Museums and their audience: towards dialogic communication through social media?

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Abstract: Social media (SM) platforms are gaining a leading role as a communication tool for museums, representing an important tool which these institutions can use to engage with their audience. Despite the strategic potential of SM, most museums exhibit a low level of social activity and are still in a phase of monologic communication with their public. In this vein, the present paper aims to investigate whether the top 3 most visited museums in Europe with an official profile on Facebook, namely the Louvre, the British Museum and Tate Modern, use this social platform merely as a marketing tool, or if, on the contrary, they exploit its potential to establish two-way (i.e., dialogic) communication. The results of the analysis show that, although the museums in question are turning to SM increasingly often, their approach continues to be exclusively communicational; indeed, the interactions between the museums and their public are very limited.

Keywords: dialogic communication; social media; Facebook; museums.

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1 Introduction

Social media (SM) can be defined as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content" [Kaplan and Haenlein, (2010), p.61]. Therefore, regardless of the different types of SM (Zarrella, 2010), the main feature of these applications is that they allow users to act not simply as users, but also as co-creators of digital content (Capriotti et al., 2016).

For this reason, SM – and more in general the digital technologies – have revolutionised communication processes (Castells, 2007, 2010), offering new alternatives of communication based on users' involvement and active participation (Baker, 2017). By doing so, social platforms have facilitated the transition from 'one-to-many' interactions, which are typical of traditional media (such as radio, press and TV), to

'many-to-many' interactions, making the communication 'multi-directional' and therefore facilitating the development of more symmetrical interactions (Castelló et al., 2013). In this sense, the advent of Web 2.0 has not only reorganised the way in which organisations can gather information, but has also redefined stakeholders' expectations (Bonsón and Ratkai, 2013). For this reason, strategies related to the internet have seen a substantial shift, from a primary focus on information to a focus on communication and cooperation (Fuchs, 2008; Kent and Taylor, 2002).

This change of communication model has interested all kinds of organisations, including non-profit entities (Bellucci and Manetti, 2017) such as – in particular – museums (Capriotti and Kuklinski, 2012).

Regarding museums, SM platforms are gaining a leading role as a communication tool (Suzić et al., 2016). Nowadays, these institutions operate in an increasingly competitive environment, where competition involves not only other museums and cultural institutions, but also organisations belonging to educational and entertainment industries (López et al., 2018; Burton and Scott, 2003; Kotler et al., 2008). Survival in this competitive arena requires the right management decisions, as well as the development of an interactive or dialogic form of communication (Capriotti et al., 2016) in order to increase the level of interaction between museums and their public (Camarero et al., 2016).

In this respect, SM platforms seem to have the potential to establish the ideal conditions to favour dialogic communication, which represents the framework for the building of lasting relationships between organisations and their audience via the web (Kent and Taylor, 2002; Pang et al., 2018). Notwithstanding, some studies have highlighted that museums do not always take advantage of the opportunities of dialogue provided by SM (Capriotti and Losada-Díaz, 2018).

In light of these considerations, the present paper aims to investigate whether the top 3 European museums (in terms of visits) employ Facebook (FB) – the most used SM platform in the world (Statista, 2019) – as a tool for one-way communication, with the sole goal of sharing information related to museums' activities (in other words, merely as a marketing tool), or if, on the contrary, they exploit the potential of this social platform to establish two-way (i.e., dialogic) communication.

The remainder of the paper is organised as follows. Section 2 includes the literature review of SM and dialogic communication, while Section 3 illustrates the research methodology. Section 4 puts forth the empirical results and discusses the findings of this study. The paper ends with conclusions regarding the use of SM as a tool for supporting dialogic communication in Section 5.

2 Theoretical background

Digital technologies and, in particular, the advent of SM, have deeply impacted museums, forcing them to find innovative solutions to the changing technological environment (Kotler et al., 2008). The field of public relations has also seen a theoretical shift for museums, from one-way communication to an emphasis on relationship building through dialogue (Waters et al., 2011).

From this perspective, online communication represents an ideal avenue for fostering dialogic communication, which refers to a process of two-way discussion using internet

tools where participants are able to exchange information, comments, opinions, assessment and experiences on a continuous basis (Kent and Taylor, 1998, 2002).

Kent and Taylor (1998) identified five principles which organisations may follow to promote interaction with online users. These principles include:

- a the 'dialogic loop'
- b the usefulness of information
- c the generation of return visits
- d the *intuitiveness/ease of interface*
- e the conservation of visitors.

According to Capriotti and Kuklinski (2012), nowadays the dialogic loop represents not merely a principle, but also the result of the correct management of the other four principles. Furthermore, the same authors grouped the four remaining principles into two clusters: *content management* (principles of usefulness of information and intuitiveness/ease of interface), related to the type of information provided and how it is organised online, and *interaction management* (principles of generation of return visits and conservation of visitors), connected to the level of interaction between organisations and their public (Table 1).

	Principles	Description
Content management	The usefulness of information	Organisations should provide the information which is useful for users and specifically tailored to their needs.
	The intuitiveness/ ease of interface	Organisations should present digital content in such a way that users are able to easily to find it.
Interaction management	The generation of return visits	Organisations should use appealing pages, with features that make them attractive for repeat visits over time (updated information, online forums, etc.).
	The rule of conservation of visitors	Organisations should organise their social pages to keep visitors on the site/social platform, rather than leading them off to third-party websites.
	The 'dialogic loop'	Following the above-mentioned principles, organisations have the potential to create an ongoing dialogue with their virtual audience, allowing the public to ask questions and the organisation to respond.

Table 1	Principles	of effective	dialogic	communication
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Scholars initially examined dialogic communication via traditional websites, both of companies (Park and Reber, 2008) and non-profit organisations (Ingenhoff and Koelling, 2010; Taylor et al., 2001), following which they adapted the principles of dialogic communication to social platforms, such as Facebook, Twitter and YouTube (Bortree and Seltzer, 2009; DiStaso and McCorkindale, 2013; Rybalko and Seltzer, 2010).

In the context of museums, some studies highlighted that SM platforms have great potential as a dialogic communication medium because they include some dialogic features by default (Capriotti and Losada-Díaz, 2018; Zafiropoulos et al., 2015) that allow for the exchange of information, debate, discussion and collaboration (Kidd, 2011). As noted by Avery et al. (2010, p.337), "social media are inherently interactive, communicative, and social." Furthermore, SM could be particularly useful for non-profit organisations – such as museums – which have limited funds and human resources compared to firms (Waters et al., 2009). Moreover, for these reasons, Suzić et al. (2016) recognised the need for museums to use SM in a strategic way and to develop an effective SM strategy.

However, despite the strategic potential of SM, several studies have found that most museums exhibit a low level of SM activity and are still in a phase of monologic communication with their public (Capriotti and Kuklinski, 2012). In this case, institutions do not fully exploit the dialogic features of SM (Kim et al., 2014) and use these tools only to support their marketing strategies in the following ways: promotion and communication, word of mouth, market research and innovation management and reputation management (Hausmann, 2012a; Kotler et al., 2008; Mangold and Faulds, 2009). Furthermore, other studies have highlighted that there are significant differences in the use of SM tools among countries; indeed, most European museums do not use digital tools to actively promote dialogue with users (Badell, 2015), while American museums are trying to increase their use of SM for multi-way communication strategies (Fletcher and Lee, 2012).

In the light of the above, our research question involves determining whether or not the top 3 most visited museums in Europe use FB as a tool for encouraging a more interactive and collaborative dialogue with their audience and therefore for supporting dialogic communication.

3 Methodology

Considering that interaction is the cornerstone on which dialogic communication is built, this exploratory research aims to analyse the level and the type of interaction between museums and users on SM. In particular, the analysis focuses on the 3 most visited museums in Europe (TEA/AECOM, 2017) with an official profile on Facebook, namely the Louvre (Paris), the British Museum and Tate Modern (London).¹ These institutions are in first, third and fourth place respectively in the ranking, while the Vatican Museums (Vatican City) are in second place but are active only on TripAdvisor and YouTube (Table 2).²

The focus on FB can be justified considering that it is not only the most adopted form of SM among artistic and cultural organisations [Thomson et al., (2013), pp.25–26], but also the most popular social network worldwide, followed by YouTube and Instagram (Statista, 2019). Indeed, FB has approximately 2.3 billion monthly active users, against the 1.9 billion of YouTube and the 1 billion of Instagram (Hootsuite, 2019). Furthermore, FB is a 'community relationships' channel, whereas YouTube and Instagram are 'community interests' tools (Ang, 2011), and therefore the former is particularly suitable for dialogic communication (Bellucci and Manetti, 2017). This could explain why most studies that apply principles of dialogic communication to SM focus on FB and explore its communicative potential for building dialogic relationships (Wirtz and Zimbres, 2018).

Place in	Mugauma			Social p	latforms		
the ranking	Museums	Facebook	Twitter	Instagram	Pinterest	YouTube	Others*
1	Louvre	✓	✓	✓		✓	
2	Vatican Museums					\checkmark	✓
3	British Museum	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	✓
4	Tate	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	

Table 2Museums and SM

Note: *the residual category 'others' includes TripAdvisor (Vatican Museums), Google+ and RSS (British Museum).

In order to answer our exploratory research question, we designed a content analysis (Krippendorff, 2012) that took into account the FB page of the Louvre, the British Museum and Tate galleries. The study was developed in two steps, with the aim of exploring two fundamental aspects of online communication, namely the *content* of the social activity and then the *interaction* on FB (Camarero et al., 2016).

In the first step, the content of each post published by the museums in the first three months of the year 2019 (1st January 2019–31st March 2019) was grouped into one of the following categories:

- art-historical content
- information on current or upcoming exhibitions and events
- information on extraordinary activities, such as restorations, artworks on loan or other forms of collaboration with other museums or institutions
- invite to support museum's activities and initiatives
- opening hours
- others, which is a residual category for those posts that do not fit into other classifications.

Following this, we also investigated how many posts contained pictures, audio/video or links, that is, the *richness* of museums' social efforts (Chung et al., 2014). Several studies have highlighted that posts containing these tools are more informative and are more likely to be noticed and shared by users (Emerson, 2012). Indeed, these digital tools help the museums' stakeholders to understand information, and in this sense also allow them to fulfil the principle of usefulness of information (Kent and Taylor, 1998).

In the second phase, we conducted a descriptive analysis of the posts in order to explore the interaction between museums and their public. This practice of gathering and analysing data from SM ('SM analytics') is widely employed in literature for evaluating the online interaction (Gerrard et al., 2017; Stieglitz et al., 2014) between organisations – companies (DiStaso and McCorkindale, 2013) and non-profit entities (Bellucci and Manetti, 2017) like museums (Capriotti and Losada-Díaz, 2018) – and stakeholders. Therefore, we manually collected the number of 'likes', 'shares', and 'comments' for every single post in each category. A high number of likes, shares and comments suggests indeed a reasonable level of interaction between museums and their audience

(Manetti et al., 2017). At the same time, since museums can also reply to users' comments, we also evaluated whether and how frequently this type of two-way communication really happened, thereby exploring whether museums exploit the dialogic potential of FB. Furthermore, following a similar approach to that adopted by Bellucci and Manetti (2017), we also investigated the general tenor of the discussion between the museums and the public, indicating whether feedback from users was more positively-orientated (compliments, constructive proposals, etc.), negatively-orientated (protests, constructive criticism, etc.) or neutral. In order to achieve this, we classified each reply with a value ranging from 1 (protest) to 3 (compliments), with neutral comments receiving a score of 2. In addition to analysing single posts, we also collected the value of 'page likes' for every FB page, which can be seen a measure of the museum's virtual audience.

4 Results and discussion

This study focuses on the Louvre, the British Museum and Tate galleries, which are the most visited European museums and among the most popular worldwide (TEA/AECOM, 2017). These institutions joined FB in 2008, 2009 and 2007 respectively, and have on staff professionals who deal with SM.

The first step of this research takes into account the *content* of the social activity of the museums under study and, in particular, the level of activity and the richness of the content, both of which are important aspects when it comes to attracting users' attention (Moro et al., 2016).

First of all, the study investigates how many posts the museums have published during the period of analysis, since a high level of posting activity is expected to offer more opportunities for interaction and therefore for relationship building (Vlachvei and Kyparissis, 2017). For this reason, Hausmann (2012b) recommended updating social profiles several times per day. The results reveal that Tate galleries have published an outstanding number of posts (186) compared to the Louvre (63) and the British Museum (67) (Table 3). In this sense, the last two institutions, having posted approximately five posts per week, surprisingly exhibit low posting activity (Capriotti and Losada-Díaz, 2018), although they are in first and third place respectively in the ranking of the most visited European museums (TEA/AECOM, 2017). Therefore, these institutions should increase the number of posts which they put up in order to encourage dialogue with their audience. On the contrary, Tate galleries have daily activity on their FB account, posting about two messages every day and hence partially following Hausmann's recommendation.

Considering the different kinds of content of the messages which museums deliver on their official FB accounts, the analysis finds that art-historical information (133 posts out of 316) and information about current or upcoming exhibitions and events (131) are the most common categories (Table 3). This is an interesting result because the success of museums in enhancing dialogue and engaging users is positively affected if published posts include content which focuses on educational information in addition to the usual promotional messages (Suzić et al., 2016). Indeed, as Hausmann (2012b) noted, the more appealing the content is, the more dialogue there will be between museums and users. Furthermore, it is worth noting that, surprisingly, only the Louvre has published posts to

28 M. Contri

invite the public to support its activities and initiatives. In particular, the museum invited users to join the 'Société des Amis du Louvre', which is the main private supporter of the museum, and to support the restoration and conservation project of the 'Arc de Triomphe du Carrousel' (Paris). In this respect, many studies have indeed highlighted the opportunities provided by the internet to find donors and to create a network of supporters (Anderson and de Mille, 2006; Kotler et al., 2008).

Contout of post		No. of posts		
Content of post	Louvre	British Museum	Tate	Tot.
Art-historical content	18	39	76	133
Current or upcoming exhibitions and events	24	22	85	131
Extraordinary activities	5	4	13	22
Invite to support museum's activities and initiatives	5	—	_	5
Opening hours	5	—	_	5
Others	6	2	12	20
Tot.	63	67	186	316

 Table 3
 Results of content analysis by museums and types of content

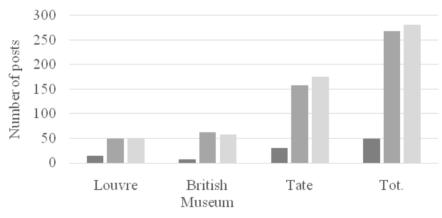


Figure 1 Tools used in the posts by museums

■Video ■Photo/Image ■Link

As regards the *richness* of museums' social efforts (Chung et al., 2014), this study shows that the vast majority of the posts include – in addition to text – links (281 posts out of the 316 total) and photos (267), and only in some cases audio or video (49) (Figure 1). This result is particularly interesting considering that interactive links to other social platforms or websites and images increase the users' propensity to look at the content of the messages (Sabate et al., 2014); indeed, in this sense, said links and images have the potential to foster the interaction and therefore the dialogue between museums and users (Emerson, 2012).

When examining more-in-depth the level of *interaction* on FB, it is necessary to observe – first of all – the 'page total likes', which can be seen as a measure of the virtual audience, indicating how many users are interested in the museums' initiatives (Suzić et al., 2016). The Louvre, the British Museum and Tate galleries have an outstanding number of fans: 2,478,220, 1,503,979 and 1,176,163, respectively (Table 4). Said values confirm the great appeal of these institutions, especially when looking at the number of followers of the other institutions included in the ranking of the top 10 museums for fans on FB (TEA/AECOM, 2017).

Museums		No. of FB page likes
Louvre	Paris, France	2,478,220
British Museum	London, UK	1,503,979
Tate	London, UK	1,176,163
National Gallery	London, UK	946,958
Natural History Museum	London, UK	488,759
State Hermitage	St Petersburg, Russia	58,162
Reina Sofia	Madrid, Spain	380,892
Victoria & Albert Museum	London, UK	657,604
Centre Pompidou	Paris, France	679,802
Mean		1,004,733
Standard deviation		756,358

 Table 4
 The 10 most visited European museums and their audience on FB

Regarding likes, shares and comments, the analysis points out that the content most frequently published by museums (art-historical information and information about current or upcoming exhibitions and events) is also the content which is most appreciated by users (Table 5). Nevertheless, the study reveals that fans mainly react to posts by using '*like*', whereas '*share*' and especially '*comment*' are used to a lesser extent. This means that, if it is true that a high number of likes, shares, and comments suggests a potentially wider level of interaction between museums and users, the lower values related to the comment tool seem to suggest a contained dialogue among participants.

In order to provide a further confirmation of this preliminary evidence, the present study also explored the replies that were posted by museums, finding that in very few cases these institutions did reply to users' comments. Out of a total of 16,039 comments, only 24 are replies by museums (more specifically, 10 by the British Museum, 7 by the Louvre and 7 by Tate galleries). Furthermore, the general tenor of the dialogue between the museums and the public is substantially neutral (2.1), with most comments containing merely information requests. Therefore, the analysis shows that these museums rarely take part in discussion, thereby not optimally exploiting the communicative opportunities which FB offers in order to create a real two-way communication with their audience (Suzić et al., 2016). In sum, and consistent with Langa (2014), the findings confirm that the mere use of digital tools does not necessarily result in more engagement of, and dialogue with, the online audience.

		No. ι	No. of likes			No. of shares	hares			No. of comments	ments	
Content of post	Louvre	British Museum	Tate	Tot.	Louvre	British Museum	Tate	Tot.	Louvre	British Museum	Tate	Tot.
Art-historical content	30,787	87,761	48,144	166,692	5,398	24,716	8,983	39,097	166	3,920	1,975	6,886
Current or upcoming exhibitions and events	30,547	30,505	49,469	110,521	5,682	6,256	12,666	24,604	1,670	1,723	2,925	6,318
Extraordinary activities	6,921	12,774	7,362	27,057	1,068	2,369	2,390	5,827	208	626	342	1,176
Invite to support museum's activities and initiatives	3,517	0	0	3,517	387	0	0	387	95	0	0	95
Opening hours	5,680	0	0	5,680	511	0	0	511	159	0	0	159
Others	8,929	3,070	14,320	26,319	771	688	1,940	3,399	341	68	966	<i>I</i> ,405
Tot.	86,381	134,110	119,295	339,786	13,817	34,029	25,979	73,825	3,464	6,337	6,238	16,039

 Table 5
 Likes, shares and comments by museums and types of content

30

M. Contri

5 Conclusions

Digital technologies have the potential to deeply change how museums engage with their audience (Capriotti and Losada-Díaz, 2018), allowing them to receive real-time feedback about their activities and then to create a more interactive and collaborative approach to communication (Camarero et al., 2016). In this respect, the low-cost opportunities which SM provide for the two-way communication between museums and their audience make them an affordable and promising resource for building strong relationships with the public (Hausmann, 2012b). Nevertheless, the presence of museums on SM might not provide the expected benefits if said presence is not appropriately conceptualised and implemented (Kidd, 2011).

In this vein, the current study explores the use of FB as a tool of dialogic communication in museums, focusing on the three most visited museums in Europe (TEA/AECOM, 2017) with an official profile on Facebook, namely the Louvre (Paris), the British Museum and Tate Modern (London).

The results show that these institutions do not fully take advantage of the dialogic communication features of SM in order to actively foster interaction with users. Considering the *content* of social activity, the study finds that only Tate galleries have daily posting activity (approximately two posts every day), whereas the Louvre and the British Museum, somewhat surprisingly, post few messages (approximately five posts per week) over the period of analysis (Capriotti and Losada-Díaz, 2018). However, it should be noted that most posts include links and/or photos, which encourage users to pay more attention to content, thereby indirectly favouring the possibility of dialogue between the museums and the public. Nevertheless, regarding the level of interaction, this study points out that fans mainly react to posts through the '*like*' function, while '*share*' and especially '*comment*' are used to a lesser extent; above all, the analysis finds that the museums in question answered only three times, hence suggesting a limited number of opportunities for dialogue between the institutions and their audience.

In sum, and answering the research question, the top 3 most visited museums in Europe do not use FB as a tool for encouraging dialogue with their audience and therefore for supporting dialogic communication. Consistent with the results of other studies (Badell, 2015; Capriotti and Kuklinski, 2012; Russo et al., 2008), these institutions are still in a phase of monologic (one-to-many) communication with their public. For this reason, said museums should redefine the relationship with their online audience (Chung et al., 2014) through the development of a SM strategy elaborated on according to the specific mission and goals of the museums (Suzić et al., 2016).

The current study has at least four limitations which, however, might represent opportunities for further research on this topic. First of all, this is an exploratory research study aimed at providing some initial insight into how (and to what extent) museums use SM and, most of all, whether they exploit the potential of social platforms in order to establish a dialogic interaction with stakeholders and users. Further studies could employ interviews or surveys administered to the staff (e.g., SM managers) of the museums under study, in order to understand more in depth what museums expect from SM, what their SM strategy is and, most importantly, if they use SM to involve users or if, on the contrary, they are still in a phase of monologic communication with their public.

Second, the period of analysis is limited (only three months), although it is in line with other studies on SM (Gronemann et al., 2015; Suzić et al., 2016). Therefore, it

would be appropriate to consider a longer period of time in order to obtain a more comprehensive view of museums' social activity.

Third, this study focuses only on FB and, although it is the most popular form of SM (Hootsuite, 2019; Statista, 2019), it could be interesting to broaden the analysis of the dialogic potential of SM to other social platforms, especially Twitter which – like FB – is suitable for dialogic communication (Langa, 2014; Sáez-Martín et al., 2015).

Finally, this paper only takes into account the three most visited European museums; in this respect, future research could extend the analysis to a larger number of institutions, considering - for instance - the ten most visited European museums or the top 10 worldwide museums.

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Notes

- 1 Tate Modern is a part of Tate galleries, which also comprise Tate Britain, Tate Liverpool and Tate St Ives. These galleries share the same unique profile on FB.
- 2 Vatican Museums have a FB profile, but the last update dates back to 24 January 2017 and the website does not contain any link to this page.