

Discussion Paper 2022/04
**Culture in Quarantine? Cultural
institutions' uses of Twitter during
lockdown**

Dr. Jenny Kidd and Dr. Eva Nieto McAvoy,
School of Journalism, Media and Culture, Cardiff
University

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About the Creative Industries Policy and Evidence Centre

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Summary

This discussion paper presents findings from a systematic analysis of a six-week snapshot of Twitter activity from March-May 2020, the early weeks of lockdown in the UK. It explores the parameters of engagement between cultural institutions and audiences through that platform at that time. The discussion is grounded in a mixed-methods analysis of data shared across two hashtags; #CultureInQuarantine and #MuseumAtHome.

The analysis was underpinned by the following questions:

1. What was being circulated and by whom?
2. What kind of content gained the most traction, and can we begin to understand why through a thematic analysis of that content, or through understanding its tone?¹
3. What kind of interactions ensued with audiences/users, and does this represent a shift from engagement pre-pandemic?
4. Which values were being celebrated or discussed in content on the hashtags, and what does that tell us about broader debates at the time?

We find: 1) Most actors tweeting were cultural institutions themselves, or cultural workers. Members of the public accounted for only 7% of our tweets and even fewer (as far as we could tell) were new audiences; (2) video content was the most popular; (3) the sample was international, but mostly representative of the English Twittersphere; (4) for tweets located in the UK, London and the Southeast were the most active regions.

In this paper we are able to go beyond these metrics and, through an analysis of themes, tone and values in the tweets, get a much richer picture of elements that sparked conversations with and between users. Content which connected powerfully, playfully and/or emotionally with the themes of the pandemic tended to do well with audiences. We often saw arts and culture being connected dynamically with place (mostly locally or regionally rather than nationally) in ways that reaffirmed the heightened importance of community and local green spaces during the early weeks of lockdown. In our data we get a sense of the many ways in which digital content and engagements were shaped by their real-world contexts during this period.

The data demonstrate also that some institutions found it easier to translate their work into the social media environment. Museums and galleries, as well as local community groups, quickly moved to produce new content, activities and calls

¹ Was it, for example, content that expressly linked to the pandemic, wellbeing, or education that really galvanised people, or maybe content that was expressly emotional, hopeful or humorous?

to action which privileged empathy and intimacy over and above traditional production values. Some other institutions - notably other cultural institutions - struggled more with this (in our sample at least). This is perhaps a consequence of their efforts at this time to re-circulate existing digital content, and to maintain their traditional promotional voice.

This research is significant because it tells a story about the kinds of content and interaction users found valuable, and indicates how we can understand and articulate that value during a time of crisis. In this paper we connect our analysis with previous research about the use of social media by cultural institutions (Kidd 2011, 2014; Gronemann et al. 2015; Baker 2017, Arias 2020), and highlight emergent debates that demand further consideration in those contexts; about hybridity, the value of user creativity and connection, digital inequalities, and the limitations of traditional engagement metrics. The paper also details a rigorous mixed-method approach to social media analysis which others may wish to adopt, and reflects upon its implementation.

Although the data underpinning the analysis here is collated from two English language hashtags, the findings can inform the work of cultural institutions and researchers more broadly, as they operate through time and space in the global 'searchable talk' (Zappavigna 2011) of social media networks.

Acknowledgements and credits

We would like to thank the support given to this research, which took place as part of the AHRC-funded project 'Impacts of Covid-19 on the cultural sector and implications for policy', led by the Centre for Cultural Value in collaboration with The Audience Agency and the Creative Industries Policy and Evidence Centre. A summary of findings can be found in ['Culture in Crisis: impacts of Covid-19 on the UK cultural sector and where we go from here' \(2022\)](#). We would also like to thank Bruce Tether and Hasan Bakhshi for their insightful feedback to this discussion paper. Finally, we thank the anonymous tweeter and the institutions who have kindly agreed to have their tweets included in this paper: the Van Gogh Museum, the Royal Electrical and Mechanical Engineers (REME) Museum, the Ashmolean Museum, National Museums Scotland, Salford Museum and Art Gallery, and the Northern Ireland Memorial Museum.

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1. Introduction

There has been significant effort to articulate the shape and reach of digital cultural engagement during the pandemic in different geographical contexts² and research has begun to indicate ongoing challenges and opportunities for those working in digital roles within the sector, and for policy makers going forward.³ Social media content was of course an important part of the prolific cultural offer facilitated online during the Covid-19 lockdown(s), and research has also begun to explore its role at that time.

Pre-pandemic studies into the patterns of engagement facilitated by cultural institutions within social networks have tended to conclude that dynamic two-way interaction or dialogue is difficult to engender in these contexts, and that it has often not been a priority for institutions for whom social media has served predominantly a marketing and promotions function.⁴ But literature already emerging from the period of Covid-19 lockdown has begun to investigate the possibility that social media interactions were energised and made vital in new ways during that time (Kidd and Galani 2020, Kidd 2020). The research detailed in this paper explores that possibility further.⁵

According to studies published during the early months of the pandemic, efforts to utilise social media increased for more than half of museums (ICOM 2020: 2, see also UNESCO 2020), and many cultural institutions - as the Art Fund noted at the time - reported significant increases in engagement with social media content as a result (Art Fund 2020). For 64 out of 66 institutions in a study by Ryder et al. (2021) social media engagement increased during Covid closures, although they note that for 44 of those 64, there was a steady decrease in that engagement over the months of continued closure. The authors put this down to a 'loss of novelty, audience fatigue, the gradual re-opening of institutions, and changes in content' (2021: 8). They maintain however that the pandemic 'transformed digital content into [institutions'] central message and social media into their primary communication medium' (2021: 1), noting that social media was helpful in shifting the tone of institutions' messaging, demonstrating transparency, centring dialogue with audiences, and increasing visibility ('followers') (2021: 7).

² For example, ICOM 2020, NEMO 2020, OECD 2020, UNESCO 2020, Agostino et al. 2020, Samaroudi et al. 2020, Walmsley et al. 2022.

³ For example, Kidd, Nieto McAvoy and Ostrowska 2021, King et al. 2020, Noehrer et al. 2021.

⁴ Kidd 2011, 2014, Gronemann et al. 2015, Baker 2017.

⁵ This study was part of a larger project exploring the impacts of Covid 19 on the UK cultural sector, led by the Centre for Cultural Value in collaboration with the Creative Industries Policy and Evidence Centre and The Audience Agency. This project was funded by the Arts and Humanities Research Council (AHRC) through UK Research and Innovation's COVID-19 rapid rolling call. <https://www.culturalvalue.org.uk/our-work/covid-19-research-project/>.

McGrath also notes the importance of a shift in tone in social media communications during this period, saying such content provides a 'welcome reprieve from content that aspires to the more didactic tone of traditional museum labels, or the hyperbole of the traditional press release' (2020: 168). As a result, he proposes that social media were well-utilised 'as sites of dialogue and curation' during the pandemic (2020: 164) and others agree. Kist concludes that social media were one way in which institutions catered 'to the emotional needs of audiences' by providing 'positive distractions' (2020: 345), and Burke et al. suggest that this content 'buoyed up visitor communities' (2020: 117), keeping institutions relevant and centred in the public consciousness even whilst they were closed:

'These virtual interactions are vital ... in validating the existence of such cultural institutions when in-person visits are not possible, promoting our heritage as worthy of attention when the doors reopen' (Burke et al. 2020: 123)

Krajnović et al. conclude their own study similarly, proposing that online communications have 'kept the relationship between culture and its users alive in almost impossible, and sometimes completely impossible, conditions' (2021: 272). These studies have not tended to include an expansive analysis of social media output however, instead using examples of such content to illustrate discussions, which they have tended to approach via case studies of institutions or interviews with cultural professionals as their starting point.

There is some evidence that institutions have become more audience-centred in their digital outlook during the pandemic, and that those in digital roles - and to some extent senior management - might be moving beyond understanding the value of their social media activity purely in terms of metrics such as likes, shares, or number of followers (Ryder et al. 2021, Kidd, Nieto McAvoy and Ostrowska 2021). This is, according to Ryder et al. indicative of the fact that 'building connections and communities was the primary goal of digital content during COVID-19 temporary closures' and 'suggests that COVID-19 temporary closures may have caused a shift in best practices in measuring social media engagement for cultural institutions.' (Ryder et al. 2021: 12) There is evident uncertainty however about how to understand social media activity in more nuanced terms (Kidd, Nieto McAvoy and Ostrowska 2021), and one of the contributions of this paper is to suggest one way this can be done, regardless of whether institutions are working with smaller or larger bodies of social media data.

In the sections that follow we begin by introducing the study's methodology (section 2), before presenting findings from the analysis (section 3). In the

findings section we offer a high-level overview of the sample before introducing the content types most prevalent in the analysis. We then explore the popularity of content through a thematic lens and analyse the tone of tweets, before discussing hybridity, and the values debated and celebrated in the sample.

2. Study methodology

This paper explores the parameters of social media engagement between cultural institutions and the social media public over the first six weeks of the UK lockdown.⁶ It presents an analysis of all Twitter data from 19th March 2020 to 5th May 2020 on the hashtags #CultureInQuarantine and #MuseumAtHome. These hashtags were chosen because they speak to - and across - the efforts of cultural institutions (broadly defined) to engage via Twitter during this period; broadcasters, museums, galleries, historic sites, theatres and dance companies for example. We selected these hashtags because as lockdown started there was a concerted collective endeavour from cultural organisations to connect what they were doing in the digital environment, and these were two of the principal hashtags through which they did this.

In total we obtained a dataset of 9061 tweets via Vicinitas.⁷ After taking out duplicates we were left with 9000 tweets, which were quantitatively analysed using the available Twitter metadata.⁸ A random five per cent sample of tweets (n.450) was then more extensively analysed using NVivo.⁹ Coding those data manually, rather than through automated processes which might count keywords or collocations for example, means their nuances could be preserved, studied, and made visible in the pages that follow. The analysis took into consideration not just the text in each analysed tweet, but its context. For example, tweets that were replies (8 percent) were analysed in relation to the original tweet. Images, video and animated gifs were considered alongside the

⁶ Although we use these dates as a framing device for the research, the data produced are an international sample.

⁷ Changes in the Twitter API mean accessing historical data is now problematic without the use of commercial data services such as Vicinitas, as is detailed by Bruns: 'social media platforms are crippling the functionality of their public APIs to the point that they no longer enable anything but the most basic forms of investigation' (2019: 1556). Such datasets are likely to be imperfect, but are the fullest that can be accessed, and have become a standard. Other scholars who have used Vicinitas include Saleema and Thampi 2020, Nourani et al. 2020 and Ruffer et al. 2020.

⁸ 5033 tweets with the hashtag #MuseumAtHome, 3906 tweets with #CultureInQuarantine and 61 tweets with both hashtags.

⁹ The protocols for the thematic analysis followed those of Nowell et al. 2017, and the mixed-methods approach to social media analysis was informed by Snelson et al. 2016. At five per cent we had reached saturation point (Saunders et al. 2018).

text of the tweet when coding for theme and value, as was the information accessed via links. In this sense we have been able to remain attentive to each tweet's context and the juxtaposition of elements it contains. The smaller sample works as a 'thickening strategy' for the analysis in recognition that 'data abundance' is not in itself an indicator of research quality or insightfulness (Latzko-Toh et al. 201). Given the approach, this study also contributes to recent social media research that couples large datasets with nuanced qualitative analyses (Eschmann et al. 2020). The data we analysed are presented in the following pages in accordance with the ethical protocols of the study.¹⁰

For the NVivo analysis (n.450 tweets) we coded for the **tone** of each tweet, which gave us a rich insight into the types of expression or emotional register being activated. We also coded each tweet for **theme** (as many as were relevant) and recorded other hashtags used in the tweets so as to explore connections with other concurrent debates, events and/or campaigns.¹¹ We also explored the presence of **hybrid** approaches to culture in the data subset, given a notable surge of interest in 'blended' physical-digital techniques during the pandemic. In addition we explored which **values** were recognised and/or debated in the sample.¹² We were then able to analyse these attributes - tone, theme, hybridity and values - across multiple variables (who is talking, what kind of content was shared, how much traction it gained etc.) which gave us rich insight into the parameters of engagement across the two hashtags.

An analysis of Twitter data is inevitably limited. Most notably, it confines any investigation to the constituency of (predominantly) English speaking Twitter profiles inclined to use the hashtags under scrutiny. Relatedly, we might note that Twitter users are not representative of the wider population, not least those who are excluded either by circumstance or self-selection. In the UK at least, we know that Twitter users are disproportionately male and young (although not as young as we might assume), with class continuing to be a strong indicator of usage, particularly for those in managerial and professional occupations who are over-represented (Sloan 2017). For practical reasons we worked with Twitter data for this study, however a similar sample of Facebook or Instagram data may well have told us a slightly different story about engagement, and would

¹⁰ Ethical clearance for data collection, retention and analysis was secured as part of the overarching project ethics procedure. We used the Association of Internet Researchers guidelines as a basis for our approach. See various chapters in Sloan and Quan-Haase 2017 for an overview of ethical challenges associated with social media data collection and use.

¹¹ 'Tone of tweet' and 'themes present' suggest an interpretive element to the coding. An inter-coder reliability test was performed on these fields and was above the widely accepted 80 per cent benchmark.

¹² Coding for 'values' also involves an interpretive element, and our inter-coder reliability score here was 74 per cent. In light of this, we are careful to present the discussion about findings here about 'value' using a discursive approach, rather than quantitatively or in absolutes.

be an interesting comparative analysis. The hashtags themselves, although useful in practical terms, have also shaped in profound ways the kinds of data that have been made visible in this study. There was no doubt vibrant and dynamic content and conversation across other hashtags or threads which our approach here misses, and interesting data that fell outside of our study period on these same hashtags. These are limitations which we must acknowledge, but they do not render the dataset beyond recuperation.

According to Chiara Zuanni, writing in the context of digital cultural heritage, there continues to be a 'lack of clear methods and benchmarks for researching online audiences and evaluating their engagement' (Zuanni 2020: unpagged). One of the contributions of this study is that it tests a process and framework for analysis which might prove insightful for further such studies of social media engagement in the future. In reflecting on this process it is our firm belief that transparency about our parameters and their limitations is of value.

What this approach *has* been able to achieve is an assessment of social media interactions that extends far beyond the metrics which cultural institutions typically report on; likes, comments and shares, so called 'vanity metrics' or 'Klout' which, according to Rogers (2018: 454) amount to 'success theatre and projection'. It presents a richer and more nuanced picture of activity, and of response, which can more expansively and authentically speak to the opportunities and challenges associated with operating within social networks during this period.

3. Findings

In this section we present findings from the study. In 3.1, we offer a high-level overview of the data which demonstrates trends and gives context for the analysis that follows. In 3.2 we present a thematic overview of the subset of data (n.450), introducing a number of examples of tweets from the dataset to add texture, and to ground what can otherwise be quite abstract considerations. Taken together these sections amount to a nuanced and rigorous insight into the data, accounting for its depth and its breadth.

3.1 High-level overview

The 9000 usable tweets collated through the sampling strategy were primarily coded as English language (82 percent) as might have been expected given the limitations noted above. The vast majority of tweets in the sample were using the hashtag in an original tweet (92 percent) rather than in a response to other tweets. Using a hashtag is an attempt to connect disparate and distributed bits of information, and in this case, was often done with promotions or the

broadcasting of messages in mind, rather than as a part of, or to spark, conversation. This tallies with the broader lean toward promotional material we see in our subset of data (which we explore below), and echoes findings from previous research which has also recorded a propensity toward broadcast messaging by cultural institutions in social media environments.¹³

51 percent of tweets in the full dataset (n.9000) included photographic/image resources, and 8 percent included videos. Tweets featuring video content were more likely to register as high on traction (in the top ten tweets for numbers of likes, retweets or quote tweets). This is perhaps unsurprising given the importance of video content in social media environments more broadly, but it is really pronounced in our sample, and echoes findings from Najda-Janoszka and Sawczuk (2021) who report on museums' successes in using video content to spark interaction.¹⁴

While video content had the highest probability of all media types of being liked, retweeted, quote tweeted or commented upon, this was followed by tweets with animated gifs.¹⁵ This is notable given that gifs (simple animated images), now so ubiquitous an aspect of our digital communications landscape (Miltner and Highfield 2017), have a tendency toward humour and the expression of emotion. Tweets featuring photographic content fared less well, but still had a higher traction in all measures of engagement than tweets with no media.¹⁶

The distribution of tweets over the sampling period is as follows on each of the hashtags:¹⁷

¹³ In, for example, Kidd 2014, Badell 2015, Arias 2020, and Najda-Janoszka and Sawczuk 2021. Although the last of these presents some caveats to that finding.

¹⁴ For the analysis of the media included in each tweet we used the available Twitter metadata. The subset of n.450 tweets shows a similar distribution of media type to the main sample (50 percent of tweets included photos, 42 percent no media, 6 percent video, and 2 percent animated gifs). In addition to this analysis using Twitter metadata, for the subset of n.450 tweets, we manually checked each tweet that included an url link to assess whether it showed up as an image or video when posted. When that was the case, we coded the tweet within that media type category (photo or video). The final distribution for the n.450 is 62 percent of tweets include photos, 27 percent no media, 9 percent video and 2 percent animated gifs.

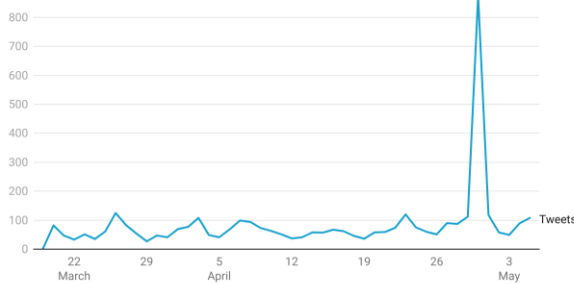
¹⁵ Tweets with video had an average of 25 likes, 9.2 retweets, 0.7 replies and 1.4 quote tweets. Tweets with animated gif had an average of 13.1 likes, 4 retweets, 0.4 replies and 0.6 quote tweets. Tweets with no media had an average of 4.3 likes, 1.8 retweets, 0.2 replies and 0.2 quote tweets.

¹⁶ Tweets with photographs had an average of 14.1 likes, 4.3 retweets, 0.6 replies and 0.6 quote tweets.

¹⁷ All tables are produced using the free in-browser service Datawrapper. N. 9061 across both graphs, in this case including duplicates of tweets that share both hashtags.

Distribution of Tweets by date #CultureinQuarantine

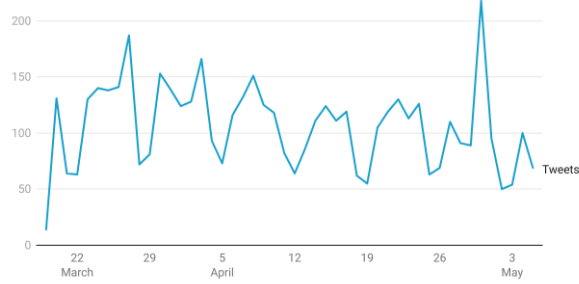
(n=3967)



Created with Datawrapper

Distribution of Tweets by date #MuseumAtHome

(n=5094)



The highly visible spike in Twitter activity for #CultureInQuarantine on 30th April 2020 can be explained in large part by the BBC Arts Museum From Home initiative, a part of its Culture in Quarantine series.¹⁸ The distribution for #MuseumAtHome is similar, although a small additional spike can be noted around the 27 March 2020 which corresponds with the #GettyMuseumChallenge; a call via the Getty Museum's social media accounts for members of the public to re-create works from the collection using everyday items from home, and to post them online. The Getty Museum Challenge proved to be hugely popular and enduring, and is widely accepted to be one of the major digital culture success stories of the pandemic period.¹⁹

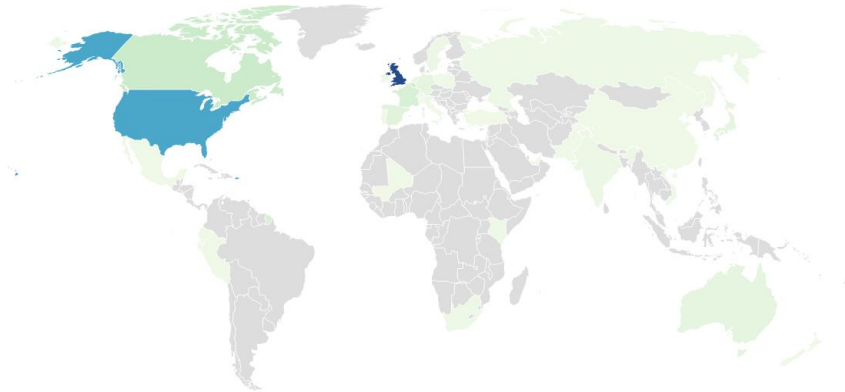
¹⁸ More information about Museum From Home can be found here: <https://www.bbc.co.uk/events/enxcd4/live/c954wh> [Accessed 30th Nov 2021].

¹⁹ See Burke et al. 2020, Galani and Kidd 2020, Kidd 2020, Potts 2020.

Focusing on our data subset (n.450) we can begin to see more nuance in the data. For example, it is evident that although 45 percent of tweets originated in the UK, this is a somewhat international sample:

Geographical distribution of tweets

n. 405 (45 tweets had no location given)



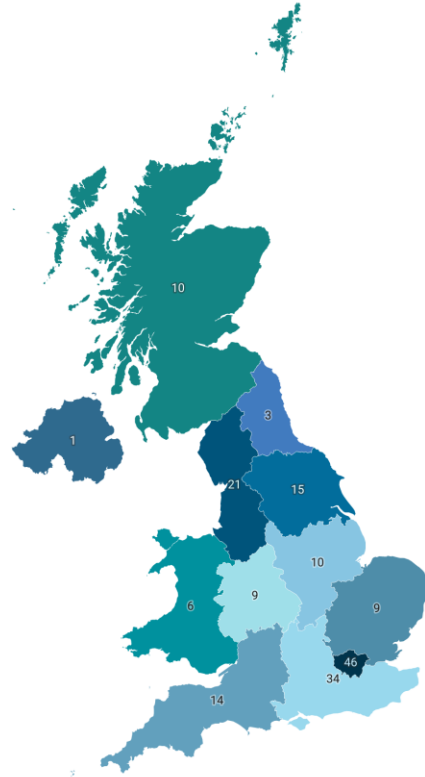
Created with Datawrapper

Our focus on these English language hashtags naturally leads to a prevalence of English speaking countries in the sample, and there are notable pockets of activity within North America and Europe. Where Twitter was able to provide geographical location for posts within the UK (n.178 of the subset), the following breakdown can be identified:

Distribution by UK nations and regions

(n.178)

East Midlands East of England London North East England North West England
Northern Ireland Scotland South East England South West England and Gibraltar Wales
West Midlands Yorkshire and the Humber



Created with Datawrapper

This demonstrates something of a skew in the dataset toward London and the South East, and to some extent, toward the North West. This is primarily due to the work of museums, galleries, heritage institutions and theatres in those regions posting on the hashtags. Northern Ireland, the North East of England and Wales in particular are under-represented in the sample.

The following gives a high-level overview of who was doing the posting and shows a significant slant in the dataset toward museums, galleries and heritage sites. This is again to be expected given the hashtags under analysis but is important to note as it informs the more nuanced discussion which follows (in section 3.2).

Who is Tweeting?

#MuseumsatHome and #CultureinQuarantine n.450

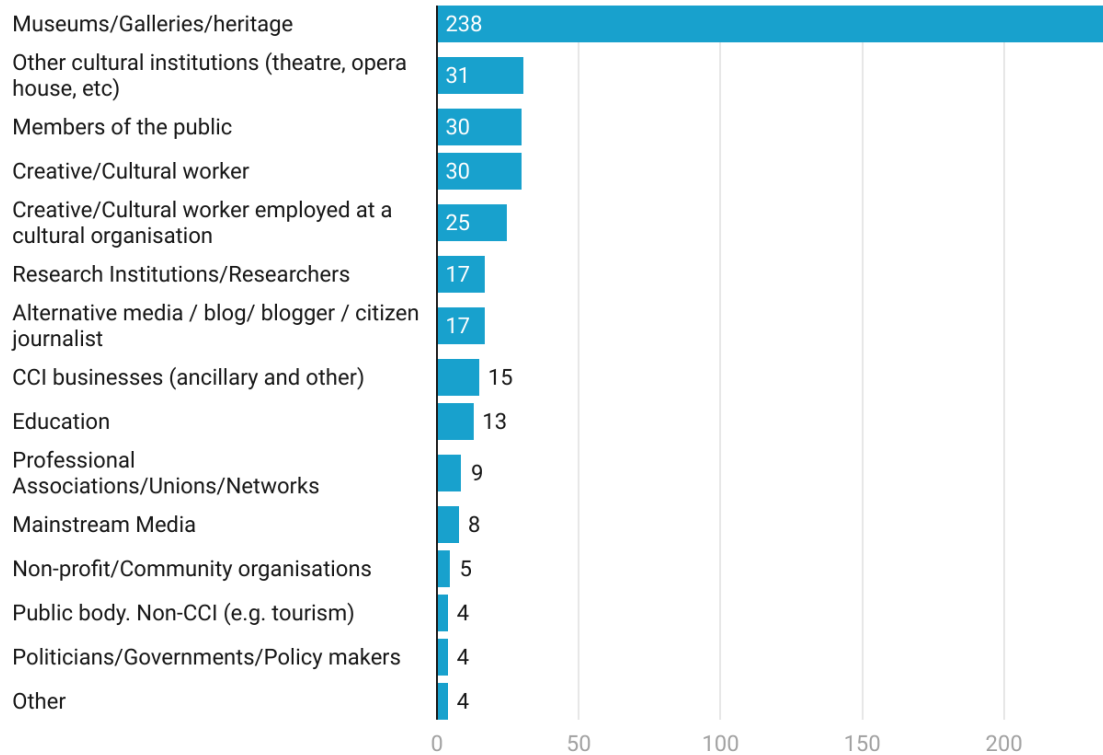
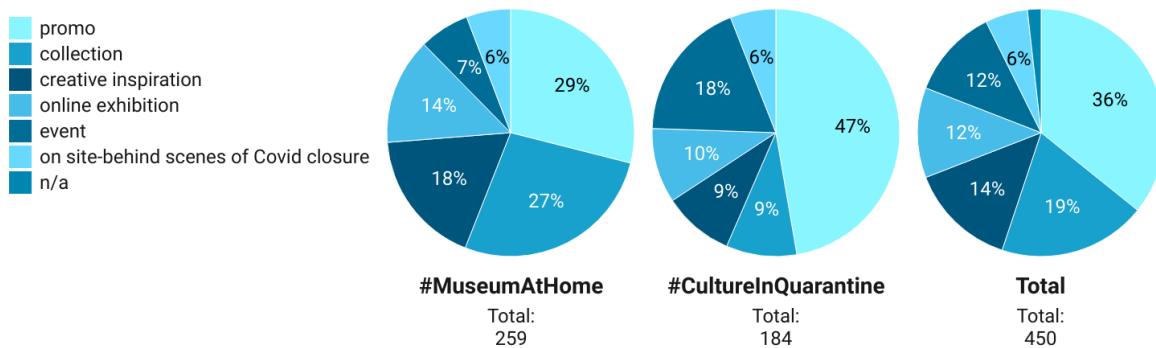


Chart: JOMECC/PEC - Created with Datawrapper

Again focusing on the data subset, we can see what kind of content was being shared across each of the hashtags, and can begin to observe some trends:

Type of content

Shown here as a percentage so the emphasis in content for each hashtag can be seen as a proportion (n.450)



Created with Datawrapper

Perhaps unsurprisingly museums and galleries were most likely to share information about collections, but they were also the most likely group to be sharing 'behind-the-scenes' insights. These attempts to open up institutions with behind-the-scenes snapshots proved popular in our sample, perhaps demonstrating a longing within audiences for the reassurance and familiarity the physical space and place of a museum building seems to suggest, to some people at least, even remotely. Other types of cultural institutions (theatres, opera houses etc) were more likely to be doing traditional promotional activities around events, and non-profits and community organisations were the most likely in the sample to be trying to inspire creativity through setting activities and encouraging responses. This is interesting as it suggests the importance of place and locality in the sample and underscores active attempts by organisations grounded in communities to be visible, and to engage, collaborate and support. In this respect, we may have seen a more nuanced consideration of what specifically social media 'community' means for these organisations, an examination of which, according to Amelia Wong (2015) is overdue.

This high-level exploration of the dataset demonstrates its shape and its reach. These insights are important in grounding what follows; a thematic analysis of the tweets' content and tone, hybridity, and a discussion about the values expressed in the data.

3.2 Thematic analysis

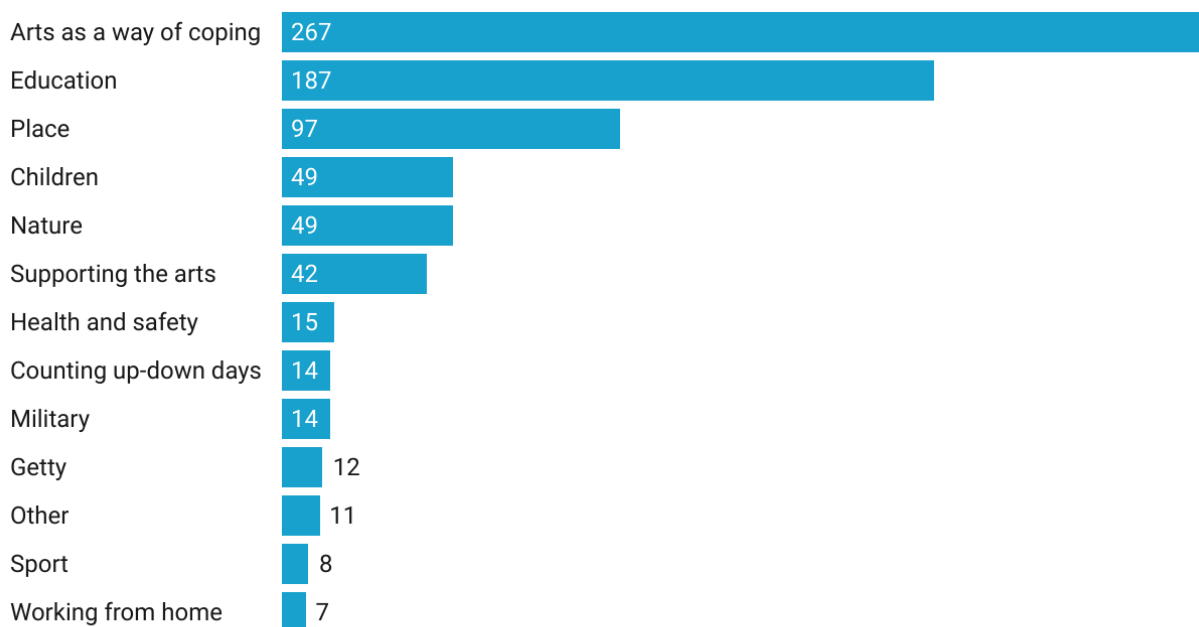
Following the high-level overview in 3.1, this section explores findings from the thematic analysis of the random subsection of tweets from the main sample (n.450). In doing this study we were able to code for hybridity, multiple themes, tone, and values in order to account for the complex layering of messaging and meaning in many tweets. This section presents and discusses the findings arising from this analysis.

3.2.1 Theme

We coded for themes present in the tweets – including the text and media in the tweet as well as the context when necessary. This led to a total of 772 theme instances being identified, with a frequency as follows:

Total theme frequency

total count (allowing for multiple themes) n.772



Created with Datawrapper

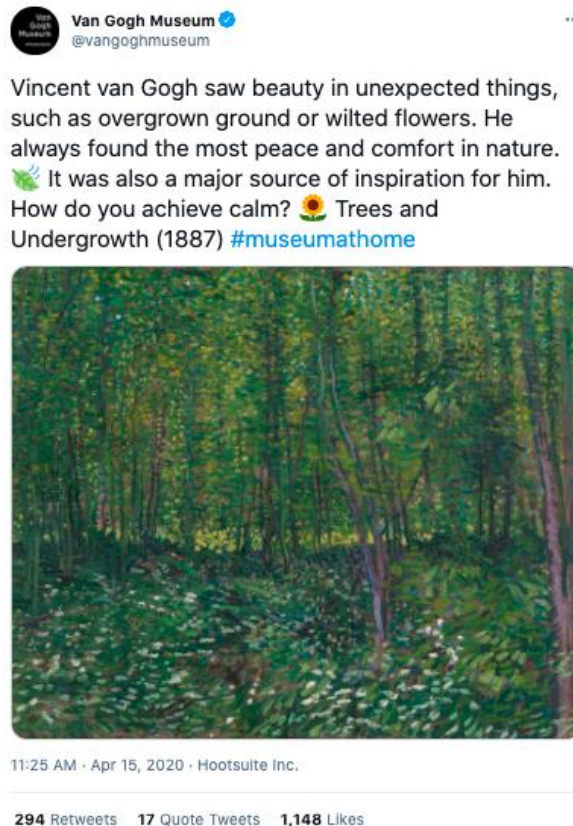
It can be seen that two themes were particularly prevalent in the tweets: 'Arts as a way of coping' and 'Education'. These will be discussed in turn, with references to additional themes where connections are helpful to note.

The first of these more dominant themes - 'Arts as a way of coping' during the Covid crisis - was present in 59 percent of all coded tweets. This included tweets that were Covid-inspired or related, as well as tweets which specifically referenced the arts in relation to wellbeing and care. When isolating tweets by members of the public, the overwhelming majority were on this theme. Tweets often spoke directly to the effects and impacts of the pandemic; Covid-19 – the restrictions, the loneliness, the fear, the boredom - is of course an underlying and sedimented theme in much of our sample. These tweets often advocated for the power and role of the arts and culture to change lives – or make them more bearable - at this time. Also of related interest was a grouping of tweets which referenced support, advocacy and funding for the arts in particular.

'Place' is an intriguing theme that cropped up significantly and relatedly. Here we saw tweets being situated especially within local contexts (through the use of hashtags for example), at a time when locality and community were more important than ever to connect with. This echoes previous social media analysis by Aslan Ozgul et al. (2021) which demonstrated that even within the context of

a global phenomenon (in their case the Shakespeare Lives campaign by the British Council) engagement on Twitter was much higher around localised events.

Although not quite so prevalent, references to nature were also interesting to note in the dataset. There was a recurrent collocation of culture, art, wellbeing and the natural environment in the sample, which was also linked to the value of reflection (introduced in section 3.2.4). An example of this is as follows²⁰:



[reply 2 @vangoghmuseum April 15, 2020] I find calm in the same way [smiley emoji] [5 likes] -- [reply 2a.- 16 April 2020] Me too [heart emoji] [1 like]

[reply 3 @vangoghmuseum April 15, 2020] By photographing in nature [smiley emoji] [1 like]

[reply 4 @vangoghmuseum April 15, 2020] Un des plus beaux musées que j'ai pu visiter. J'en garde un merveilleux souvenir.

²⁰ We are very grateful to all tweet authors for permission to re-produce posts in this discussion paper.

The above tweet from the Van Gogh Museum was one of the most retweeted in our sample. It featured a high-resolution image of a painting from the collection (Trees and Undergrowth) with a prompt for interaction: 'How do you achieve calm?' A number of followers took up the invitation to respond, with most also referencing nature in some way, and some featuring their own photographic 'recreations' of the artwork. Although the tweet and responses did not specifically reference Covid it is probably safe to assume this tweet from April 2020, and engagements around it, were shaped by the circumstances of lockdown, and the welcome (if time-limited) respite people found in their interactions with the natural world at that time.

The other major theme identified was 'Education' broadly defined (42 percent of coded tweets). These tweets can be subdivided into those that linked to or promoted educational programmes, classes and content (39 percent of all tweets coded as education), those that offered information of a historical nature (36 percent), tweets which nodded to lessons we can learn from the past in relation to the specific circumstances of lockdown (10 percent), tweets which mentioned homeschooling specifically (6 percent), tweets which mentioned science in particular, including #STEM and #STEAM (7 percent) and those which referenced skills (2 percent).²¹ Tweets coded as educational in theme tended to garner particularly high levels of interest and traction.²²

As an example, on 21 April 2020 the Royal Electrical and Mechanical Engineers (REME) Museum tweeted the below image of some collection items alongside the text 'It's #NationalTeaDay so here's a 1980s 24 hour military ration kit from our collection. Would 8 pints of tea be enough to last you the whole day? #MuseumFromHome #MuseumsTogether #museumathome':

²¹ Tweets aimed at children in particular were also fairly visible in the sample which is unsurprising given the emphasis during the early weeks of lockdown on providing activities to pass the time or for homeschooling.

²² In interviews with digital workers in museums and galleries (Kidd, Nieto McAvoy and Ostrowska 2021), we heard that learning material from educational departments did not gain much traction. We coded tweets as education in a broader sense, including tweets that explained, showcased or gave details of items of the collection as well as tweets promoting online workshops, seminars or Q&As with curators.



A much smaller institution with roughly 5K followers to their twitter account (versus the 95K of the Van Gogh Museum account), with this tweet the REME Museum made it into the top ten most commented upon tweets in our sample.

This tweet nodded to lessons to be learnt from the past in relation to the circumstances of lockdown. It was an example of reusing items from collections, rather than creating new content (beyond perhaps the photo), done with humour, calling for engagement, and signalling efforts to open up conversations. On the back of a 'national' conversation on #NationalTeaDay, the theme resonated well with a specific community of museum followers that shared in past experiences of rationing, as can be seen from the comments:

[**reply 1** @REME_MUSEUM April 21, 2020] I am sure these were in the 10 man ration pack might be wrong it was a long time ago here's a 24 smaller tins [image of another ration pack] -- [**reply 1a** from @REME_MUSEUM April 21, 2020] You could be right! We still think 4 pints of tea is a perfectly normal amount for one person/museum professional to drink each day... -- [**reply 1b** April 21, 2020] Yes defo a 4 or 10 man pack. Tea bags went in the BV and caused the inners to be eternally stained that no matter how much cleaning could remove it. -- [**reply 1c** April 21, 2020] -- Thought so even squaddies couldn't get through that much sugar in 24 hours

[**reply 13** @REME_MUSEUM April 21, 2020] I remember those 24 hour ration packs. I don't think I ever did bother with the tea

[reply 20 @REME_MUSEUM April 21, 2020] Some great memories of this

There were many tweets in our sample which engaged with different communities in this way, as will be seen in the following section.

In reflecting on the themes visible in our sample, it is worth noting the lack of content that might be characterised as political or activist in theme or tone. This may seem surprising given the ways cultural institutions, including in their social media feeds, have recently been entangled in often heated discussions about slavery, decolonisation, representation and inequalities in access. These debates are missing from our sample for a number of reasons. Firstly, they were particularly evident in the wake of the Black Lives Matter protests and the toppling of the Edward Colston statue later in 2020, and are thus missing from our sampling period. These concerns did shape in profound ways the work of institutions later in the pandemic, as we went on to explore in a series of reflective interviews with practitioners in 2021 (Kidd et al. 2021). Secondly, our hashtags may well have shaped our sample such that debates about the so-called 'culture wars' or the politics of representation would be unlikely to crop up anyway; our hashtags were being used by institutions to connect content for very specific purposes early in lockdown, namely, entertainment and distraction, and in a fairly conscious display of positivity (Kidd et al. 2021, see also section 3.2.4). Museum and gallery responses on more challenging issues are clearly significant however, and worthy of separate analysis.

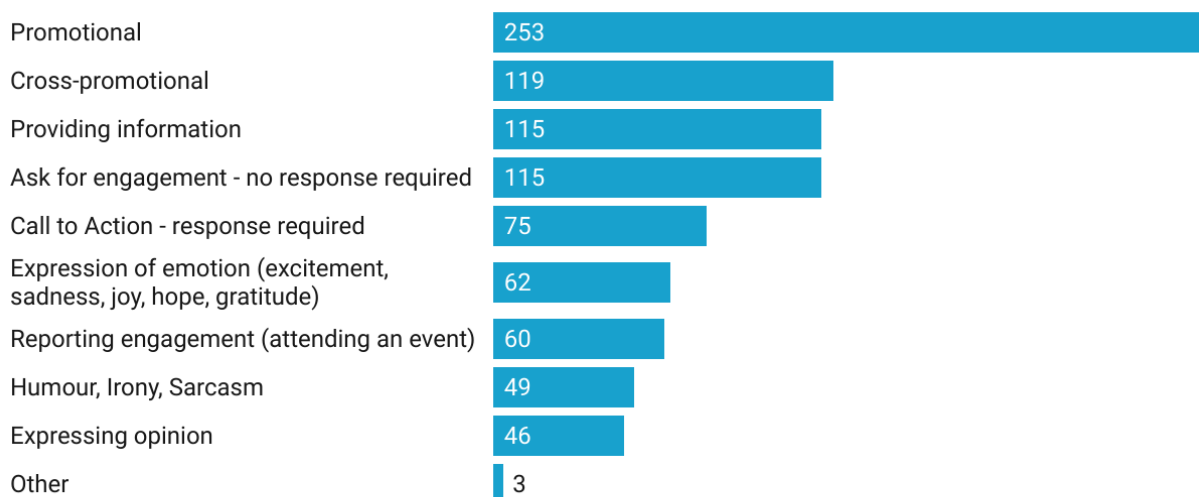
3.2.2 Tone

The table below gives an insight into the tone of tweets in the data subset and demonstrates a slant toward a promotional voice in 56 percent of tweets, coupled with a cross-promotional tone (i.e. promoting other venues or activities) in 26 percent, and an informational tone in 26 percent.²³ This is in keeping with previous research which has shown that cultural institutions such as museums tend to limit their use of social media to marketing and promotional purposes, and rely heavily on the broadcasting of messages rather than conversation (Kidd 2014, Gronemann et al. 2015, Baker 2017, Arias 2020). 14 percent of tweets were expressing emotion, including gratitude; and 11 percent used humour, irony and/or sarcasm. 10 percent of tweets expressed opinions, including some advocating to support the arts and culture.

²³ There was some overlap here for tweets that performed both functions.

Total tone frequency

total count (allowing for multiple tones) n.931



Created with Datawrapper

It was interesting to note in our sample the number of tweets that tried to inspire interaction, asking for engagement or issuing a call to action for people to respond to (in 26 percent and 17 percent respectively). Here we saw cultural institutions asking people direct questions, to take part in quizzes or crowdsourcing projects (Kidd 2011), or to get creative (for example, the Getty Museum Challenge tweets already referenced). This showed attempts to supplement broadcast messaging with more interaction during this period.

As an example, the Hull: Yorkshire's Maritime City Project asked its followers to help choose which objects from their collection would be part of a post-lockdown exhibition. A cross-promotional quoted tweet from April 6, 2020 that was captured in our sample with the hashtag #CultureInQuarantine read:²⁴

'Guys, Hull are actually going to put a real exhibition together after we are allowed out, featuring objects chosen by YOU while stuck in quarantine limbo!'

With the hashtag #PeoplesChoice, the original tweet encouraged users to vote on one of two options offered in their tweet, which got 47 replies. Had it been captured in our data sample, it would have been in our top 10 most

²⁴ <https://twitter.com/emilydoodles/status/1247184050575589376>

commented tweets.²⁵ We did find examples in our sample of advocacy tweets – those supporting the arts and culture sector – some of which also asked followers for engagement, whether attending a Q&A about funding available,²⁶ or asking practitioners in the sector to feed into consultations. Museums Galleries Scotland tweeted on March 26, 2020:²⁷

'Museums + galleries let us know how you are via
inform@museumsgalleriesscotland.org.uk or 0131 550 4100 Your feedback
is informing how we address sector needs. Content will be shared on our
website, daily posts, and bi-weekly Zoom social meetings, more info soon!
#MuseumAtHome'

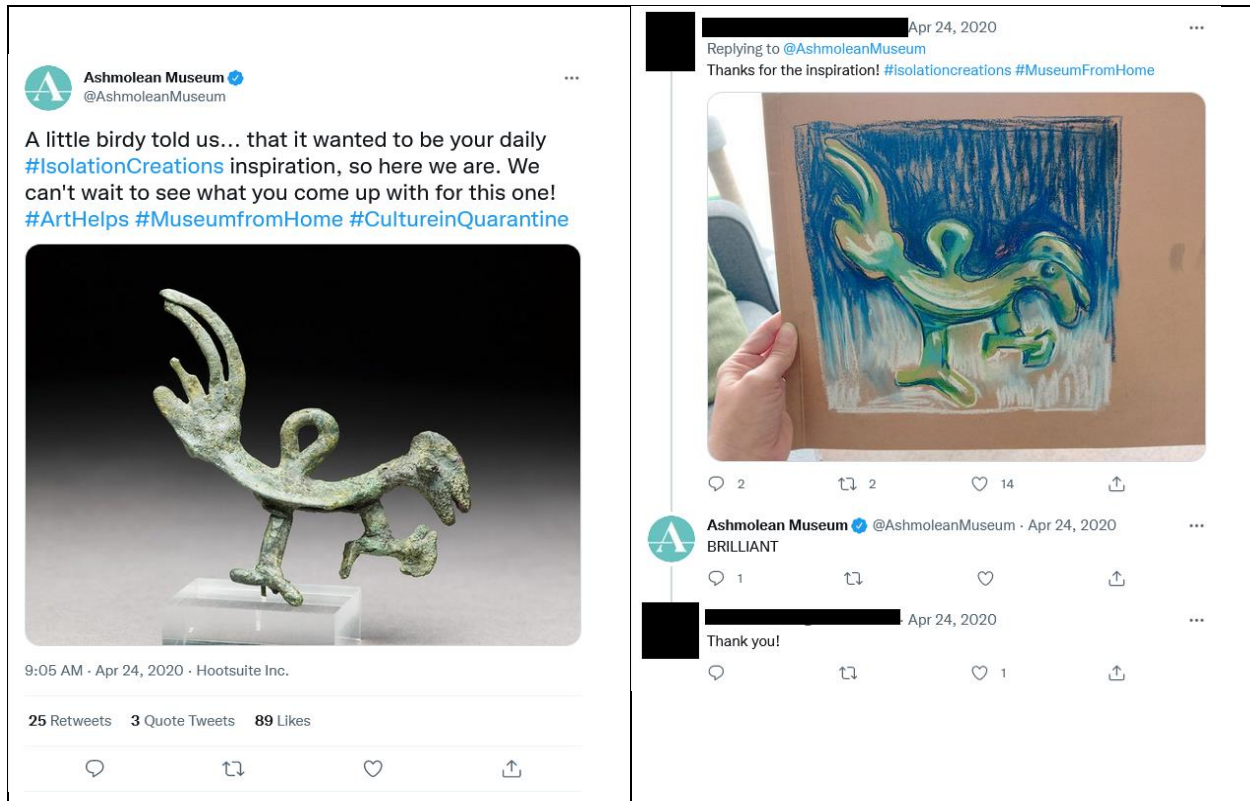
Other calls for engagement required more active participation from users. For example, in the top ten most commented tweets across the whole sample (n.9000), there was a call for action from the Ashmolean Museum on April 24, 2020.²⁸ As part of their daily series #IsolationCreation, they encouraged users to be inspired by an object from the collection to create an artistic response at home and send it back. Users responded well (24 replies, 20 of which were users' creative contributions). We also found a number of responses to the responses, many from the Ashmolean Twitter account, demonstrating the value of playful interaction in the social media environment. Below we see the original tweet and a sample response which keenly demonstrates the quality of engagement.

²⁵ The original tweet was captured as part of the quote tweet which used the #CultureinQuarantine hashtag, and therefore its own metadata was not captured. We included its content to contextualise and nuance our analysis, as was outlined in section 2.

²⁶ <https://twitter.com/livingreading/status/1255758411108618240>

²⁷ <https://twitter.com/MuseumsGalScot/status/1243117505150955521>

²⁸ <https://twitter.com/AshmoleanMuseum/status/1253595820684906496>

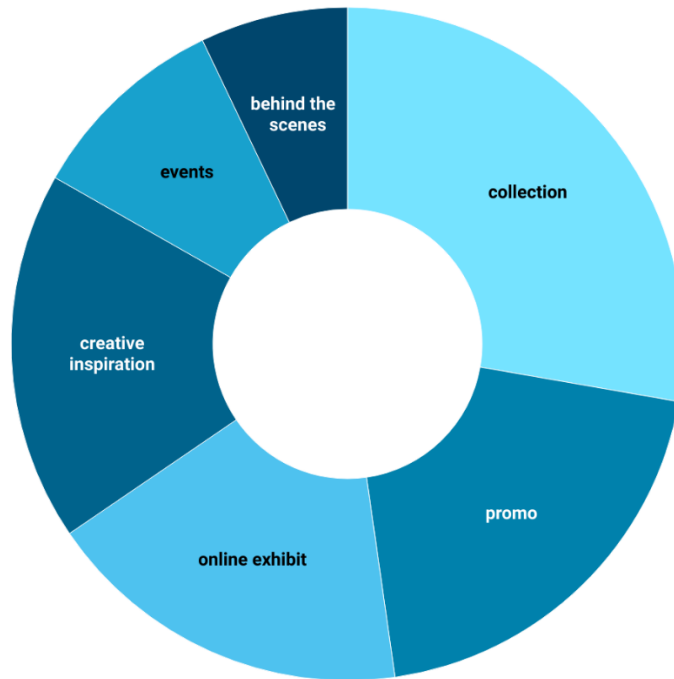
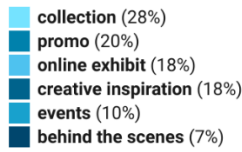


3.2.3 Hybridity

The Ashmolean tweet is also an example of an important aspect that emerged from the sample in ways we had not anticipated: 'hybridity', or, the blending of physical-digital approaches and spaces, often in playful ways. In our data subset many hybrid approaches can be identified (see below) including, for example, calls for users to be creative at home with everyday objects and to tweet or post the results back to institutions; downloadable activities; 'behind the scenes' moments, and snapshots of surrounding outdoor venues (like museum's gardens) that attempted to connect audiences with (closed) cultural spaces as well as nature. Other hybrid activities facilitated by digital technology and mediated or promoted on social media included online exhibitions, virtual and 3D guided tours, webinars and online lectures, workshops and lessons for adults and children, and live streaming of concerts, theatre and other performances:

Hybridity

Number of tweets that refer to hybrid practices for each type of content (n.310)



Created with Datawrapper

Discussions about hybrid approaches to engagement have gathered steam during the pandemic (Galani and Kidd 2020, Noehrer et al. 2021, Walmsley et al. 2022) and we see evidence of their popularity in our sample. As institutions closed their doors and as their online presence (including social media) became their principal mode of engagement, we find a heightening of ongoing efforts to connect users not just with ideas, but with the materiality of cultural institutions in ways that go beyond mere representation. Restrictions on physical access to cultural spaces has made visible the ways in which we can understand 'hybridity' as operating on a 'continuum of materialities' (Galani and Kidd 2020, 299), bridging the traditional physical-digital divide.

The tweet below from National Museums Scotland features a good example of hybrid content from the dataset. The text, which also represents a prompt for engagement (with no response required), encouraged followers to explore the famous Lewis medieval chess pieces from the collection through creative

practice. The chess pieces have here been interpreted as digitised line drawings which could be downloaded via a link, and used as a material source for creative inspiration by people at home during lockdown. The interplay here between materiality, digitalisation and remediation, and re-construction of materiality, is complex, yet playful:



This assessment of hybrid approaches takes us beyond a more traditional unpacking of ‘content types’ as presented in section 1, and demonstrates how information retrieved automatically through platform metrics can be usefully nuanced.

3.2.4 Value

We were keen to explore whether and how different values were sedimented into the tweets captured in our dataset. This is significant because it helps to demonstrate what both institutions and audiences thought was important,

worthwhile or useful during this particularly intense and unpredictable period. It also helps us to see where ideas and principles might have been challenged, or in competition with one another, and how arts and culture were implicated in those debates.

The following gives an account of which values were being debated and celebrated in the sample:

Values referenced or debated in tweets

total count (allowing for multiple values) n.749

Cultural (23%) Social (16%) Curiosity (15%) Creativity (14%) Playfulness (12%)
Enjoyment (11%) Reflections (8%) Economic (1.3%)



Created with Datawrapper

There was a propensity in the data subset to recognise the value of active and joyful engagement with cultural content during this period. As noted above, a significant percentage of tweets featured a call for engagement or action, signalling efforts to open up conversations with users, and adopt interactive strategies which got a good response from users.

Many tweets from members of the public mentioned pleasurable and enjoyable interactions with content or events, and a significant proportion from institutions tried to spark and celebrate the value of curiosity - asking questions and encouraging people to explore. The value of creativity was recognised in a significant proportion of tweets also through celebrations of practice - whether

amateur or professional, or through calls to create something new. The value of playfulness was also celebrated in the tweets - through humorous content, the use of emoji and (less frequently) gifs, or through some other reference to play, an online game or escape room for example. There was a smaller subset of tweets which demonstrated or celebrated the value of thoughtful or deep reflection, which included nostalgia, admiration and resilience. Economic value was hardly present, and when it was, it mostly referred to the support announced by Arts Council England (March 24, 2020), and to the financial difficulties and fundraising efforts of some institutions, rather than reflecting on the economic contribution of arts and culture more broadly.

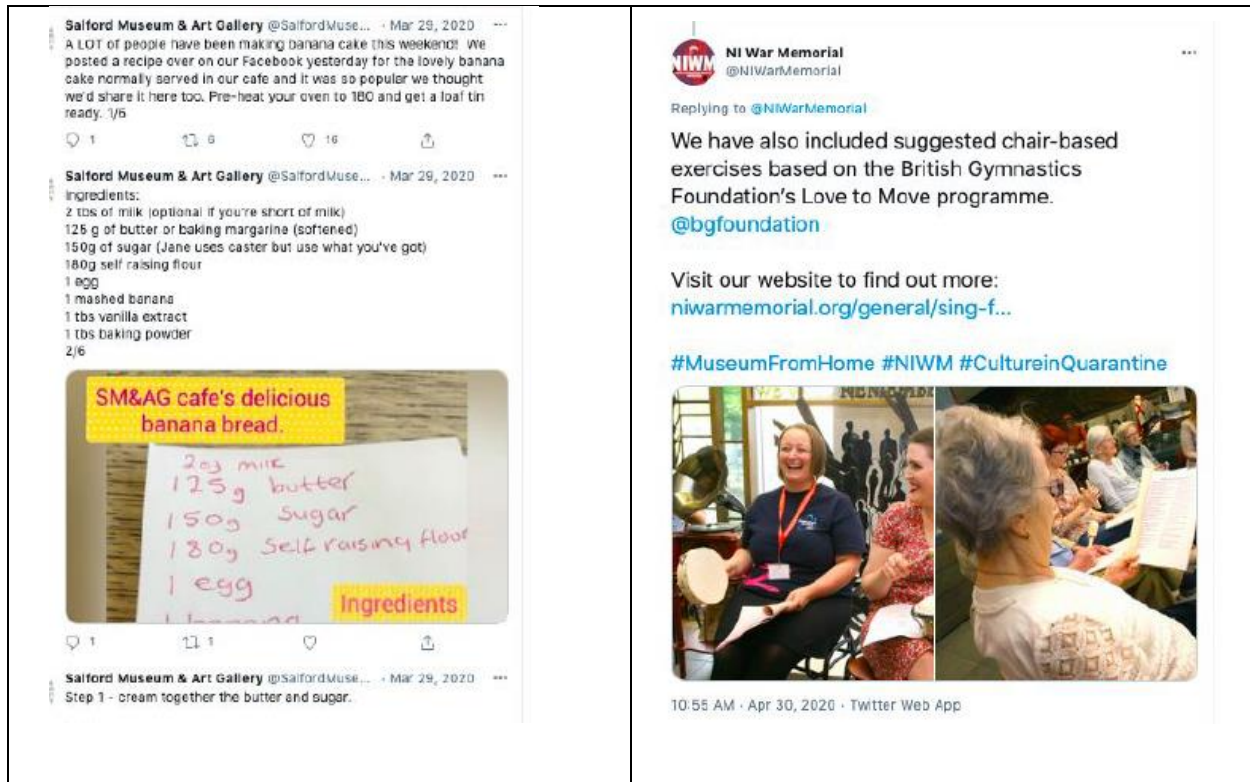
There were lots of tweets which promoted and celebrated social values too: those which referred to wider civic and societal issues such as welfare or climate change, those promoting initiatives for local communities, or which tried to invoke a sense of belonging or togetherness. Two examples are reproduced below. The first, from Salford Museum and Art Gallery, shares a cake recipe used by chefs in the Museum's café, tapping into the popularity of banana bread baking at this point in the lockdown (indeed, this had become something of a trope). The initial text read:

'A LOT of people have been making banana cake this weekend! We posted a recipe over on our Facebook yesterday for the lovely banana cake normally served in our cafe and it was so popular we thought we'd share it here too.'

The text continued with the instruction 'Pre-heat your oven to 180 and get a loaf tin ready', and the recipe and method for the bake unfold across a thread of 5 tweets.

The second example from the Northern Ireland Memorial Museum highlighted a series of chair-based exercises to help support the health and wellbeing of people with limited mobility who were isolating at home during the lockdown²⁹:

²⁹ This message was also posted on the Northern Ireland Memorial Museum Facebook page, and regarded by the museum as an example of successful engagement with its audiences.



Here we can clearly see these institutions trying to position themselves in relation to their communities during this intensely challenging period, making attempts to offer comfort, nourishment and connection as best as they could digitally whilst their doors were closed. Such examples demonstrate what might be termed a kind of benevolence evident across the sample. A desire to be helpful, thoughtful and compassionate in posts; to be public-spirited and of the community³⁰. This in large part meant institutions avoided outright challenge and provocation as we have noted, at least in their posts on these hashtags.

It has been noted elsewhere that the pandemic has seeded or nurtured civic-mindedness within institutions during the pandemic – a ‘pivot to purpose’ as Walmsley et al. 2022 suggest – and digital teams have clearly been at the forefront of that endeavour. If this is to turn into a more sustainable and confident humanitarianism, connecting with more forceful efforts within the sector to champion social justice and reform, then it will no doubt need to be nurtured.

³⁰ For an in-depth exploration of the motivations behind museums and galleries' digital engagement (also on social media), see Kidd et al. 2021.

4. Conclusion

As we tentatively and sensitively turn to talking about a post-COVID recovery, what can we learn from analyses such as ours?

Such research begins to reveal what seemed to work, and what worked less well, as strategies for engagement during this pandemic. As we have suggested, it tells a story about the kinds of content and interaction users found valuable, and begins to unpack how we can understand and articulate that value during a time of crisis. This paper has demonstrated how an analysis of such content can be carried out systematically and reflexively. We have acknowledged the limitations of our approach, but highlighted its promise as a way of getting beyond - and even interrogating - the 'success theatre' of traditional metrics (Rogers, 2018: 454).

The data demonstrate what some of the 'winning' strategies were for social media content during the pandemic – not just in terms of reach, but considering the quality of engagement.³¹ They do so by going beyond the established metrics, exploring the nuances of output and interactions. Video content and content which connected powerfully, playfully and/or emotionally with the themes of the pandemic tended to do well with audiences. In tweets we often saw arts and culture being connected dynamically with place (mostly locally or regionally rather than nationally) in ways that reaffirmed the heightened importance of community and local green spaces during the early weeks of lockdown. In our data we get a sense of the many ways in which digital content and engagements were shaped by their real-world contexts during this period.

The data demonstrate also that some institutions perhaps found it easier to translate their work into the social media environment. Museums and galleries, as well as local community groups, quickly moved to produce new content, activities and calls to action which privileged empathy and intimacy over and above traditional production values. Some other institutions - notably other cultural institutions - struggled more with this (in our sample at least). This is perhaps a consequence of their efforts at this time to re-circulate existing digital assets, and to maintain their traditional promotional voice.

There are a number of questions which emerge from this analysis, and that we have been investigating further through other approaches (Kidd et al. 2021). How are institutions and those who work for them gauging the success (or otherwise) of these activities? Has there been a shift in assessments of the value and importance of these endeavours over the course of the pandemic? How should key learnings from this time be used to usefully inform strategy - and

³¹ This point about what constitutes a 'digital' success is explored in Kidd et al 2021.

indeed policy - going forward? And how can that align with, accelerate, or usefully disrupt, broader planning for digital work?

One of the key emerging questions remains how (and whether) inequalities in digital access, and conversations about those, have shaped engagement, outputs or strategy during this period in these contexts. It is seductive to assume that social media are democratised and open to all, yet they are not. Evidence shows that digital exclusion is still a big problem, one that extends far beyond debates about access and connectivity (Helsper 2021), and there are of course those who self-select not to participate within social networks. Where digital inequalities are less of an issue, we might need to talk more about what Macfarland et al. (2020) have termed 'digital ambivalence', and the ways it also has been a barrier to engagement during the pandemic. Many of us have at times turned away from our screens and social media feeds during this period, citing screen fatigue or a general sense of despair at what we are seeing. Our relationship with digital media and our sense of what digital culture makes possible may have altered profoundly during this period, but we will only begin to understand how in the coming months and years. Just what this means for cultural consumption and participation we will have to wait and see.

To address these challenges, and as we emerge from the pandemic, we need to think dynamically and strategically about what social, cultural, communicative and creative value look like in the digital environment (Jeannotte 2020: 5). This paper, and others like it, can begin to assist with this.

Making the case for investment in digital skills, capacity, experiences and business models may continue to be a challenge given scarcity of resources - and ongoing fragility and precarity within allied sectors - in the wake of the pandemic. Investment in digital infrastructure and competency will be crucial however, and should be at the heart of the cultural recovery. We would make the case that this pertains to further investment in understanding social media activity; that it too has a demonstrable part to play in meeting cultural institutions' ambitions for social impact, inclusivity and participation.

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