



## Abstract

*This paper explores a collaboration between TOTeM (Tales of Things and Electronic Memories), a UK University research project based around the 'Internet of Things', and Dundee Contemporary Arts (DCA) Print Studio. Supported by Research Councils UK – Digital Economy, TOTeM explores new ways of preserving people's memories and stories, through linking objects to the Internet via emerging technologies such as QR Codes.*

*In this collaboration, print-based artworks produced at Dundee Contemporary Arts for the DCA Editions program, and artworks made also by invited members of the open access print studio are linked (known as 'tagging') via a Quick Response code (QR code) to digital media content which can be played on a mobile phone. Members of the TOTeM team at the University of Dundee are carrying out research through the use of a public facing site, developed by their University College London (UCL) partners called [talesofthings.com](http://talesofthings.com) where digital media content relating to artworks created in the DCA Print Studio is uploaded. This may take the form of video, text or audio of stories and inspiration, in the creation of the artworks. By working in collaboration with a community of artists, tagging can provide a platform of communication about the artwork between the artist and potential buyer/collector.*

*Although this is a means of enabling artists to connect with their audiences, reaching beyond artist/maker communities and out to buyers and collectors, other research questions arise, such as, Do artists really want the concepts behind their works to be explicit? What does this mean for the artist and their audiences if the 'mystery' surrounding concepts, or how the work was produced, is demystified in this way? If artists choose to create digital content relating to how the work was produced, how does this affect their working practices in the print studio?*

*This paper examines initial findings in terms of the research questions, art making and the logistics encountered when marrying print-based artworks with cutting-edge mobile technologies in the context of a large multi-disciplinary research project.*

# Tagged at Dundee Contemporary Arts: How Your Mobile Phone Can Demystify Print-Based Artworks

**Simone O'Callaghan**

*University of Dundee, United Kingdom*

*s.p.ocallaghan@dundee.ac.uk*

## Introduction

Imagine you are standing in front of a work of art that intrigues you: you want to find out more about what the artist was thinking when they made it, or perhaps how they created the work, but in a way that really connects you with the actual person who made the work, more than just a printed artist statement on the wall. TOTeM (Tales of Things and Electronic Memories), a £1.39 million Digital-Economy-funded UK-based research project, explores connecting any object – in this case, artworks – with stories, using tagging technologies. The project spans five UK institutions,<sup>11</sup> with each responsible for different areas of the research. Research at the University of Dundee is art and design based, focusing on 'Platforms for Provenance' where storytelling methods are used to capture provenance from multiple points of view, including that of the artist.

In doing this, artworks are linked (known as tagging) via a QR code to digital media content. QR codes, where the QR stands for 'Quick Response', are two-dimensional barcodes which can be read by 'scanning' the code with the camera in a mobile phone which has reader software installed. This takes the user to online content made for mobile phone audiences. The TOTeM technical team members at University College London (UCL) have created free iPhone and android apps enabling users to do this as easily as possible. In the TOTeM research project, stories, in the form of text, images and video are entered into the project's public facing website [www.talesofthings.com](http://www.talesofthings.com), which then generates QR codes that can be printed out and attached to the label of artworks. Although a website open to anyone wanting to join in, [talesofthings.com](http://talesofthings.com) was developed solely for research purposes. The main objective was to create an online data collection tool for TOTeM researchers, which enabled them to collate, analyse and track stories that were being attached to objects.

The story of any print will always be an interesting one: from debates surrounding authenticity as a work of art in a practice of multiples, to tales of techniques. The print, in contemporary art and media, is a loaded object. Add to this tagging the print with a type of barcode, and the stories become even more intriguing, particularly when print is the most commonly used form of displaying barcodes. A number of interesting juxtapositions occur: although a form of print, the codes mediate digital content; the way in which audiences interact with the prints themselves is altered, as the print becomes an interface for digital content; and the stories behind the works have agency which can alter original perceptions of the work.

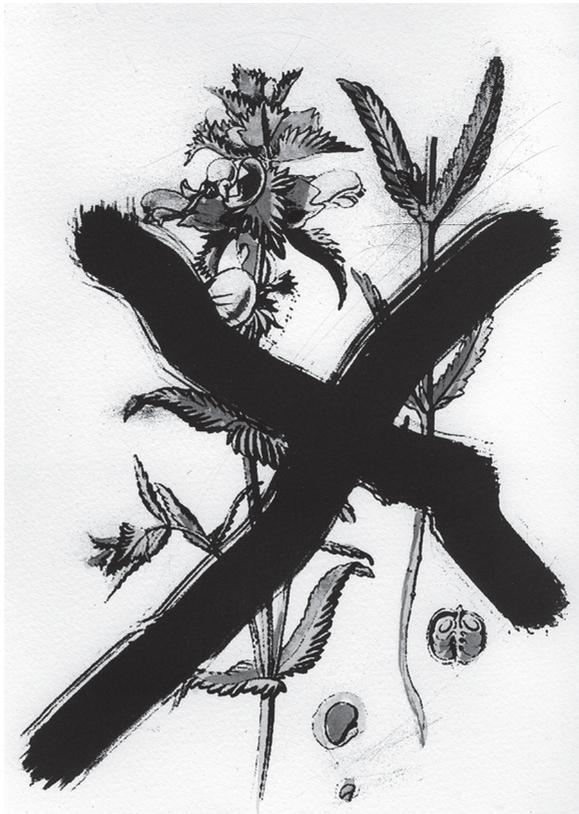
*Figure 67.1: An example of a QR code.*

*Figure 67.2: Cancellation Proof, by Annis Fitzhugh. Courtesy of Annis Fitzhugh.*





▲ Figure 67.1 | ▼ Figure 67.2



Tagging the works is also a means of enabling artists to connect with their audiences, reaching beyond artist/maker communities and out to buyers, collectors and those who appreciate art. This then gives rise to a number of other questions, such as: Do artists really want the concepts behind their works to be explicit? What does this mean for the artist and their audiences if the 'mystery' surrounding concepts, or how the work was produced, is demystified in this way? If artists choose to create digital content relating to how the work was produced, how does this affect their working practices in the print studio?

### Intimacy and the Artist's (Co-) presence

The use of QR codes in art has been in practice since 2006 (Wikipedia, 2010). Connecting artworks to biographical information has been implemented experimentally in some museums and galleries (Chan 2009). These have been logistically problematic and the information conveyed is usually the point of view of a third party, that of a curator or critic. The aim of this research is to provide audiences with an instant connection to creative practitioners to enable more privileged understanding of the work from the artist's point of view.

Through the use of mobile phones as a platform for conveying media there is also the opportunity for artist and viewer to come together. Even if one is not physically present, they can share a liminal space, which is somewhere between the truly physical and the truly virtual, augmented by a mobile phone. In this sense the artist could be seen to be adopting co- or telepresence. Lev Manovich was one of the first critics to explore notions of telepresence in digital art. He defines telepresence as: 'representational technologies used to enable action, that is, to allow the viewer to manipulate reality through representation'. He then goes on to say that 'the essence of telepresence is anti-presence. I do not have to be physically present in a location to affect reality at this location' (2001, 165).

With mobile media as a platform for creation and distribution of artworks, and advances in technology, aspects such as materiality, physicality, presence and location are becoming themes on which artists are focusing. One reason for this is that many mobile devices are 'location aware', and therefore seen as locative media. Ben Russell in the 'TCM Online Reader' (Transcultural Mapping) defines locative media as: 'A framework within which to actively engage with, critique, and shape a rapid set of technological developments. A context within which to explore new and old models of communication, community and exchange' (2004).

If one adds the location awareness to the pervasive properties of a mobile phone camera, it becomes a more intimate and transparent device, where the user's attention does not focus on the device itself, but rather, *through* the device to the person or activity at the other end. In research done at Surrey University's Digital World Research Centre, Amparo Lasen further clarifies the intimacy of mobile telephones by suggesting that they are *affective technologies*, technologies through which we mediate expression of emotion and, in turn, to which we become emotionally attached (Lasen 2004). When tagging works with QR codes, what the artist chooses to reveal about themselves or their artworks can heighten intimacy between them and their audiences, affecting interpretation of the artwork.

The locative qualities of mobile devices remind the viewer of their physicality and presence within the space that they are viewing an artwork. They are using a 'computer' but are no longer chained to a desk; they could be interacting with a work of art, but need not be constrained by the 'white cube' gallery aesthetic; they have physical presence in a set location in the real world, but, through interaction with online content, they may also be co-present in another, virtual location at the same time. These dichotomies reflect the very nature of tagging, which relies on a physical object to hyperlink the user into a virtual space. In any experience of an artwork, the space in which it is exhibited can subconsciously affect interpretation, as Daniel Buren pointed out in 1970:

Whether the place in which the work is shown imprints and marks this work, whatever it may be, or whether the work itself is directly – consciously or not – produced for the Museum, any work presented in that framework, if it does not explicitly examine the influence of the framework upon itself, falls into the illusion of self-sufficiency – or idealism (quoted in Kwon, 2004, 13–14.)

Viewing 'traditional' artworks on the wall changes when the artwork, through mobile augmentation, allows the viewer to be co-present in the physical space of the gallery, as well as an online world mediated by digital content delivered by a mobile device.

This un-tethering from a computer is liberating, both for the artists and their audiences. The physicality of the space in which the works are consumed is key. In a gallery the artist-audience space can be seen to be similar to that of actor-audience, which is broken down when one tags an artwork, scans it and then connects to the artist. Brian O'Doherty in his book, *Inside the White Cube, The Ideology of the Gallery Space*, has pointed out that this breakdown of space has been happening for quite some time. 'With postmodernism, the artist and audience are more like each other. The classic hostility is mediated, too often, by irony and farce. Both parties show themselves highly vulnerable to context, and the resulting ambiguities which blur their context' (1999, 76).

With O'Doherty's and Kwon's insights in mind, the use of tagging technologies heightens this blurring of gallery contexts, opening the artworks up to wider audiences who may not visit galleries but who will play with a 'cool app' on their mobile device. The technology created for TOTeM research works in a similar way to social networking: it is an online space that people often find less threatening than the 'white cube'. Through this, those who may engage with printmaking under 'normal' circumstances find a voice and a forum for expressing their opinions.

### Print Artists: A Case Study

In exploring these ideas, researchers based in Dundee are collaborating with the DCA Print Studio to undertake a case study where artworks are tagged using QR codes with the artists' stories. These stories could then be commented on by others using talesofthings.com via a desktop computer or out-and-about on mobile devices with the potential to create different layers of interpretation about an artwork.

Two groups of print-based artists were involved. One group was based on artists whose work is shown in the Main Gallery at Dundee Contemporary Arts, and who then collaborated with the Print Studio to produce print-based artworks for the DCA Editions program. In this paper, this group is referred to as the 'Editions Artists'. The second group of artists in this case study comprised artists who use the DCA Print Studio open-access studio and are referred to as the 'Open Access Artists'.

Prints for the Editions Artists were tagged by the DCA Editions Co-ordinator, Sandra DeRycker, who entered the stories of 13 artists in this group under one account in [www.talesofthings.com](http://www.talesofthings.com). Content uploaded included text, images and video. This meant that the style of content was uniform, in anticipation of maintaining consistency when presenting at art fairs, and later for measuring sales success of tagging the works with stories.

In contrast, the Open Access Artists each signed up as individual users to [talesofthings.com](http://talesofthings.com). This meant that they were responsible for uploading their own stories, digital content and how they used the platform. By giving this group complete autonomy, researchers could see how they engaged with the technology, the types of stories they chose to tell and how often they returned to the site.

### The Editions Artists' Stories

Over approximately five months, artworks and their stories were uploaded to [talesofthings.com](http://talesofthings.com). Although there was the option for the artists to add more to the story in their own words in addition to those collated by the Editions Co-ordinator, only one of these artists, Alex Frost, chose to do this.

Frost's work 'Wi Fi Zone' immediately suggests to the viewer that the artist is already using the medium of print to engage with the potentials of the digital, so of all the artists in this group, he was considered the most likely to follow through onto [talesofthings.com](http://talesofthings.com). Having both the 'official' version of the story of Alex Frost's print, plus additional comments from the artist himself gave broader interpretations of the artwork than just one statement. Add to this the video of the work on the site and the experience of 'Wi Fi Zone' suddenly felt much more embedded within a networked environment of alternative interactions with the work. For audiences viewing his work, the potential to reach across the physical virtual divide was mediated by the printed tag and allowed those boundaries between the spaces to break down.

The main impact of tagging the artworks was felt more by the Editions Co-ordinator than by the artists, for she was the one writing the stories, uploading them and then discussing the works with potential buyers. During this time, the Multiplied Art Fair, organised by Christie's, took place in London (15–18 October 2010) and artworks from the Editions Artists were exhibited there. The reception of tagged works was very positive from a wide range of audiences. Those visiting the fair were intrigued by the codes and impressed by access to video content. Other exhibitors wanted to know more so they could use the same technology for their artists, while the Editions Co-ordinator found the codes really useful as an icebreaker to introducing potential buyers and collectors to the works. She observed that many of the buyers had iPhones, and this enabled her to encourage them to download the app, and play with it to learn more about the artworks, which they found fun.

Engaging with the content about the artworks on their own mobile phones also made the experience take on a more personal dimension.

Although this study set out mainly to explore the impact that tagging artworks had on artists, the data from this group of artists, whose work was managed by someone else, showed that such tagging has greater immediate impact on those who work with artists in advocacy of their art, rather than the artists themselves.

### Tales of the Open Access Artists

The behaviours and stories from the artists in the Open Access Artists group were quite different from the Editions Artists. Their autonomy and responsibility for their work meant that they were much more engaged with the process and spent more time telling their stories. In this group, as expected, the *artist's voice* came through much more strongly than in the other group.

Stories of the works in terms of how artworks were made were expected, but what was not expected was how they highlighted the importance of technique and methods to the printmaker. The integrity of the artist as a printmaker was articulated through many of the artists' stories and was very poignant in Annis Fitzhugh's entry *Cancellation Proof*. She commented: 'When a limited edition is completed, the plate or block is defaced, often with a cross, so that no more prints may be made from it. The plants represented are all on the Red List of endangered species' (2010).

This entry implies that the edition is 'authentic' because Annis created a cancellation print for her edition, a 'proof' that the edition is limited. The content of the artwork, like the print itself, is endangered, rare and limited. Annis's entry also explained printmaking processes to non-printmakers and the comment following up on this by a user called 'froggo' showed a discourse beginning to emerge about the work, and about printmaking practices, when they wrote: 'That's sad that a lot of nice images get defaced in such a way' (Fitzhugh 2010). One can infer that froggo is not a printmaker, but that they appreciate the print that was cancelled. This comment is also thought-provoking in how accepted norms and 'good practices' in printmaking can be perceived as destructive by those outside the field, who are unaware of the critical debates surrounding authenticity and originality of the print.

The practice of using technology in ways unforeseen by the developers is what Adam Greenfield, a usability expert at Happy Cog Studios in New York, refers to as *fault lines*. He defines these as 'places where emergent patterns of use expose incorrect assumptions on the part of the designers, imperfect models of the target audience on the part of the marketers, and social realities that might have otherwise remained latent' (Greenfield 2006).

One fault line that emerged in this case study was the practice of printmakers to use [talesofthings.com](http://talesofthings.com) as a new type of sketchbook, or place to post ideas and works in progress. One such artist to do this was Marianne Wilson. In October 2010, WASPS (Workshop and Artists' Studio Provision Scotland Ltd), the co-operative where Marianne has her own studio, had an Open Weekend. During this time, she chose to exhibit

tagged works in her studio and then upload the process to [talesofthings.com](http://talesofthings.com). The use of the technology in exhibition situations was what researchers were hoping to see, but not so early on in the process, and again the stories provided much more insight than expected:

This year I've avoided framing as a lot of the work is part of a thought process and as such unfinished. I have decided to create a display even though I have not really reached a conclusion to my research. I am hoping to create an atmosphere of time gone by and a sort of eclectic feeling within my space. I hope that people will react well to the work but it is a new venture and so I do feel fairly nervous and excited (Wilson, 2010).

It is this type of story that enables others to see how the artist thinks and works through a body of works, as well as providing candid insights into the vulnerabilities of an artist. The image is of many artworks, but each of these has their own network of stories, some of which Marianne has started to tell in uploads to her space. As this research project continues, there is now the opportunity to follow how Marianne's ideas develop and which ones make it to works in a gallery space.

## Conclusion

Early research in this project has shown that artists are adapting emerging technologies to sustain traditional techniques in printmaking, through telling the stories of their works. Depending on how they choose to engage with the project's research tool, [talesofthings.com](http://talesofthings.com), the act of tagging their works can have an impact on the ways in which artists communicate about their work, as well as altering some studio practices. Most artists involved in this case study did want to demystify their work and practices, reaching out and sharing their ideas with their audiences. However, at the time of writing, the case study is still ongoing. As more artists become involved this may change, with more critical debates emerging. By tagging artworks, mobile augmentation enables the artist and their audience to share gallery and online spaces with the potential to enter into discourse in new ways, opening doors for future research into the affects of tagging artworks with stories.

## Endnote

- 1 These are the University of Dundee's Duncan of Jordanstone College of Art & Design (DJCAD), Edinburgh College of Art (ECA) Brunel University, Salford University and University College London (UCL). The TOTeM co-investigators are (in alphabetical order): Maria Burke, Andrew Hudson-Smith, Angelina Karpovich, Simone O'Callaghan, Jon Rogers, Chris Speed (principal Investigator). Additional team members are: Ralph Barthel, Martin De Jode, Kerstin Leder, Clare Lee, Arthi Manohar, Duncan Shingleton, Jane Macdonald

## References

- Chan, Seb. 2009. QR Codes in the museum – problems and opportunities with extended object labels. Powerhouse Museum Sydney, 9 March. Accessed 2 December 2010. Available from: [www.powerhousemuseum.com/dmsblog/index.php/2009/03/05/qr-codes-in-the-museum-problems-and-opportunities-with-extended-object-labels](http://www.powerhousemuseum.com/dmsblog/index.php/2009/03/05/qr-codes-in-the-museum-problems-and-opportunities-with-extended-object-labels).
- Fitzhugh, Annis. 2010. *Cancellation Proof*. TOTeM, 26 November 2010. Accessed 3 December 2010. Available from: [http://talesofthings.com/totem/totem\\_view/1364](http://talesofthings.com/totem/totem_view/1364).
- Greenfield, A. 2006. *Everyware, Dawn in the Age of Ubiquitous Computing*. New York: New Riders.
- Kwon, Miwon. 2004. *One Place after Another. Site Specific Art and Locational Identity*. Cambridge Massachusetts: MIT Press.
- Lasen, A. 2004. 'Affective Technologies – Emotions and Mobile Phones'. Vodafone Receiver, [www.vodafone.com](http://www.vodafone.com).
- Manovich, Lev. 2001. In R. F. Malina (ed.), *The Language of New Media*. Cambridge: MIT Press.
- O'Doherty, Brian. 1999. *Inside the White Cube, the Ideology of the Gallery Space (Expanded Edition)*. 4<sup>th</sup> edn. Berkeley, Los Angeles, London: University of California Press.
- Russell, Ben. 2004. TCM Online Reader Introduction. TCM Locative Reader. Available from: [www.locative.net/tcmreader/index.php?intro;russel](http://www.locative.net/tcmreader/index.php?intro;russel).
- Wikipedia. 2010. QR Code 2010. Accessed 13 December 2010. Available from: [http://en.wikipedia.org/wiki/QR\\_Code](http://en.wikipedia.org/wiki/QR_Code).
- Wilson, Marianne. 2010. WASPS Open Studios. TOTeM, 29 September. Accessed 2 December 2010. Available from [http://talesofthings.com/totem/totem\\_view/1074](http://talesofthings.com/totem/totem_view/1074).