledge and expanding the target audience of the exhibition (Mas, 2018).

However, do cultural entities and institutions employ ICTs (Information and Communications Technologies) to foster their interactive approach to their potential "customers"? Do museums use Facebook to educate and transmit culture to users, or as a mere promotional tool? Are there differences between its use in museums, or is it a common practice in all of them? Were their Facebook Promotion Strategies directly affected by the coronavirus COVID-19 pandemic?

KEYWORDS: Facebook, Museums, Promotion, Social Museums, COVID-19

2.- Introduction

It is clear that cultural institutions, like museums, need to assume the challenge of adopting contemporary digital methods and communication systems for heritage management (Kavoura & Sylaiou, 2019). Promoting a proactive digital strategy will allow them to be capable of raising their visitor's engagement.

During the last ten years, culture-based institutions, like museums, have used digital technologies and social media to share mass communication with their online content, improve the museum-visitors relations, and enhance visitors' experience (Waller & Waller, 2019).

3.- Facebook and the new communication and promotion challenges for museums

3.1- The evolution of the Social Digital Museum

The term museum comes from the Greek word “*museion*” (Corominas, 1973: 408), the name that identifies the temple of Athens consecrated to the cult of the Muses, and we must go back to 285 BC in Alejandría (Alonso Fernández, 1995: 27), to find the first institution considered as such (Iniesta, 1994: 35).

In Roman times, the concept of art collecting begins to develop (Hernández, 1994), although it is not until the Renaissance when we can establish the incipient museum institution (BSGT, 1974). We must wait until 1683 to see the museum’s birth as a public institution, at the hands of the University of Oxford, and the subsequent French Revolution that consolidated the museum as a space of the public property and enjoyed by the whole town (Desavallees, 1993).

In Spain, we must wait until 1771 to see the first museum, at the hands of Carlos III and his Royal Cabinet of Natural History (Bolaños, 1997). The museum institution has undergone a constant evolution, where the works of Rivière (1993) and Vergo (1989) are of importance, which establishes the foundations of the new museology and the new social role of the museum.

Díaz Balerdi (2002: 504) recognizes the public as an active protagonist, moving away from the public’s categorization as a merely passive subject. Other Scholars such as Cordón (2013), Montañés (2001), Gómez Vílchez (2012) provide a vision of a social, integrating, dialoguing, and participatory museum.

The proposals coming from Viñarás (2005) delves into the challenges of changing museum communication management and its challenge of conversion to a social museum.

Llerena (2016) and Mas (2020) delve into the profound change undertaken by museum institutions and how social networks Twitter and Facebook can help to achieve an increasingly social museum.

In this evolution towards a more social, participatory museum, where the visitor is an active protagonist, and social networks have a fundamental role in communication and the visitor’s relationship, we find Mas’ definition of the Digital Social Museum.

“We define the digital social museum as one that takes advantage of the opportunities offered by digital technologies to deepen the achievement of a museum that is truly close, open and social, enriching the visitor’s experience, personalizing the interaction, favoring accessibility to the exposed knowledge. Moreover, it is expanding the target audience of the exhibition (Mas, 2018)”.

Secondly, for the analysis of the impact of technology in the transformation to a social museum, two key authors are fundamental: the research by Saldaña & Celaya (2013) “Museums in the digital age” which investigates the motivations and objectives of incorporating technology into the museum, discovering that the main motivations are to attract new audiences, enrich the visitor experience and improve the communication

strategy, and Castilla San Martin (2012) in his study entitled “Museum environments, new exhibition technologies” devises a taxonomy of the different technologies and delves into the fact that these technologies help both to improve disclosure and the relationship with the user.

Other authors such as Castillo (2011), Fontán (2013), or Cordón, González & González (2016) study the opportunities that ICTs offer to the new museum and the new environments that they generate where they can interact with the visitor.

Thirdly, the theoretical contributions on the potential of social networks in the achievement of a social museum carried out by Professor Jenny Kidd in 2011, in her study “Enacting engagement online: framing social media use for the museum” are of great importance, as well as the studies that were published at the Nordic Digital Excellence in Museum’s congress by the authors Gjetrang (2004) and Kelly, Lynda & Chan (2006), where they concluded that these platforms offer opportunities to improve the visiting experience and the “engagement” with the visitor. This last author delves into how social networks can allow continuing to interact with the visitor once the exhibition has been visited, thus opening an opportunity to maintain contact beyond the short period of visit.

This social network approach as a community builder beyond the exhibition space was also the reason for studies like those by Jonhson, Becker, and Freeman (2013). Her work studies social media as new ways to generate deeper contact with these communities. In 2013, the study “Museum Communication and Social Media: Connected Museum” follows the profound change in the communication model that museums must address for social media’s correct use. Kristen Drotner and Kim Shroder conducted this study, or finally the one provided by Wilson-Barnao (2018), who tried to answer how “on-demand” museums adapt their activities in the digital era.

3.2- Facebook as a communication and promotional tool

Facebook is the most used social network globally (Statista, 2020), with 2.603 million active users, well above other popular networks such as Instagram, Tik Tok, or WhatsApp. Facebook has changed the way we interact (Llavinia, 2011). As per Amiguet (2011), although it is incapable of replacing the pleasure of seeing, touching, and feeling people in the flesh, it can help us see, touch, and feel each other more often.

Serrano Marín (2016) defines Facebook as the “machine of affections,” combining two elements that are fundamental in modern societies:

- i) technology understood as the organizing principle machine for everything, which began by organizing knowledge and then economic life and with it, political and now social relations;
- ii) symbolic systems, a much older element linked to the human species, religions, and ideologies.

Faerman goes a little further and compares Facebook with an operating system, focusing on the concept of the technological platform on which we install our relationships (Faerman, 2010: 123).

Camarero et al. (2018) show Facebook’s role in raising the importance of achieving user engagement, which “entails developing a strategy based on content as well as the museum’s relationship and dialogue with its audience.”

From the organizational point of view, Facebook is a fundamental tool to create stable links with its followers and offers notable advantages for brand building. (Rodríguez Fernández, 2017).

Social networks like Facebook have become new communication channels that have revolutionized the traditional way of relating between people, forcing museums to become permanently involved in this new process of democratizing culture (Sabaté Navarro & Gort Riera, 2012).

This author analyzes Facebook’s role within a possible communication strategy, indicating that it also offers many other advantages for organizations. In this sense, organizations can use Facebook as a channel for customer service, redirection to a website or blog, direct sales, and even a perfect communicating vessel between the offline and online users (Rodríguez Fernández, 2017).

According to Kidd (2011), museums can use social networks and Facebook with a triple purpose:

1) Marketing Frame

“The most common and sometimes least original part of museums’ use of social media offers great potential for communicating and attracting the public to exhibitions” (Kidd, 2011).

2) Inclusivity Frame

One of the most exciting aspects of social media is its ability to create sustainable communities over time: “Museums interested in building community and audiences have quickly realized the potential of these new technologies and attitudes” (Grabill, Pigg, & Witternauer, 2009).

3) Collaborative Frame

In Mas’ opinion, Facebook’s potential for Marketing and Promotion is high (Mas, 2020), highlighting this potential compared to the other frames defined by Kidd (2011).

Table 1: Potentiality offered by Facebook for museum communication strategies

	Marketing Frame	Inclusivity Frame	Collaborative Frame
	HIGH: It is the setting with the most significant	HIGH: It is a social network that allows	HIGH: Facebook allows the generation

Facebook	potential for museums and one of the main focuses of their activity. In this sense, Facebook provides excellent support for museums to materialize the reality of the digital social museum.	museums to establish ties and relationships with their community through content that encourages interaction.	of dialogue and participatory community interested in getting involved in the museum, which gives it new opportunities to consolidate the digital social museum.
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Source: Mas, 2020

In their conference “Do and don’t on Facebook across museums,” Gron, Hansel & Holst (2014) refer to the fact that most museums miss the potential offered by Facebook to generate community since almost all of them orient their strategy more towards the promotion:

“Few museums on Facebook succeed in generating engaging content that creates awareness. We often choose to promote events and exhibitions rather than engage in conversations” (Gron, Hansel, & Holst, 2014).

Internet and Facebook are consolidated channels for communication and the promotion of museums and, as such, they form part of their usual communication mix and other tools (Sanguinetti, 2009: 17). The Internet is the leading information channel and the most useful medium for attracting new visitors and promoting activities (Jordar, 2011).

However, the use of Facebook for promotion also has its limitations. Claes & Deltell (2014) reached an interesting conclusion about the relationship between the number of followers of a Facebook profile and the museum’s physical version. In their study, they set that the number of followers a museum has on Facebook is closely linked to the physical reach of the museum:

“The creation of a globalized social museum does not materialize. The number of followers is directly related to the territory close to the physical space of the institution” (Claes & Deltell, 2014).

The study also concluded that there is no correlation between increased museum visits and increased Facebook followers. “The growth of physical visitors is not directly equivalent to the increase in the number of virtual visitors” (Claes & Deltell, 2014).

Now the strategy of museums is centered in the “technology-driven stage” (Virto & López, 2019). “Technology-empowered experiences” present a clear opportunity to museums as these institutions seek interactive, embodying, and immersive tools that satisfy a more comprehensive range of audiences (Hede, Garma, Josiassen, & Thyne, 2014; Wilson Barnao, 2017).

4- Research Design

We have already seen how technology in general and social networks, in particular, favor the evolution of the museum institution towards the digital social museum and how Facebook directly offers excellent opportunities for communication and the promotion of museums.

However, do museums use the social network Facebook to educate and transmit culture to users, or just use it as a mere promotional tool? Have they changed the way of using Facebook before, during, or after the state of alarm due to COVID-19?

4.1.- Hypothesis

Our research proposes to solve the following hypotheses:

H₁. Museums use Facebook mainly as a promotional channel, above literacy and transmission of culture, closer to its natural objectives as a social museum.

H₂. Spanish museums modified their Facebook communication and promotional strategies during and post-COVID-19 lockdown.

H_{2.1}.- Spanish museums modified their Facebook communication and promotional strategies during COVID-19 lockdown.

H_{2.2}.- Spanish museums modified their Facebook communication and promotional strategies post-COVID-19 lockdown.

4.2- Methodology

To carry out this study, we have used the technique of content analysis (Hsieh & Shannon, 2005). This quantitative technique allows the manifest content of communication to be examined systematically and objectively (Berelson, 1952: 18; and Kerlinger, 1986). The content analysis makes it possible to scientifically explore both “the meanings” (thematic analysis) and the “signifiers” (analysis of procedures and formal features) of any text (Krippendorf, 2018).

Riffe, Lacy, and Fico (2019) define content analysis as a procedure to systematically assign the communication contents to categories using statistical methods. In this sense, content analysis not only serves to describe the characteristics of messages in a univariate way but also to identify the relationships between their different characteristics, allowing us to scientifically explore both “the meanings” (thematic analysis) and the “signifiers” (analysis of procedures and formal features) of any text (Krippendorf, 2018).

The systematic nature of this technique allows us to measure the frequency with which elements of interest appear in the set of information that has been selected for the study (Sánchez Aranda, 2005: 207-228).

As we said, this technique is characterized as (Wimmer & Dominick, 1996: 170):

- a) Systematics: since explicit rules are established and applied, consistently, throughout the investigation and on all elements of the sample.
- b) Objective: in the sense that it tries to avoid the most significant possible bias on the part of the researcher, in such a way that if another researcher repeated the analysis, the results should be the same.
- c) Quantitative: since it seeks to present the results with the highest accuracy.

For the calculation of the distribution, and given the size of the sample, the Student's t test (Kilgo, 1997) has been used, in order to estimate the mean and to evaluate their differences. Excel and SPSS have been used for its statistical treatment.

$$T = \frac{Z}{\sqrt{V/v}} = Z \sqrt{\frac{v}{V}}$$

4.3.- Data Structure and collection

We have selected the ten Spanish museums with the most followers on Facebook¹, and we have analyzed the contents of their posts during three different periods, from July 2016 to July 2020:

- First data collection (pre-lockdown):
 - July 2016 to February 2017: 2,336 posts analyzed
- Second data collection (During lockdown):
 - April 2020, during the lockdown, which in Spain was imposed due to the state of alarm due to COVID-19: 541 posts analyzed
- Third data collection (Post-Lockdown):
 - A third period, June and July 2020: 951 posts analyzed

The final Facebook posts analyzed represent 3,828 messages over five years.

Table 2.- Museum's Post by Period

	PRE	DURING	POST	TOTAL
Prado National Museum	251	61	61	373
Reina Sofía Museum	452	83	174	709

¹ www.socialbakers.com 14th February 2017

Bilbao Guggenheim Museum	324	56	125	505
Picasso Museum of Barcelona	74	42	86	202
Thyssen Bornemisza Museum	171	40	69	280
Museum of Contemporary Art of Barcelona	137	35	62	234
Bilbao Fine Arts Museum	265	65	105	435
CAC Málaga	404	86	139	629
National Art Museum of Catalonia	158	43	105	306
Madrid Costume Museum	100	30	25	155

Source: Own elaboration

We analyze the intent of each publication according to nine possible purposes (Literacy, Dissemination, Promotion, Live Broadcasting, Raising questions, Requesting info, Requesting to play, Amend information, Reinforcing Contacts)

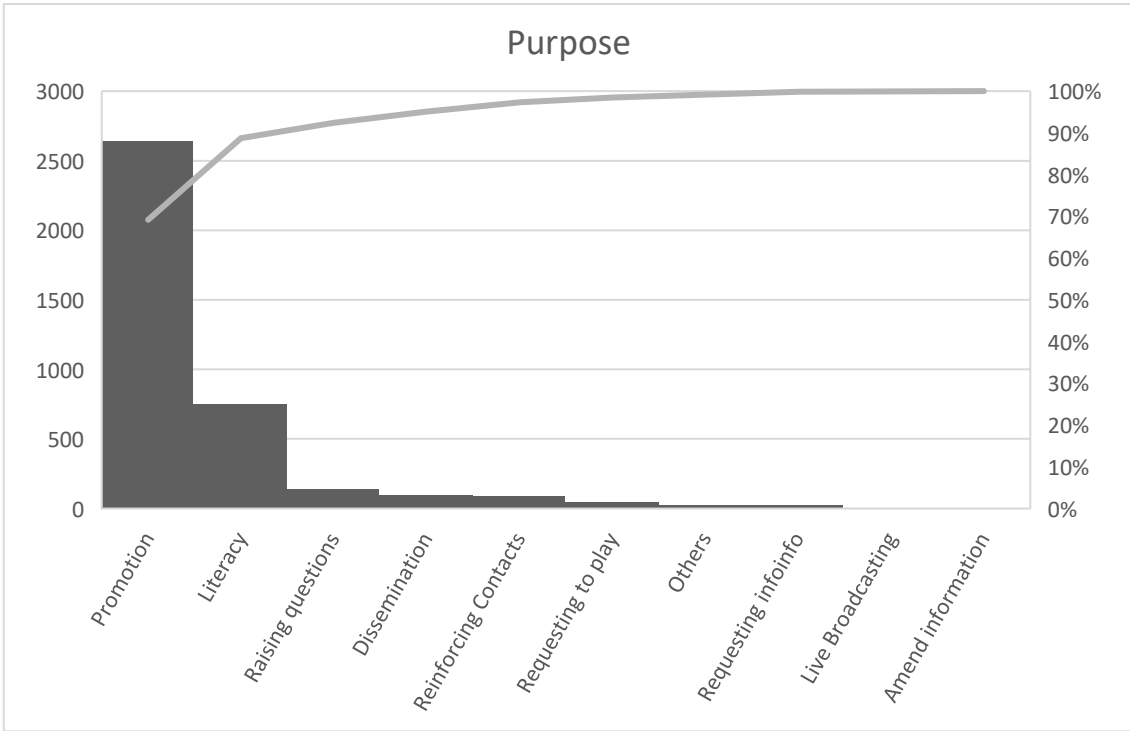
5.- Results and Conclusions

H1. Museums use Facebook mainly as a promotional channel, above literacy and the transmission of culture, closer to its natural objectives as a social museum.

The use that the museums make of Facebook through their publications is mainly for promotional purposes. From 2016 to 2020, 3,824 publications have been observed, of which 2,645 have been used to promote, representing 69.2% of the total.

Literacy ranks as the second-order purpose of publications, with 750 publications, which represents 19.6%.

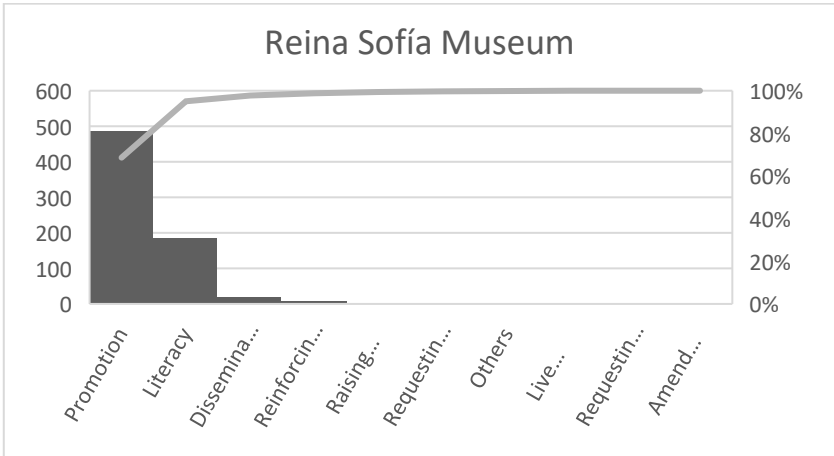
Figure 1. Museums' Facebook posts purpose in accumulated absolute and relative values.



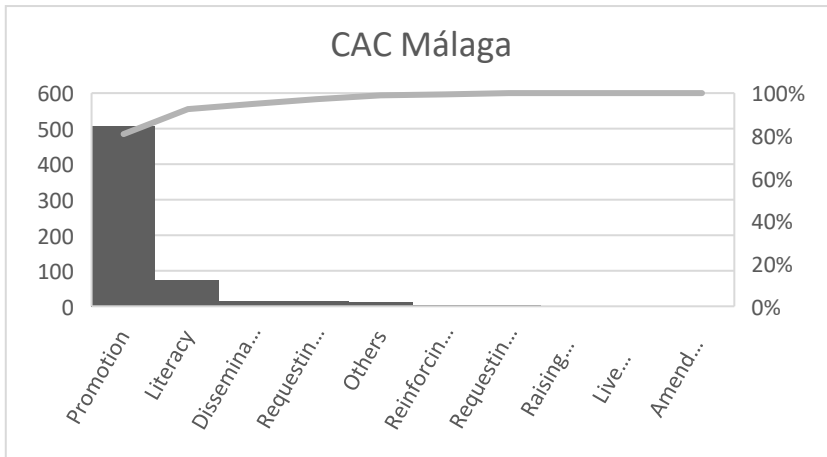
Source: Own elaboration

The three museums that have published the most publications are the Reina Sofía Museum with 709 (18.5% of the total), the CAC Málaga Museum with 629 publications (16.4% of the total), and the Bilbao Guggenheim museum with 505 publications (13.2% of the total). These three museums share a communication strategy, with promotional publications being the fundamental axis of the same.

Figure 2&3. Facebook’s post purpose from the Reina Sofía and CAC Málaga museums in accumulated absolute and relative values.



Source: Own elaboration



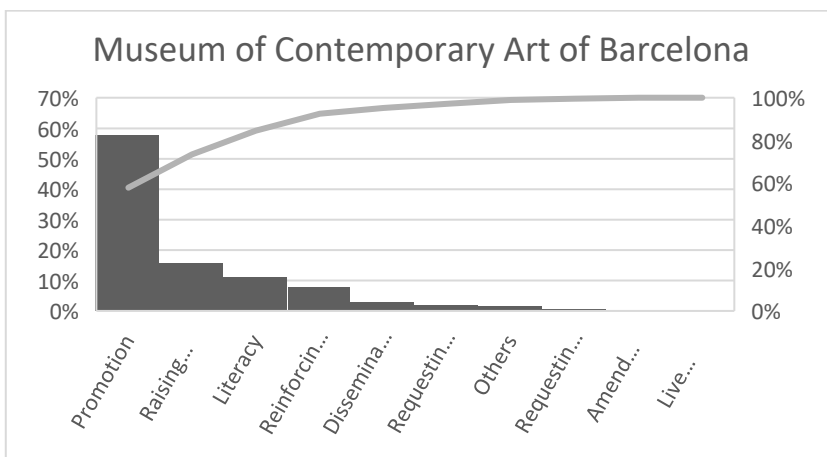
Source: Own elaboration

Source: Own elaboration

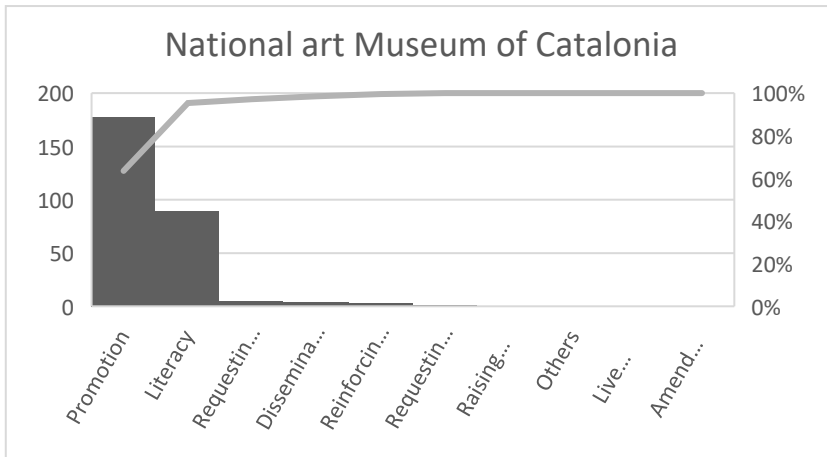
When analyzing each concrete museum's strategy, two of the Catalonian museums stand out as the main drivers of promotional activity, followed by the CAC Málaga; that is, these are the museums that present a more significant number of posts for promotional purposes.

In the following figures it is observed how the Museum of Contemporary Art of Barcelona dedicates 86% of its publications to promotional activity, and the National Art Museum of Catalonia dedicates 84%.

Figure 4&5 Facebook's posts purpose from the National art Museum and Museum of Contemporary Art of Catalonia in accumulated absolute and relative values



Source: Own elaboration

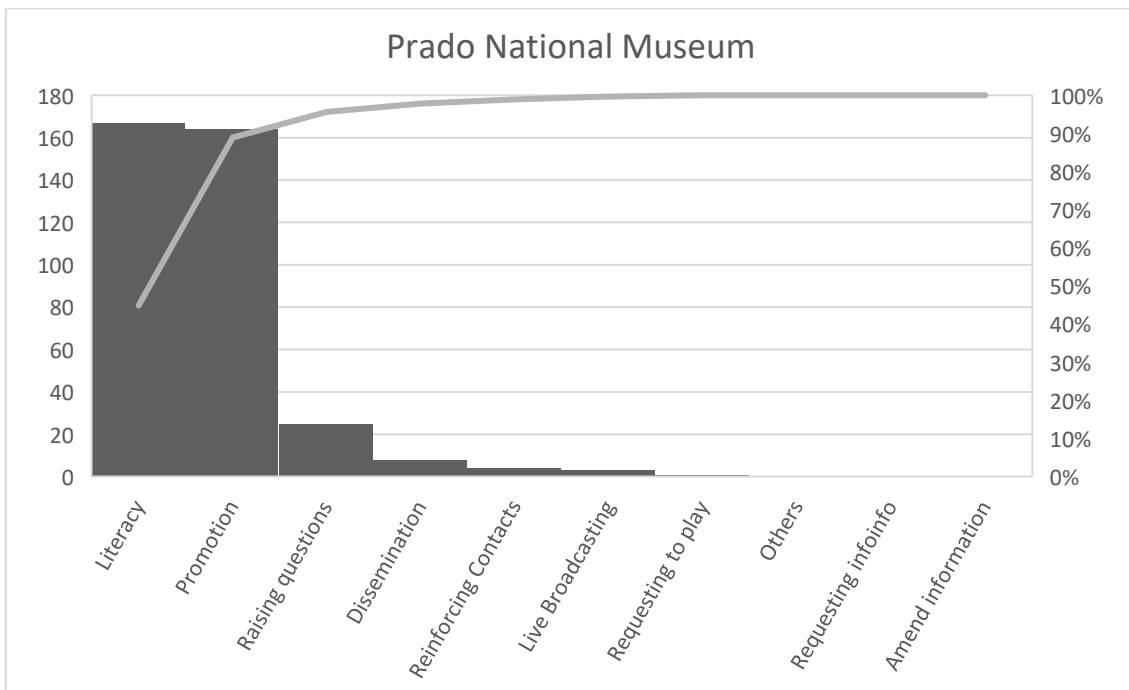


Source: Own elaboration

Finally, the Prado Museum strategy is noteworthy, as it is the only museum whose number of posts aimed at literacy exceeds those intended to promote.

The following figure shows that publications aimed at literacy make up 45% of the museum's total, and those aimed at promoting make up 44%.

Figure 6. Facebook posts from the Prado Museum in accumulated absolute and relative values.



Source: Own elaboration

These data allow us to confirm the hypothesis raised that indicates that Museums use Facebook mainly as a promotional channel, above literacy and the transmission of culture, closer to its natural objectives as a social museum. Due to the prominence of the promotional purpose in Facebook posts created by museums, it is necessary to analyze the strategy implemented at a time of particular relevance, such as the lockdown derived from the coronavirus COVID-19 pandemic.

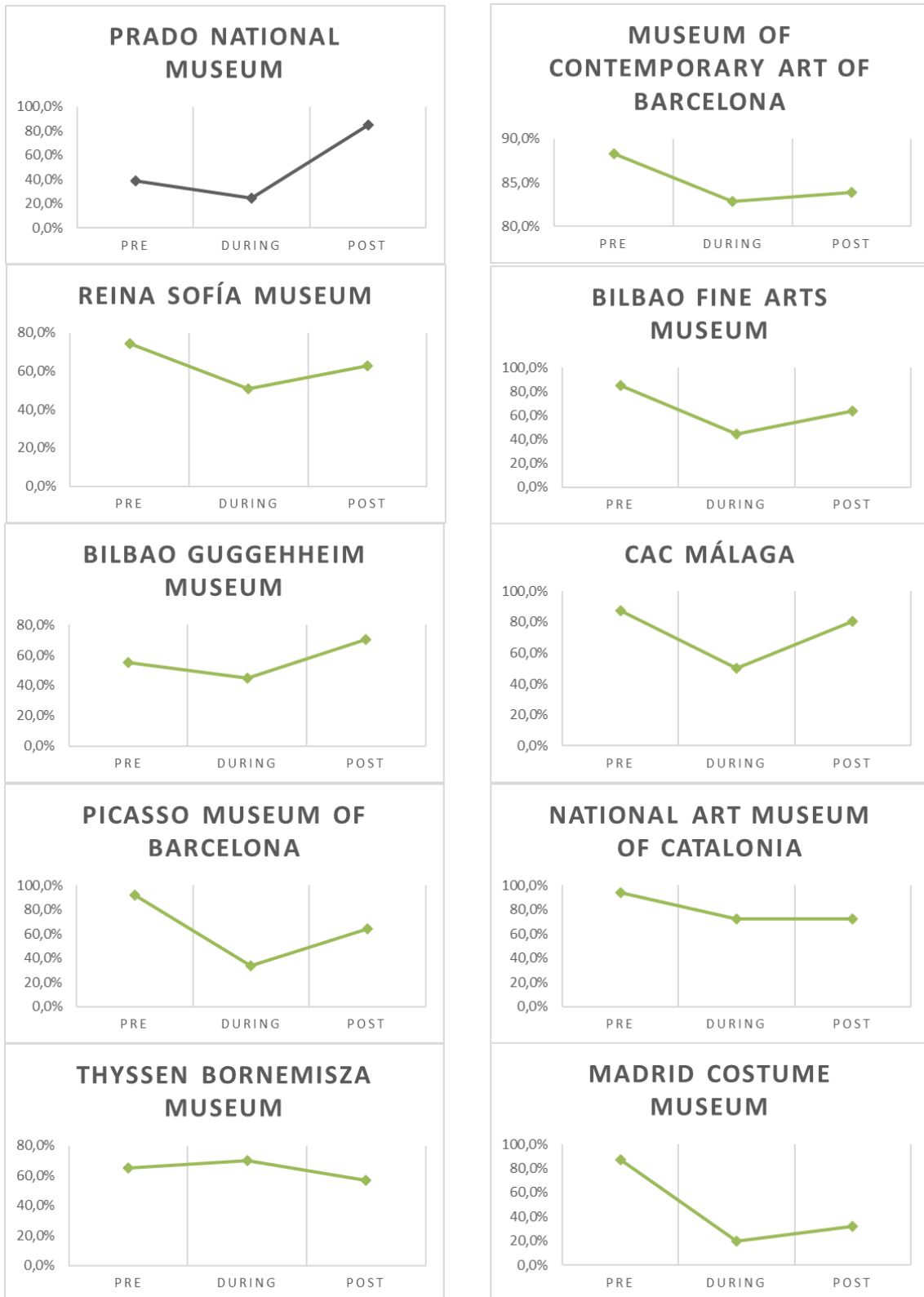
We propose a longitudinal analysis that comprises three stages, one before the lockdown, another during the lockdown, and another after the lockdown to study the possible differences in the number of museum publications for this purpose.

Table 3.- Table 3.- Relative weight to the promotional publications of the Museums in the pre-during and post-lockdown periods

	PRE	DURING	POST
Prado National Museum	38,6%	24,6%	85,2%
Reina Sofía Museum	74,1%	50,6%	62,6%
Bilbao Guggenheim Museum	55,2%	44,6%	70,4%
Picasso Museum of Barcelona	91,9%	33,3%	64,0%
Thyssen Bornemisza Museum	64,9%	70,0%	56,5%
Museum of Contemporary Art of Barcelona	88,3%	82,9%	83,9%
Bilbao Fine Arts Museum	84,9%	44,6%	63,8%
CAC Málaga	87,4%	50,0%	80,6%
National Art Museum of Catalonia	94,3%	72,1%	72,4%
Madrid Costume Museum	87,0%	20,0%	32,0%

Source: Own elaboration.

Figure 7. Evolution relative weight of promotional publications of museums on Facebook, during and after confinement



Source: Own elaboration

All the museums, except the Reina Sofía, have decreased their promotional publications in the period of confinement compared to the previous stage. The most significant

decreases, in the relative weight of its promotional publications, are those made by the Museo del Traje de Madrid which varies 67 percentage points, the Picasso Museum in Barcelona which varies 58.6 percentage points and the Museum of Fine Arts in Bilbao that varies 40.3 percentage points.

This strategic communal coincidence is repeated again in the post-confinement period with respect to confinement, but in the opposite direction, that is to say, all museums, except the Reina Sofía, have increased the relative weight of Facebook posts for promotion. The most relevant increases were those produced by the Prado Museum, which increased by 60.7 percentage points, followed by the Picasso Museums in Barcelona and CAC Málaga with an increase of 30.6 percentage points.

Another relevant fact is the one observed when comparing the relative weight of publications in the period before confinement and the one after. It seems logical to think that museums would have a special interest in promoting their activities after confinement with the aim of attracting a greater number of attendees, however, the data shows a different behavior. All the museums except the Prado and the Guggenheim have decreased the relative weight of their publications destined to promote activities, the most outstanding case is the Madrid Costume Museum, which decreased 67 percentage points, that is, before the confinement, a greater number of posts to promote their activities on Facebook than after confinement. The Picasso Museum in Barcelona and the Museum of Fine Arts in Bilbao imitate this behavior with a decrease of 58.6 and 40.3 percentage points respectively.

This descriptive analysis suggests the need for statistical tests to confirm the assumption about the variation of promotional posts made by museums on Facebook during and after confinement.

H2.1: The promotional activity of museums in Spain during the lockdown has been reduced compared to the stage before the lockdown.

We carried out a t-test on the equality of the average use of promotion techniques before and during confinement, based on the Spanish museums' sample. The two-sample t-statistics are 3.1379 (critical value of $t = 1.7340$). Por tanto, se confirman diferencias significativas entre los períodos señalados y se acepta que la actividad promocional se ha reducido en los períodos señalados.

The impossibility of attending museums in person has led to a change in communication strategy, the most visible effect of reducing publications whose objective is to promote activities and increase publications aimed at disseminating information.

H2.2: The promotional activity of museums in Spain has increased in the post-lockdown stage compared to the lockdown stage.

We performed a t-test on the equality of the average use of promotion techniques during lockdown and after lockdown, based on the Spanish museums' sample. The two-sample t-statistics are 2.1774 (critical value of $t = 1.7396$).

Therefore, we can confirm significant differences in the use of promotion techniques during and after lockdown.

There is a change in communication strategy focused on promoting activities related to visiting the museum due to eliminating restrictions on access to the public.

Therefore we can be capable to confirm the H2 and the secondary ones.

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