Art-Mapping Smart-Cities: Accessing art collections outside the museum

Paper

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1. Introduction

The concept of *Distributed Museum* (Bautista & Balsamo, 2011) was recently introduced into the field of museum studies to indicate those contemporary institutions that act as a primary node in the "distributed learning networks" (ibid; Balsamo, 2011) that characterise the digital age. As the learning process shifts from teacher-led to a peer-led "communal sharing of knowledge and information" (ibid), museums are compelled to reassess their role in the "distributed, dispersed, and decentered space of the digital age" (ibid), while at the same time maintaining their traditional functions of conservation and curation, education and community outreach. Bautista and Balsamo, referring to de Certeau's definition of space as "a practised place" (de Certeau, 2011: 117), described this process as a transformation from a "place-based cultural institution to a more dispersed (post)modern space" (ibid) and broke it down into three dimensions to categorise recent museums' efforts to go beyond their physical premises and to move into the realm of *virtual*, *mobile,* and *open* learning. The main concern in closing their analysis, was the challenge faced by contemporary museums in asserting their authority and expertise without losing relevance in the digital world, in a context where learning is usually a peer-to-peer process and formal authority is not necessarily recognised.

A brilliant answer to this reflection, although too close in time to enter Bautista and Balsamo's analysis, is the *PhilaPlace* project (Fischer et al., 2011), a place-based story-sharing platform launched in 2010 and fruit of a collaboration between historical and technical institutions in Philadelphia, Pennsylvania and local community partners. Based on the idea that "place is an important touchstone for memory, history, and culture" (ibid), this open-source website aims at holistically combining resources from the partner institutions and local communities to offer "a Web-based exploration of identity, place, and experience that is far richer than any one partner could offer alone" (ibid). Fischer et al. describe the process of data collection and its transposition onto the digital medium as "reciprocal technology," a term first used by folklorist ethnographer Natalie M. Underberg to indicate a research methodology that actively involves the informant community in the shaping of the final output's perspective and meaning (Underberg, 2006). In so doing, *PhilaPlace* manages to strike a balance between the institutions' expertise and the community partners, "distributing authority among myriad participants and enriching the collective historical narrative" (Fischer et al., 2011).

Without wanting to reduce the originality of its results, the *PhilaPlace* project represents a growing tendency in the field of "distributed museum studies," defined as *Open Authority* by museum professional and social media strategist Lori Phillips in 2013. In her article "The Temple and the Bazaar," Phillips brings together the "mirroring metaphors" (2013: 220) expressed by Duncan F.

Cameron in his seminal article "The Museum, a Temple or the Forum" (1971) and by software programmer Eric S. Raymond in his essay "The Cathedral and the Bazaar" (1997). Both authors in their respective fields argued for a socially meaningful complementation to the authority of the institution, or big software company, through the seamless involvement of new actors, the final users in the play. With the term *Open Authority*, Phillips defines an approach to museums' projects that allows the institution to maintain its recognised expertise, while at the same time inviting contributions from its publics through digital platforms such as Wikipedia (Phillips, 2013).

In this sense, the Art Maps platform can be considered a rightful example of *Open Authority*, although we will argue its scope goes beyond that. In this article, we first introduce Art Maps as an open-source blogging application that invites contributions from users in order to map the Tate collection, and that encourages personal interpretation of the artworks and of their relation with locations in the real world. As in the workshops that are subsequently described, the gallery's authority is maintained online through its role as facilitator of the conversation that will eventually shape the project's output: a cartographic text intertwining geographical data and personal interpretations, reflecting the fruitful collaboration between the institution and the platform's users. In our concluding observations, we assert that Art Maps not only stimulates in its users a sense of ownership for the collection, but also enables them to transpose the attitude and behaviour related to a gallery visit onto their own environment, reframing it as a space for aesthetic contemplation.

2. Art Maps

The Tate collection of British art from 1500 to the present day, and international modern and contemporary art, has been constantly growing since the inception of the gallery in 1897, and currently counts almost seventy thousand artworks.

All of these have been digitised in recent years, and about a third have also been indexed with geographical data associating each artwork to one or more locations, including mythical places (Stack, 2012; Giannachi, 2012a). Recognising an opportunity to support Tate's mission "to promote public understanding and enjoyment of British, modern and contemporary art" (Tate, n.d.) while also testing the gallery's developing Digital Strategy (Stack, 2013a, 2013b), Tate set out to open up such a rich database and provide its publics with a novel way to engage with the online collection.

Soon after some initial geocoding work went into the mapping of the collection, Tate realised that relating an artwork with a real-world location was not a straightforward task, but rather a subjective matter made even more complex by the considerably diverse nature of the collection itself (Sinker, 2013). Deciding to open up the experience to its publics while retaining its subjective nuances, Tate brought together a team of researchers in Computer Science from the University of Nottingham, and in Performance and New Media from the Centre for Intermedia at the University of Exeter, to collaborate with three of its departments—Learning, Online, and Research—in the context of the Art Maps project. Funded by the Research Councils UK, the team started working in January 2012 and was tasked with the development of a suite of mapping applications that would crowdsource precise geographical information, while at the same time offering to Tate publics a platform "where new ideas and meanings are generated, exchanged and preserved" (Stack, 2013b). In sharing cartographic responsibilities with its publics, Tate consciously decided to give up some control over its collection so that the map representing it would not be a rhetorical, "authoritarian image" (Harley, 1989:14), but rather a reflection of its communities and of their personal relationship with art.
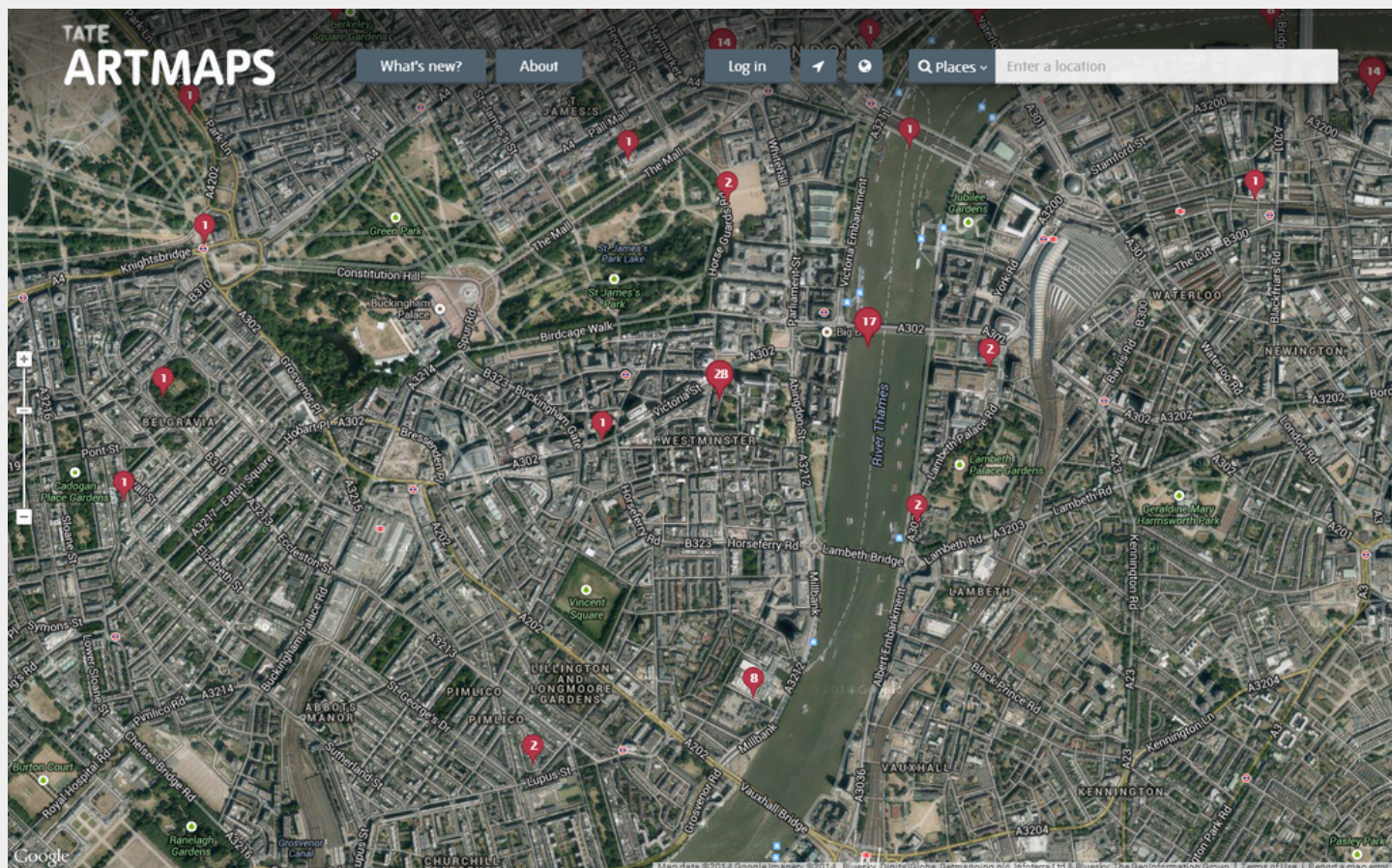
— Figure 1: screen grab, Art Maps © Tate

Soft-launched on February 17, 2014 (Sinker, 2014), the resulting Art Maps Web application is based on the open-source blogging platform WordPress, presented in a Tate-designed custom interface integrating a Google Maps API, where artworks are identified by pins marked with a number that indicates the quantity of items related to the same location. Users can either navigate the digital map by moving it on their screens—the application is optimised for both desktop and mobile usage—or by looking up a specific location or keyword through the search-box, which pulls data directly from the *Art & Artists* section of the Tate main website at http://www.tate.org.uk/art. The "What's new?" tab displays the most recent users' comments and offers regular challenges through which the institution guides users towards little-known works in the collection, or geographical areas that require more precise information to be added. Clicking on a pin, users open an overlay window where a reproduction of the artwork can be enlarged, and more information about it can be accessed via a link to the Tate website *Art & Artists* section. Most importantly, the artwork's location can at this point be either confirmed or contested by users, who can suggest an alternative site by dropping a new pin on the map, and explain their motivations by simply choosing from a drop-down list of proposed reasons, or by posting a more articulated, possibly personal comment on the sidebar. Tate actively facilitates dialogue with and between users through the "What's new?" section and by encouraging members of its staff to post comments on different artworks or places. Once an artwork's location has received enough confirmations, the institution officially adds it to its database.

The Migrants Resource Centre's Workshops

Engaging in a two-year research project, rather than simply commissioning the creation of the Art Maps website to an external contractor, testifies to Tate's interest not only in gaining geographical data from the crowdsourcing process, but also in understanding its dynamics, the users' motivations in contributing to it, and the nature of their experience in doing so (Tate, 2011). In line with the elements of *Open Authority* detailed by Phillips in her intervention at the Museum Computer Group conference in 2013, among which featured that of focusing "on process, not product" (Phillips, 2013), Tate deploys crowdsourcing not merely as an action aimed at producing or transposing valuable information for the benefit of an undefined, future end user, but as an intrinsically valuable engagement experience per se for today's project's contributors. In the words used by Trevor Owens, digital archivist at the Library of Congress, Washington D.C., to describe a successful crowdsourcing project ran by the University of Iowa libraries, "crowdsourcing is the best way to actually engage our users in the fundamental reason

that these digital collections exist in the first place" (2012). Within this framework, it was natural that the Art Maps project, from its very beginnings would regularly test the team's ideas with various community groups, whose feedback would then be analysed and eventually used to shape the application into its current form and, more broadly, to inform Tate Digital Strategy's implementation (Stack, 2013b). Early engagement events in 2012 saw a barely sketched platform, but many ideas and potential affordances tested by a group of tech-literate adults and by another of families with children (Cardiff et al., 2013), while in 2013 a more defined Art Maps website was used by visitors to the exhibition *Looking at the View* at Tate Britain (Locatelli, 2013), by a class of secondary school students, a group of elderly people, and a group of migrant women, which we are going to describe in more detail hereafter.

Through the Migrants Resource Centre (MRC) the Art Maps research team was able to collaborate with a group of six women from India, Africa, and Latin America who had recently migrated to the United Kingdom. In winter 2013, just before the group embarked upon a long-term project at the MRC aimed at making them more autonomous in their daily life, a series of three two-hour Art Maps workshops were organised at and around Tate Britain. The workshops' aim was to give the women an opportunity to use the application not only to explore the Tate collection, but also to get familiar with the area of London around the MRC itself, which includes Tate Britain and Westminster. The methodology adopted was once again very much in line with the idea of *Open Authority* (Phillips, 2013), encouraging an open dialogue around the concept of "landmark"—used by the research team as a common thread in the three workshops—and facilitating participants' self-documentation with a diverse range of media, to stimulate them to share memories among the group and online.

The group's first session started in the familiar space of the MRC, where all participants were handed an iPhone 4 and offered a brief explanation of its functionalities. After being introduced to the Art Maps website on the mobile device, the women were invited to walk with the researchers towards Tate Britain and tasked with finding the exact building depicted in *Bessborough Street, Pimlico* by Ambrose McEvoy, and to photograph anything they considered significant as a landmark. The artwork's location was quickly identified across the street from the busy Pimlico tube station, which prompted participants to comment on the differences between the peaceful site captured by the painter in 1900, and the bustling reality they could experience in present days. As for the landmark objects, to the researchers' surprise only one of the women directed the phone's camera to Big Ben's tower in the distance, while the rest of the group photographed a bright yellow door, a pub's entrance, and a flowered window box, together with many other every-day objects encountered on the street.

In sharing control with the group over the very interpretation of landmark, the research team found itself working with an unexpected range of data, which testifies to the very value of the Art Maps project as a tool for idea generation and exchange (Stack, 2013b; Phillips, 2013). Once the group had reached Tate Britain, artist-educator Michele Fuirer introduced participants to a series of watercolours by William Turner titled *The Burning of the Houses of Parliament*, 1834 and *An Arch of Westminster Bridge*, c. 1750 by Samuel Scott, drawing their attention to details such as light and atmosphere in the formers, and cityscape and human activity in the latter. The different scale and technical qualities of the original artworks were played upon by Michele to ensure the group would start noticing details and feel comfortable in commenting on them, regardless of their prior knowledge of art.

— Figure 2: participants at the MRC are introduced to Art Maps © Marina Uzcategui

The second session started at Tate Britain, where participants were handed back the iPhones and asked to access the Art Maps website and autonomously find Sidney R.J. Smith's drawing *Project for the Façade of the Tate Gallery*, c. 1893 and either confirm its current location or, as all participants eventually did, suggest a different one. The group was then reminded of the artworks discussed in the previous session, which were brought up on Art Maps, and asked to use the application's functionalities to find the locations depicted in them. Walking towards the Westminster area, the group was invited to use the mobile devices to take pictures or video and audio recordings of places they considered interesting or significant, in a process of group and individual self-documentation that would shed a light on the women's perspectives on their environs and over the Art Maps experience itself. Once they reached a comfortable point of observation on the River Thames, participants directed their attention to Westminster Bridge and noticed that the present structure was in fact a completely different bridge from the one depicted in 1750 by Scott. Conversation ensued on the elements of a place that turn it into a landmark, and some participants concluded that function (i.e., linking North and South London) and location (next to the Houses of Parliament) are as important as the place's formal aspects. One woman from Caracas, Venezuela, reflected on another recognised function of a landmark, drawing a comparison between how she used to orientate in her hometown and how she does it now. She explained, "The Shard [the tallest skyscraper in town] is my North in London, I've changed my mountain [El Ávila] for a building!"

The group then moved towards the Houses of Parliament to reach the location where they considered Turner had sat to observe the fire that consumed most of the building in 1834, and which he represented in the series of works on display at Tate Britain. Prompted by the researcher's comment on how certain places can transcend the spatial dimension to mark the passing of time instead, the group discussed the idea according to their personal experiences, and a participant from Somalia shared with the group that "My brother brought me here on my first day in London, I always think of it when I pass by the bridge." On the walk back to Tate Britain, the group kept looking up and around and taking pictures of the buildings facing the River Thames, pointing out elements that not even the Londoners in the research team had ever noticed before.

The third session took place in the Taylor Digital Studio at Tate Britain, where participants were asked to look up their home countries and find out if the Tate collection had any artwork related to them. Unfortunately, not all women managed to find something relevant, perhaps hinting at the fact that Tate audiences are more diverse than its collection. Those who did find something tapped into their personal experience and cultural background to make sense of the artworks, which coincidentally were mostly abstracts. For example, the participant from Caracas focused on the 1965 abstract optical painting *Cardinal* by Jesús Rafael Soto and decided to mark its location at the Galería de Arte Nacional of the Venezuelan capital because her mother used to work there. A participant from India could not find anything located in her region, and it was suggested to look up works by Indian artist Anish Kapoor; she chose to focus on *As if to Celebrate, I Discovered a Mountain Blooming with Red Flowers*, 1981 and drew from her cultural background to make sense of the red powder used in the sculpture and to locate it on the map, placing the marker on the town of Patan, Gujarat, renowned for the production of bright red saris. The Digital Studio's clever architecture, alternating high-tech areas with spaces conducive of encounter and dialogue among users, served the activity well and ensured the group, in the process of discovering and interpreting unfamiliar artworks, felt more in a forum- or bazaar- like situation where they could "share, create and dialogue equally and freely with the museum" (Phillips, 2013), rather than in the imposing and possibly belittling context of a temple or a cathedral of aesthetic values.
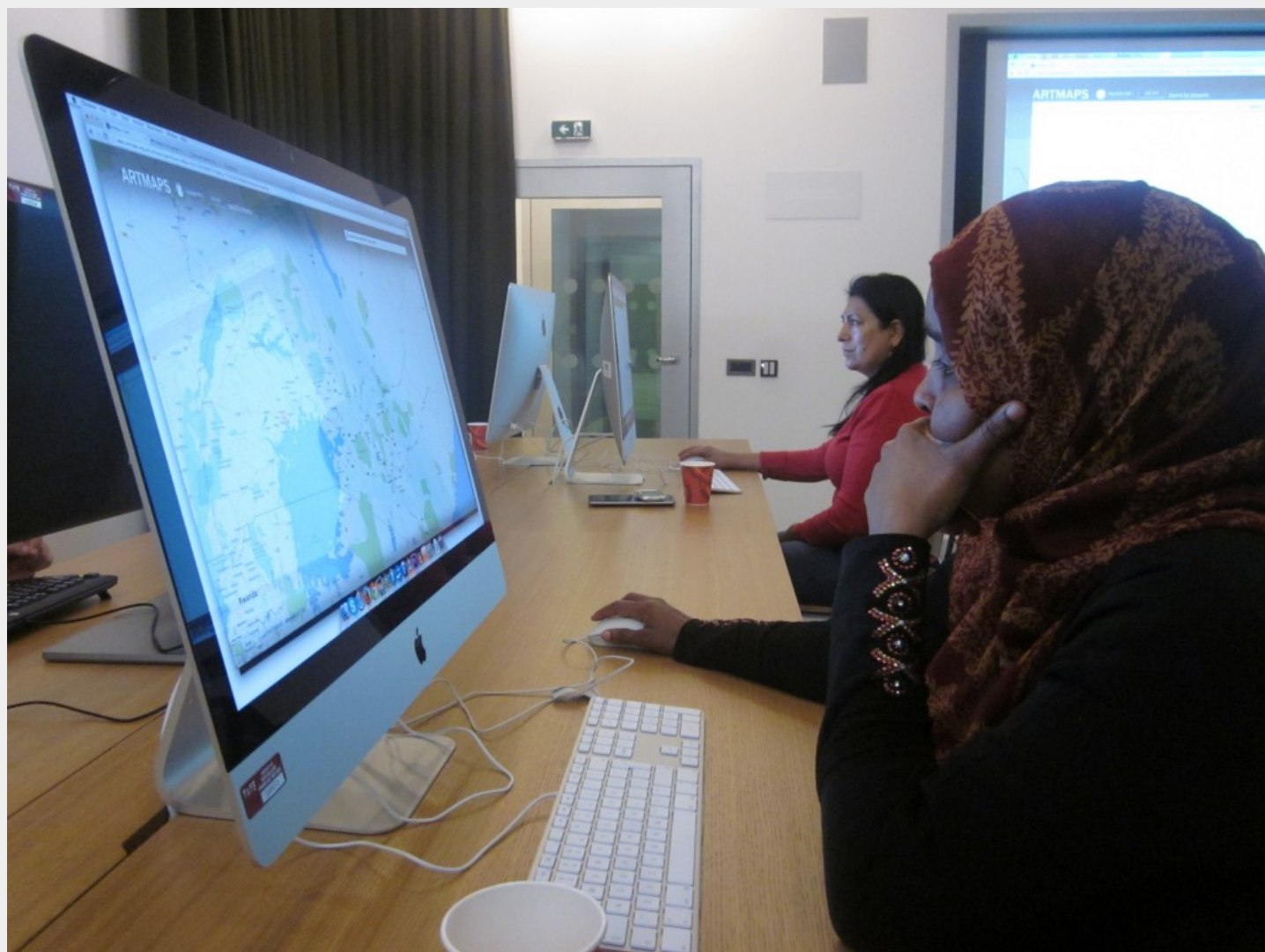
— Figure 4: participants in the Taylor Digital Studio © Marina Uzcategui

Observations

According to Phillip's spectrum of *Open Authority*, museums can adopt three different models to engage their audiences through online collaborative projects (2013). While the first of these, defined as proper Crowdsourcing and involving users in tasks such as tagging and transcribing, is the more common among current museums' initiatives, the second and the third ones, defined respectively as Community Sourcing and Participatory Interpretation (ibid), are still a rare occurrence in the field. As we have illustrated in this article, the Art Maps project goes beyond the mere Crowdsourcing and asks its users to contribute personal interpretations of artworks and places, and of the relation between the two to the online platform. Considering that users are also invited to share their memories among the community, both in person and through the online blogging platform, and to generate ideas individually and in dialogue with other users and with the museums, the Art Maps project seems to firmly belong to the category of Community Sourcing within the above-mentioned *Open Authority* spectrum (ibid). There are other elements of the project, though, both on the side of openness and of the institution's authority, that propel it in the direction of Participatory Interpretation, making of it a co-creative engagement experience, as we are going to outline hereafter.

In his seminal article "Deconstructing the Map" (1989), geographer and map historian John B. Harley maintained that "cartography is an art of persuasive communication" (ibid: 11) and unravelled his discourse (crediting Foucault's ideas about power-knowledge) to assert that, in the act of cataloguing their environs, "cartographers manufacture power" (ibid: 13). Harley's thesis was that all maps "state an argument about the world" (ibid: 11), whether dictated by the institutional power commissioning the cartographic text or simply by the specific sociocultural perspective the cartographer is inevitably immersed in. In the instance of Art Maps, whereby the collection's map is indeed commissioned by an institution, but its content is effectively opened up and left in the hands of the myriad of contributors participating in the crowdsourcing project, we maintain that the "argument about the world" being made is not as much Tate's own but rather that co-created by the platform's users. The power exercised with maps, which Harley considered to be often "imposed from above" (ibid: 12), is here democratised and shared among all contributors to the project, present and future, and merely

facilitated by the institution. Rather than to "reinforce and legitimate the status quo" (ibid: 14), Art Maps acts as "a kind of retrospective storytelling" (Ingold, 2000: 232) and empowers users to tap into their personal experiences to co-create a geographical narrative of the Tate collection, and of their own lives through it.

The third MRC workshop goes some way to demonstrate this interpretation, as all participants, after being prompted by the researchers to look at the areas they were from, autonomously decided to explore other places related to their personal interests and histories—an autonomy that is also listed as an aspect of Participatory Interpretation (Phillips, 2013). A Somali woman looked at the different African cities she had moved to before arriving in London, while the participant from Caracas looked up Venezuelan artists she already knew, to explore their work in more detail. Another woman from Colombia, unable to find anything related to her hometown Bogotá, searched for the term "El Dorado" and found Lothar Baumgarten's work *El Dorado – Gran Sabana*, under which she posted a comment explaining the myth "about our aborigens [sic] and their rituals" (Art Maps, 2013). Observing the personal nature of the participants' contributions to the project, it can be concluded that the message "persuasively communicated" through Art Maps is co-created by both the institution and the contributing users, and is an invitation for others to interpret the relation between art and place through the lenses of personal experience and cultural background, developing a strong sense of ownership for the collection.

The concept of *performance frame* as adopted by Benford et al. (2006) is here used in order to better understand what could be considered the most compelling piece of evidence gathered from the MRC workshops: the participants' aesthetic appreciation of their environment. First formulated by Gregory Bateson (1972), the *performance frame* is "a message intended to order or organize the perception of the viewer" (ibid: 187), or in other words a cue to recognise the "cognitive context" of the performance (Benford et al., 2006: 7) and to adopt the most appropriate behaviour to take part in it. The concept has been used in the field of human-computer interaction to complement the design framework of mixed reality games such as *Uncle Roy All Around You* (ibid), which plays on blurring the boundaries between reality and performance to allow spectators to "willingly suspend disbelief and enter a fictional world" (ibid: 8). What is of particular interest here is Benford et al.'s idea of the *performance frame* as defining "a contract between performers and spectators; an understanding of the principles and conventions by which both are able to take part in the performance and interpret what is happening" (ibid: 8), a fundamental idea to understand the MRC participants' behaviour and of their perception of Tate's authority. Considering the use of Art Maps as a simple "mixed reality" experience, whereby access to the artwork's virtual reproduction and the related interpretative text is granted while the user is effectively experiencing a physical place other than the gallery, we argue that a contract on the lines of that described in Benford et al. is implicitly drafted between Tate—here intended more in its temple-like function than as a bazaar—and the Art Maps user.

To illustrate the terms of such contract, let us return to the way participants engaged with the urban environment as they walked to and from Tate Britain on the first two sessions. During these less-structured, transitional times, the attention of different members of the group was in turn caught by something they deemed interesting, funny, or unexpected either on the streets or on nearby buildings, resulting in a collective conversation about the object's nature or meaning. These outdoor dynamics very closely resembled those observed by researchers on the first session at Tate Britain, when the group was introduced to Scott and Turner's original artworks in the gallery, and all participants were invited to *read* the images in order to find clues on the locations depicted, or on the perspective of the artist, physical and conceptual. It is our conviction that the *performance frame*, the contract inherent to the use of Art Maps, brought participants accessing the artworks outside of the gallery to evoke the gallery context itself, and to perform as if they were still at Tate (i.e., adopting the contemplative aesthetic, visual approach traditionally reserved to a gallery visit in the outside physical reality of their

environment). Art Maps users thus became "simultaneously part of a number of environments" (Giannachi, 2012b: 51) that coexist as different layers of the same reality, which if on the physical level was nothing more than a pragmatic movement from one point to another, on a virtual one it became a Tate-approved aesthetic, reflective stroll in that open-air gallery that is the city.

— Figure 5: participant's behaviour at Tate Britain (© Marina Uzcategui) and during the walk back to the gallery (© Tate, Ana Escobar)

3. Conclusion and next steps

An example of an *Open Authority*, and in particular of Community Sourcing, the Art Maps platform manages to accommodate users' personal contributions without undermining Tate's authority and expertise. The resulting cartographic text is co-created by many different contributors who share their histories and blend them together with that of Tate and its collection. The institution's authority is respected all along, and its bearing over the users' experience is demonstrated in their tendency to reframe their everyday reality and reinterpret it as an artistic endeavour. This offers users the opportunity to take time off their ordinary tasks and observe their environment, appreciating its details and oddities as if it belonged to, or at least it were worthy of the same aesthetic attention as, the Tate collection.

More studies are underway to test and extend these observations to the online usage of Art Maps. Analytics statistics, qualitative study of the users' contributions and their relation with the "What's new?" section and other voices at Tate, together with an online qualitative questionnaire will support and guide the institution on the unexplored path of *Open Authority*.

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