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"WE DON'T REALLY KNOW HOW IT'S GOING TO WORK": THE FRONT-END AND BACK-END PROCESSES OF ACTION-LED RESEARCH AT TATE

ABSTRACT

The paper considers the front-end and back-end processes of art production as a methodological format and a metaphor for conducting research in museums and other cultural institutions in the age of computation and rapid technological innovation. Beyond their use in software architecture, those two terms can be ways of embedding research inside an institution. Informed by research projects embedded in museums as well as through my observations from the specific case study of BMW Tate Live: Performance Room the paper explores how cultural agents assimilate the technological present and how cultural value is produced in this context. Examining this experimental project of performance art staged live online on Tate's YouTube channel and the conceptualisations of the digital audiences that emerged throughout the programme's development highlighted how the institutional authority upon the production of art knowledge translates into online interfaces. The museum's ambivalence to extend its art programming in a digital, distributed, ecosystem poses wider questions about the ways that contemporary art institutions can comprehend the technological moment and whether they can be up to speed with a computational present and future.

Keywords: research methods, museums, online audiences, moderation practices, digital culture

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"ΣΤΗΝ ΠΡΑΓΜΑΤΙΚΟΤΗΤΑ ΔΕΝ ΞΕΡΟΥΜΕ ΠΩΣ ΘΑ ΜΠΟΡΟΥΣΕ ΝΑ ΛΕΙΤΟΥΡΓΗΣΕΙ": ΟΙ FRONT-END ΚΑΙ BACK-END ΔΙΕΡΓΑΣΙΕΣ ΜΙΑΣ ΕΡΕΥΝΑΣ ΔΡΑΣΗΣ ΣΤΗΝ ΤΑΤΕ

ΠΕΡΙΛΗΨΗ

Η παρούσα εργασία εξετάζει το front-end και το back-end στις διαδικασίες καλλιτεχνικής παραγωγής ως μια μεθοδολογική πρόταση και μεταφορά για τη διεξαγωγή έρευνας σε μουσεία και άλλα πολιτιστικά ιδούματα στην εποχή της ταχείας τεχνολογικής και υπολογιστικής καινοτομίας. Πέρα από τη χρήση τους στην αρχιτεκτονική λογισμικού, οι δύο αυτοί όροι μπορούν να αποτελέσουν τρόπους ενσωμάτωσης της έρευνας στο εσωτερικό ενός πολιτιστικού ιδούματος. Βασιζόμενη σε ερευνητικά έργα ενσωματωμένα σε μουσεία καθώς και στις παρατηρήσεις μου από τη μελέτη περίπτωσης του προγράμματος BMW Tate Live: Performance Room, η εργασία διερευνά τον τρόπο με τον οποίο οι πολιτιστικοί φορείς αφομοιώνουν το τεχνολογικό παρόν και το πώς παράγεται πολιτιστική αξία σε αυτό το πλαίσιο. Εξετάζοντας αυτό το πειραματικό πρόγραμμα performance art, το οποίο παράχθηκε ζωντανά στο διαδικτυακό κανάλι της Tate στο YouTube και τις εννοιολογήσεις του ψηφιακού και του κοινού που προέκυψαν κατά τη διάρκεια της ανάπτυξης του προγράμματος, αναδείχθηκε ο τρόπος με τον οποίο η θεσμική εξουσία πάνω στην παραγωγή της καλλιτεχνικής γνώσης μεταφράζεται σε τεχνολογικά μέσα και επιφάνειες διεπαφής. Η αμφιθυμία του μουσείου να επεκτείνει τον καλλιτεχνικό του προγραμματισμό σε ένα ψηφιαχό, διχτυωμένο, οιχοσύστημα θέτει ευρύτερα ερωτήματα σχετιχά με τους τρόπους με τους οποίους τα ιδρύματα σύγχρονης τέχνης μπορούν να κατανοήσουν την τεχνολογική στιγμή και κατά πόσον μπορούν να συμβαδίσουν με ένα υπολογιστικό παρόν και μέλλον.

Λέξεις κλειδιά: μεθοδολογία έgευνας, μουσεία, διαδικτυακό κοινό, εποπτικές πρακτικές, ψηφιακή κουλτούρα

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The quote in the title of this paper is a phrase collected during my PhD research fieldwork at Tate, London's contemporary art museum, in 2013. While in a production meeting, a person from the museum's marketing team expressed the insecurity of a whole department at Tate about having to deal with the live streaming of an online performance on the museum's YouTube channel. The meeting concerned the implementation of the "Performance Room" project, which was my research case study. The project was a challenging initiative for the museum since it was the first time Tate presented live performance art online and as such it was congruous with the scope of my research looking at the ways that cultural institutions understand the *digital* not just as a tool but also as an ecosystem with its cultural characteristics. Performance Room was part of BMW Tate *Live*; a larger programme of events dedicated to live art and performance that marked Tate's partnership with the German car manufacturer. In its inception in 2011, the programme aimed to engage with a wider audience for the arts through the use of online technologies. It would explore the museum's potential to expand its conception of exhibition spaces through commissioned performances, which were staged in a room at Tate Modern and were available only via a live web broadcast on Tate's YouTube channel, with no audience in the physical space of the museum. At the end of each performance the artist(s) and the curator of the programme engaged in a discussion and a dedicated Q&A session answering questions that the online audience sent on social media platforms (Tate, 2011).

The Performance Room project lasted four years (2012-2015) and looking back now, after two years of quarantine measures due to the Covid-19 pandemic online platforms became a significant alternative for entertainment and art enjoyment (Ryu & Cho, 2022), Tate took a bold decision to engage with online technologies for exhibiting contemporary art at a period when distributed art practices were less prevailing. However, Performance Room posed several challenges for the museum for two main reasons: first, it tested alternative methods of working to produce an art project in a new space outside of its physical boundaries. Secondly, it called into question Tate's¹ adaptability and openness to digital technologies not

^{1.} Throughout this paper I will be using the term "Tate" as a way to embrace the inherent tension in the organisation's identity as both a public institution and a brand. As such, across this text, *Tate* refers to the museum's name as a brand in the contemporary art world while it also encapsulates the human actors that consist its organisational ecology as well as more specifically the networks of people that consisted the programming team of the Performance Room project.

just as a means of communication but also as carriers of a distinct culture. While the partnership between one of the largest museum brands in the UK and one of the largest vehicle companies in the world was presented as an impeccable match (Tate, 2011), it was questionable whether the museum's encounter with online platforms and the networked audience could be described as equally successful (Zouli, 2018; 2023). Indeed, they didn't really know "how it [the programme] was going to work" and that uncertainty concerned several aspects such as the complex practicalities of presenting live art on the internet compared to the physical museum spaces; the difficulty to specify and attract the 'target' audience for this project; YouTube's open access that allowed for unexpected responses to the performances; the ways through which different departments in the museum had to collaborate to produce a programme in the unfamiliar environment of online interfaces that would still abide by Tate's and the sponsor's quality standards; and finally, measuring impact and success in a context that the institutional control was doubtful.

Due to my embedded position in the museum as a researcher and staff,² it was possible to trace the complexities that arose during the development of Performance Room that reflected the museum's difficulty in embracing unfamiliar elements of art display and audience participation in online platforms. Having access to the spaces of the programme's production, allowed me to observe the organisation's everyday practices nearby. The fieldwork developed in two directions: the *front-end* and the *back-end* processes of the programme production. Based on the logic of software architecture, the front-end of a structure is the part that the user interacts with, while the back-end is the control point that determines the possibilities of that structure. Likewise, adjusting these attributions to the case study, the Performance Room had a technical front-end and back-end due to the use of YouTube's online infrastructure as well as a conceptual one which involved both the internal processes of the design and production of the

^{2.} My PhD research was part of a studentship agreement between Tate and London South Bank University under the Arts and Humanities Research Council's (AHRC) "Collaborative Doctoral Awards" funding scheme. The students that are part of such partnerships conduct their research as members of Tate's Research department. This framework grants students primary access to resources and organisational spaces since they are considered Tate's members of staff. As a result, they also own an institutional email account as well as a staff pass, which facilitate both their communication and their mobility across the museum buildings and offices. This extended access to material and human resources was valuable for the development of the research because it allowed for an exposure to the organisational culture in place.

programme and their deliverable in the form of an art event. The front-end, therefore, involved the elements of live performance with which the public engaged, namely the live-online broadcasts of each performance and the post-performance Q&A sessions between the live audience, the artist(s) and the curator. The back-end included the processes that generated and shaped the programme and its development as an art experience, such as the production and strategy meetings, as well as the backstage conversations and events. The combination of these sources of information allowed for a connection with the overall conditions, associations and dissociations that underlie Tate's relation to digital ecologies.

The present paper considers how these patterns of software architecture can act as a format and a metaphor for thinking research methodologies in museum case studies in the age of computation and rapid technological innovation. It is based on a wider academic exploration of the ways that digital and networked technologies affect the cultural sector in terms of exhibition, production as well as modes of working. It proposes a methodology that is attentive to both the front-end and back-end of practices and could thus allow for a better understanding of how cultural agents assimilate the technological present and how cultural value is produced in this context. Conducting research following this division could also be a useful factor for updating current ways of working in museums and other cultural institutions towards more collaborative schemata that would imaginatively bridge academic theory and cultural practice.

One of the difficulties for museums to adjust to the constantly developing field of computational technologies is that there is a discontinuity of speed: the pace at which cultural institutions apply new features is incompatible with the acceleration of the tech industry and the ways that technological developments assimilate into everyday life. Big museum brands such as Tate for instance, despite valuing the need for a digital transformation for more than ten years now, develop such changes in the level of operation and/or exhibition over a long period or rather choose to focus more on the communication or marketing dimensions of the digital instead. Through her experience of several institutional impediments in documenting or exhibiting digital art, the researcher and curator Annet Dekker suggests that "the introduction of different attitudes needs time, particularly in highly structured and authoritarian organizations" (Dekker, 2021, p. 17). Apart from the issue of pace, Dekker introduces another dimension that is important to take into account when looking at museums' relation to technology, which is authority. An intrinsic characteristic of the foundation of museums has been to construct and uphold authoritative forms of knowledge about, and representation of, the world (Bennett, 1995). Even though digital innovations have been challenging and sometimes transforming museums' traditional modes of authority (Henning, 2006), the maintenance of control over the art experience as well as the interpretation of art and collections remains important for institutions (Dewdney, Dibosa & Walsh, 2011; 2013; Walsh, 2016; Zouli, 2018; 2022).

More recently, the widespread digital integration in the cultural and heritage sector was accelerated and further established as a consequence of the Covid-19 pandemic. As Giannini and Bowen (2022) argue this change is expected to require "new conceptual models" that could redefine the ways that digital activities are designed and implemented. In the same vein, Elizabeth Crooke and her collaborators underline the need for new methodologies to measure the impact of museums. As they claim: "the sector is asking for support to find new methods to measure museum impacts that reflect the multiple ways people find value in museums" (Crooke et al., 2022). At the same time, in the age of algorithmic prevalence or the ever shorter attention span of audiences, museum staff need to update their practices tuning to the digital moment, for instance by recording online metrics and searching "ways to convert the online traffic into physical audiences" (De Mutiis, Sluis, Uriarte in Dekker, 2021, p. 289).

In this complex landscape, the case study of Tate, as it has been explored through my PhD research between 2012 and 2015, acts as an early example of how the digital turn in the cultural field can be challenging in terms of practice and at the same time important to research and understand as a test towards methods that are more responsive to the technological moment. The following pages unpack key details of the research fieldwork and its methodological structure showcasing how the conduction of field research in the level of cultural production can bring forward observations about dynamics and politics in place that are not easily accessible through a traditional study of museums from the outside-in. Through these observations and the development of the Performance Room case study it becomes evident that the museum's practices of control translate into other media and environments to sustain the institutional authority upon the production of knowledge about art. In this case, the "computational" is not just seen as a technical aspect that museums' have to update or follow to be current but also as another kind of "institution" with its agency to produce knowledge and meaning which can be threatening to the museums' mastery.

AN AMALGAMATION OF PROCESSES

The research on which the present paper is based examined how Tate perceives the concept of "digital" as part of its exhibition programme and how the museum approaches its audience in online settings of art production and distribution (Zouli, 2018). The case study of BMW Tate Live: Performance Room, focused on the ways that the organisation dealt with the culture, aesthetics and architecture of online spaces as well as the role of the audience that the museum can afford in a networked setting. The research concentrated on the background of the museum's engagement with digital technologies to find out how the notion of digital was understood across the organisation as well as what were the conceptualisations of audiences that surfaced from these understandings. Through a particular focus on video practices and the organisation's online strategies, it questioned what Tate's approach to the digital implies about the production of knowledge by the museum in contemporary times of intense connectivity and technological expansion. The Performance Room case study allowed taking a closer look into the established museum practices and how these intermingled with new ideas and processes that the digital encouraged. Furthermore, the embedded methodology of the project provided the opportunity to carefully observe the ideas that emerged in the process of presenting an art programme on an online interface as well as the conflict between Tate's analogue logic and the cultural characteristics of online platforms and their audiences.

The embeddedness created a methodological condition that Sharon Macdonald has described as "ethnography of production" (Macdonald, 2001, p. 82). Macdonald's ethnographic research at London's Science Museum underlined the value of observing directly the processes that define the making of an exhibition as they can lead to a better understanding of the complexities of museum productions and their politics. This approach also applied in the case of the Performance Room series that lasted for four years and was presented as exemplary of Tate's strategic turn towards digital and online audiences. Spotlighting the project's production indicated how different stages of implementation and the networks of people involved in them generated a variety of ideas and interpretations about the digital methods of art making and circulating.

The project under examination illustrated a long and consistent process at Tate to be in tune with recent technological advancements, and to approach its audiences through different media. For instance, in 2010 Tate

published an online strategy (Stack, 2010) which expressed for the first time the ambition to move away from the concept of the institutional website acting as "Tate's fifth gallery"³ and work towards making the online spaces of the museum "a dimension of practically everything that Tate does". This direction was further explored in the 2013 digital strategy (Stack, 2013) with a more "holistic digital proposition" not just for what the website does but for the ways the museum works. In this case, the digital was seen as "a dimension of everything" that Tate does. It was, therefore, important for the museum to expand its presence in online platforms - beyond the institutional website -to reach wider audiences that are interested in the museum's activities and the digital experiences it has to offer. As a result, Performance Room was exemplary of Tate's aforementioned ambition, especially regarding the production of an art project however in reality this transition to a more distributed format of exhibiting art was demanding. For that reason, the research developed relationally; namely, to explore the expansion of art programming into non-institutional online spaces where the audience is not necessarily fixed or attentive should be studied in relation to the traditional curatorial practices and working methods.

To provide some additional context in this direction, the Performance Room programme series started in March 2012 with a performance by the French choreographer Jérôme Bel and until its conclusion in November 2015 it included performances from a total of 19 artists from different parts of the world. The invitation to all the artists was common: to create a performance piece in an empty gallery room at Tate Modern that would be live-streamed for the online audience. The audience watching the performance online on Tate's YouTube channel was invited to take part in a conversation with the artist(s) and the programme curator by sending questions and comments via the YouTube chat, Twitter or Facebook using relevant hashtags and mentions such as #BMWTateLiveQ, or @TateLive.

The programme corresponded to the museums' orientation towards exhibiting and collecting performance art since the early 2000's (Laurenson, 2006; Calonje, 2014; Graham, 2016; Tate, n.d.-a) and specifically Tate's

^{3.} Considering that Tate consists of four art galleries across the UK (Tate Britain and Tate Modern in London, Tate Liverpool in Liverpool and Tate St. Ives in Cornwall) the website would count as a fifth gallery where the museum could extend its activities. As Dewdney, Dibosa and Walsh suggest in their study of Tate, the first version of the institution's website was indicative of "the material and institutional organisation, with a strongly retained corporate mode of address of the four constituent museums, nested within the overall Tate Brand" (Dewdney, Dibosa & Walsh, 2013, p. 182).

interest in live art that manifested in programmes such as "Live Culture" in 2003 (Heathfield, 2003) or "Tate Tanks: Art in Action" in 2012 (Gogarty, 2012). At the same time, the extension of Tate's art programming into online spaces echoed the process of digital transformation that had been taking place in the institution since 2010 with a particular focus on the digital experiences of audiences. With the motto "digital as a dimension of everything" Tate presented in 2013 a strategic vision for the development of digital activities and expansion of digital skills across the organisation (Stack, 2013). One of the core digital practices of the museum has been its consistent production of online content since 2008 when the project "Tate Shots" was established. Until the present day, Tate's YouTube channel presents short documentary videos and interviews, which are produced by the museum's in-house video producers and their purpose is to make exhibitions, performances or public events more accessible to the audience on the web (Tate Shots, 2020). As a result, when the Performance Room project launched it combined a variety of elements that were core for the organisation's planning towards a technologized future: engaging with digital technologies and platforms, experimenting with live art and further involving the online audiences in museum activities. However, in its implementation the programme was more unconventional than expected, as staging performance art away from the familiar, physical, contained, spaces of the museum and into an online video database that provides content 24/7 instead (Lovink, 2008, pp. 10-11) posed several challenges both for the programming staff and the participating artists.

Despite the regular use of online spaces as communication and marketing channels by mainly the Tate Marketing and Tate Media departments, the live streaming of performance art required collaboration between different specialities in the museum and a mixture of practices that did not correspond to the usual allocation of roles in the production of an art project. For instance, the curators of Performance Room had to employ broadcasting practices to exhibit live art, while the Tate media producers had to prioritise the aesthetic dimensions of each work as well as the artists' directives to set up the live broadcast. Furthermore, the YouTube interface was an important element in the delivery of the performance not only as the "frame" of the performance piece but also as the place that hosted the audience's comments and questions. Normally, the interpretation of a work of art or a discussion between the artist and the audience occurs in dedicated talks, tours or conference settings in the museum, however in this case the stream of responses happened simultaneously to the live performance. Also, in contrast to events in the physical museum spaces that could be ticketed or have an RSVP, in a live YouTube broadcast it was not possible to predict either how many people will show up or what type of questions and comments they will post. To, therefore, address the arranged features as well as the unknown factors in the production of the programme each live performance was a collaboration between staff from the Curatorial, Marketing, and Media departments as well as, occasionally, the Learning, Press, Online and Development teams. Apart from the Tate staff, an external media production company and a live-streaming company supervised the technical side of the broadcast and streaming details on the day of each performance.

The complex structure of the Performance Room and the different requirements for its realisation were elucidatory of the shifting dynamics in the way the museum organises art production and knowledge-sharing in a digital, distributed landscape. In the examined case, a certain level of flexibility and openness was needed to deliver the programme, which was not always easy to succeed amongst the variant agendas of operating and targeting that pre-exist in the museum. The collaboration of people from inside and outside Tate that made possible the staging of performance art online created a "work-net" (Latour, 2005, p. 143) which discussed and decided about the programme; negotiated ideas and tested new practices or established practices in new ways; and faced several contradictions between expectations and reality.

The fieldwork spaces, therefore, consisted of physical places where this work-net gathered as well as the online interfaces and technologies where concepts and dynamics played out. These habitual spaces of the museum's everyday life are thus key when researching institutions, as this is where interactions happen, ideas emerge and politics operate. Following Bruno Latour's thinking (2005, p. 144) a "gathering" is indicative of the multiplicity of layers that exist not only in human interactions but also in objects and in moments of connection between them. In this direction, the two main physical locations that served as the loci of my observations were the meeting rooms that hosted the programme's implementation meetings⁴, and the Tate Modern gallery rooms where the performance pieces were

^{4.} The *Implementation Meetings* were held approximately once a month at a specific meeting room at Tate Britain. During these meeting the Tate staff responsible for the implementation of the programme assessed the previous developments and discussed future planning (Zouli, 2018).

produced and live-streamed. As it was important to be attentive to the traces that appeared both in physical and online spaces, I collected institutional documents such as reports, evaluation documents, press releases, weekly agendas, newsletters, reviews and emails. I was also present at informal conversations in other sites such as offices, corridors or the staff café, which complemented the access to meetings and the performance backstage and gave a wider sense of the institutional atmosphere.

Apart from my navigation in the architecture of Tate spaces and the institutional culture, another significant element to take into consideration was the decisions that were taken regarding the YouTube page formation and the Q&A discussion with the audience.

FRONT-END AND BACK-END PROCESSES AND ACCESS POINTS

As the programme evolved through time, the research attention gradually formulated into front-end and back-end processes as a way to trace the different ways that the museum translated (if so) its established policies, ideas and practices into this experimental digital project. The front-end included the online performances that broadcast live, satellite events around the programme (such as public talks or conference presentations), relevant publications, articles and promotional audiovisual content such as trailers or interviews. The back-end processes referred to the ideas and values that the Tate staff -involved in the production of Performance Roomshared when planning and implementing the programme. The division of front-end/back-end processes mirrors the patterns of software architecture, which becomes relevant in the case of Performance Room as the work that appeared on the YouTube interface (the front-end) was based on a complex back-end structure not just literally in terms of a Tate data server but as to practices of curation, technical support, provisioning, monitoring and decision-making.

The division of front and back suggested here is shaped by the paradigm of software architecture that aligns with the physical and digital nature of Performance Room, yet it is also influenced by the sociologist Erving Goffman's work, as interpreted by the anthropologist Sharon Macdonald in her writings. As Macdonald highlights in her ethnographic account from London's Science Museum, Goffman's book *The Presentation* of Self in Everyday Life (1956) has a particular significance when one studies a museum production from the inside. Goffman identifies ways that people perform themselves in the public domain and thus act by "staging" themselves through a front-stage and a back-stage sphere. The front-stage is considered to be a more polished and carefully managed impression of the self aiming at a specific audience while the back-stage is based on a coding that only insiders could understand. Both these sides of the self are expressed through behavioural patterns, different uses of language and other techniques of "impression management". When it comes to ethnography in the museum, Macdonald points to the importance of observing the interplay between these two stages in institutional actors as they can reveal nuances and undercover politics in motion. It is also often the case that in a participant-observation context, the subjects focus more on the front-stage of their appearance which is why she suggests that "through fieldwork, the ethnographer is learning not just what people say and do but also what particular utterances and actions mean" (Macdonald, 2001, p. 86).

In 1990 Macdonald undertook an ethnographic study at London's Science Museum aiming to identify the museum staff's "definitions of science"5, and how these conceptualisations were demonstrated in exhibitions as well as in the audience's reception of them (Macdonald, 2001, p. 79). She specifically followed the production stages of the exhibition Food for Thought: The Sainsbury Gallery which opened in October 1989 and focused on the role of food in Britain throughout the twentieth century. To compose her ethnographic account she closely followed the museum staff in their setting of everyday practices, which allowed her to discover the dynamics at stake by "being there" (Geertz, 1988; Goffman, 1989). Similarly, in the case of Performance Room, the close examination of Tate staff and their habitual practices took place through participant observation methods. The aim was, as per Macdonald, to address the complexities of museums' relation to digital culture and how a focus on local operations can indicate several "cultural assumptions" involved in staff practices (Macdonald, 2001, p. 83).

Consequently, the division of processes into front-end and backend attuned to the methodological traditions of anthropology and museum studies while it specifically reflected on the particularities of the Performance Room case study and its intricate qualities. Macdonald underlines the value of observing a museum project in its making, however the question that emerges is what happens when such a project is not

^{5.} The research was realised with funding by the Economic Social Research Council's (ESRC), under the programme "Public Understanding of Science" (Macdonald, 2001).

intended for exhibition or presentation in an institutional space such as gallery rooms, auditoriums or other museum public spaces but rather in the interface of another branded space such as YouTube.

Early on in the fieldwork, it became evident that Tate staff perceived the digital mainly as a useful tool for the production of the programme and the online as a space where they could promote the Tate brand. Andrew Dewdney, David Dibosa and Victoria Walsh (2013, pp. 178-180) noticed a similar tendency in their research study of Tate⁶: the expansion into more distributed spaces was mainly seen as an extension of the physical building and the museum activities into online pages. Also, the authors underlined how this extension of practices reproduced the same organisational hierarchies and practices that exist in the physical space and formulated the production of cultural knowledge by the museum.

The way that the YouTube platform was used in the Performance Room programme revealed that maintaining control of the art experience was an important priority for Tate. The elements presented in the front-end of the YouTube platform – the performance piece, the video broadcast, the Questions & Answers session as well as the allocation of the chat on the page – reflected the decision-making going on in the back-end. Although it was not possible for a person watching the online performance to realise that a degree of filtering was applied in the interactive elements of the live performance, the platform's chat was regulated to hold the performance interpretations in check. YouTube, thus, acted both as a platform for art programming and as a control centre – in a literal and metaphorical sense – through which Tate presented the art experience and attempted to determine its possibilities.

More specifically, the first performance of the series was decisive for the participatory and networked aspect of the rest of the programme and indicative of the reflex actions of the museum's control mechanisms. The launch event was a live performance by Jérôme Bel that was highly

^{6.} The research project *Tate Encounters* was led by Andrew Dewdney as the Principal Investigator and David Dibosa and Victoria Walsh as Co-Investigators. It was a collaborative research project between Tate, London South Bank University and University of the Arts London funded by the Arts and Humanities Research Council (AHRC). The research lasted three years (2007-2010), it was interdisciplinary and embedded in Tate in order to explore how visitors with migrational origins and diverse cultural backgrounds perceive their encounter with the national collection of British art at Tate Britain. A significant part of the research, which is also relevant to the present work, is the organisational study the investigators conducted through the exhibition *The Lure of the East* (2008).

anticipated by both Tate and the BMW sponsors who had widely advertised this new collaboration through several press outlets. In addition, the days before the performance Tate did a campaign of targeted advertising on YouTube to attract new audiences that already use the platform and would possibly be interested in this hybrid art event. What happened on the evening of the performance though was that the YouTube advertising brought to the live broadcast a large stream of people among which was a significant percentage that did not understand what was going on in the performance or the context of its presentation. Consequently, several audience comments were uncomplimentary or irrelevant to the event, which was inconvenient for the artist to watch but also not what the Tate producers anticipated⁷ (Pringle et al., 2014).

In the context of this new, hybrid art project for Tate, neither the marketing/communications team nor the curatorial team could predict the type of comments that people would make online and how those would influence the reception of the performance. The participatory elements of online platforms, such as the chat where the audience could comment live on the performance piece, were beyond the typical marketing activities on social media or the website, causing hesitation in their handling. Similarly, throughout the four years of the programme, the curatorial team often perceived the internet as an "unknown territory" where the exhibition of art could risk the reception of the artwork as well as the artist's intentions (Pringle et al., 2014; Zouli, 2018; 2023). However, it was the experience of the first performance event that seemed to be the most upsetting for Tate staff and for that reason, a degree of filtering in the live discussion was deemed necessary through the use of a moderator control panel. Consequently, after the Jérôme Bel performance, the Tate Media team installed a control panel at the back-end of Tate's social media content management system through which they could moderate which questions or comments are appropriate to be posted live on YouTube under the hashtag #BMWTateliveQ. As the Tate Media producers mentioned in one of the production meetings at the time "we can't rebuild the YouTube page but we can turn things on and off" (Zouli, 2018, p. 364). What they eventually turned off was the ability of people's comments to appear automatically

^{7.} You can watch the documentation of Jérôme Bel's performance on Tate's YouTube channel. In the Q&A that follows the performance the artist seems puzzled with the reception of his work by the online audience and he questions whether this is the right medium to show a performance piece (Tate, 2012).

on the page as soon as they posted them on YouTube or their linked social media accounts (for instance, on Twitter or Google+).⁸ Instead, staff from the Tate Media and Tate Marketing team, read the incoming comments listed in the control panel and chose the ones that they considered more relevant or interesting to appear on the streaming page and to pass on to the curator for her to use in the Q&A section with the artist(s).

This decision was applied in the first months of the programme and it was a critical move as it signalled the museum's need to construct the experience for the online audience and safeguard the reception of the performance. Tate's moderating mechanisms or, as Dewdney, Dibosa and Walsh have described it, the museum's "curatorial and editorial logic" (2013, p. 177) were employed in that early moment of the programme as a way to frame the experience of the online audience making sure that the discussion remains in context and abides by the Tate standards. In addition, as part of this logic, the online museum audience is being perceived as an extension of the visitors in the Tate galleries that would follow specific spatial and behavioural norms in their visit (2013, p. 179). Consequently, the moderating mechanisms used in Performance Room were a way to secure a type of participation and a circulation of ideas that is consistent with the conversations that take place in public events in the spaces of the museum. Even though Tate created the conditions of dialogue and invited the audience to participate in this series of online events, it did not seem ready to accept the unpredicted factors of online participatory culture and instead chose to contain the programme in the protected territory of the institution and its brand.

The moment when Tate staff introduced the control panel that filtered the audience's input highlighted the value of studying both the front-end and back-end processes of production. It was one of the first instances that

^{8.} I would like to add a clarification here in regards to the technical characteristics of the YouTube chat since the way it is described here might seem unalike to modern day users of the platform. In 2012 when the project launched, YouTube's live chat was a stream of comments that appeared on the side or on the bottom of the page (i.e. on the side or under the video frame streaming the live image). One could comment live either by posting at a designated area at the bottom of the stream or by posting their comment in a social media account, such as Twitter or Google+, that was internally linked with YouTube. In these other accounts people had to add the relevant project hashtag to their comment and that would automatically appear live on the specific Youtube stream too. By the end of the Performance Room project YouTube had embedded a live chat feature on the interface of every live stream which allowed viewers to chat with each other or with the channel host on the same page during the live event.

indicated the museum's difficulty in engaging with the online audience as active participants in an online art experience and not just viewers or consumers of content. If one watched the live broadcast of the performances on YouTube they would see the audience comments appearing on the side of the video frame but they wouldn't know that there has been a filtering process through which only positive or relevant questions make it to the front-end. Throughout the development of Performance Room, Tate prioritised sustaining its cultural authority in online spaces instead of engaging with the digital – and its audience – in the more experimental ways that the programme could, and had originally proclaimed to, do. However, the aspect that remains challenging today is that online art projects do not happen in a vacuum, which means that museums and other cultural institutions have to share their cultural authority as well as the attention of the audience with other incentives that co-exist in the online ecosystem.

RESEARCHING MUSEUMS

In 2009 the artist and theorist Hito Steverl wrote a text for the e-flux journal questioning whether a museum is a factory. In one aspect of her analogy, the museum could be similar to a factory where everything is on full display but at the same time there are always elements of the production that remain out of sight. As she expressively describes: "a museum predicated on producing and marketing visibility can itself not be shown - the labour performed there is just as publicly invisible as that of any sausage factory" (Steverl, 2009). This idea is a good prompt to consider not only the invisibility of labour in museums but also of the networks of relations and decisions enacted in them; relations and decisions that are concealed from the public and often inaccessible to critics, policy-makers or museum researchers. Macdonald (2011) and Dewdney, Dibosa and Walsh (2011; 2013) have commented in their work about the distance that often exists between theory or academic research and everyday museum practices. This disconnection has its roots on both sides: the academic work and critique that is produced about museums doesn't often channel back into the institutions while at the same time, the museum staff rarely engages in a theorization of their practice, has time to do research or is just too close to the practice to even be able to do this sort of reflection.

Collaborative research projects that are embedded in the museum, such as *Tate Encounters* and my PhD at Tate or Macdonald's project at the Science

Museum, benefit from the access to the level of production. Witnessing the planning of a programme, as well as the organisational dynamics around its production, allows making connections between arising and recurring themes and the way these were expressed by different actors in the museum. Dewdney, Dibosa and Walsh have extensively described this different method of studying the museum as "post-critical museology" (2013). This post-critical approach to museum research suggests examining the institution both from the inside out and from the outside in. This schema has collaboration as a prerequisite for the researchers to be in tune with contemporary practices as well as the museum to incorporate reflexivity as a systematic method of evaluating their work. Certainly, establishing collaborative relationships between museums and research institutions is not necessarily straightforward, as it requires a broader policy framework that recognizes the value of such partnerships and their potential impact.

The condition of embeddedness to which I refer in this essay is also key as it offers access to the mechanisms of the "museum factory" as well as the processes of production that reflect politics and hierarchies of operation. Another aspect of Steyerl's analogy that is relevant to consider here is her speculation on the works on museum display: "Just as the work performed in the factory cannot be shown outside it, most of the works on display in a museum cannot be shown outside its walls" (Steyerl, 2009). This idea brings to mind the discussion that preceded here about the Performance Room programme and how Tate was ambivalent about sharing its art programming online. Just as a factory delivers a finished product to merchants, hiding the process of creation from the public eye, museums showcase meticulously curated artworks and experiences within their institutional settings. While this role aligns with the historical function of museums, the swift pace of technological advancements and the everchanging social and political landscape frequently disrupt established practices, necessitating adaptation to meet new demands.

In 2012 when Tate first launched the Performance Room project it was an innovative initiative that tested an orientation towards digital practices that the museum was already en route for. The ethnographic research inside the museum and particularly the front-end and back-end structure of my fieldwork observations elucidated the connections and disconnections that characterised Tate's relationship with digital culture and the networked audience. It proved difficult for the museum to contain a Performance Room in its display culture and create a sheltered space in which the performances could be viewed. In this direction, the curator of the programme mentioned in a public talk in 2014 the need to create a "protected space" for this live project as a response to the rampant stream of bizarre comments in the first performance of the series (Pringle et al., 2014). Since the end of the Performance Room series in 2015, Tate has not repeated a similar project of live art presentation online, while performance is staged live in the physical spaces of the museum in ticketed or public events or is shown in exhibition in the form of performance documentation works (Zouli, 2023). The institutional fear of trusting an unfamiliar system of representation such as the YouTube interface, as well as the platform's constant exposure to an abundant audience, seems to remain in place.

It is the case that the museum sector is slow in absorbing the specificities of online media beyond their communicational function or the capabilities of computational media beyond their technical attributions. At the same time, the transformational speed of modern technologies allows for experimentation and hybrid projects, which often contrast with the museums' agenda that is bound to ticket sales or branding. These sorts of clashes are important to document and explore, as they are indicative of cultural politics and economies.

In light of the algorithmic and computational turns in arts and humanities, this paper suggests a methodology for researching museums and other cultural institutions that is interdisciplinary and embedded in different stages of cultural production. The observations from the case study of Performance Room and the front-end/back-end format of the methodology designated several valuable insights about conducting research in an institutional setup, and how it could phase in the technological present. Tate's difficulty in conceiving the digital as an ecosystem and its tendency to apply moderating mechanisms that would control the art experience and its interpretation shows not only a fear of the technological as an agent of culture but also the difficulty in finding a balance between sustaining cultural authority and fostering art experimentation in the age of computation. In this direction, museums perceive online engagement in a specific context that relates to the institution's branding profile and act with hesitance towards the shared cultural authority and fragmented attention of digital platforms especially when it comes to the production or reception of a live art project. Consequently, the concepts of the "digital" or the "computational" are not just about museums updating their technology or expanding their work in a variety of platforms; they are about acknowledging the importance of both human and non-human actors in processes of cultural production, recognizing the impact of algorithms, digital platforms, and other technological infrastructures. This requires an approach that comprehends the interactions between human creativity, digital tools, and the broader ecosystem in which cultural artefacts are produced, consumed, reproduced, circulated, and interpreted.

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