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Abstract
This paper explores the provenance of art and design objects through stories of the people who created them. It is part of TOTeM (Tales of Things and Electronic Memories) a £1.39M research project based around the “Internet of Things”. Supported by the Digital Economy Research Councils UK, TOTeM opens up new ways of preserving people’s stories through linking objects to the Internet via “tagging” technologies such as QR codes.

In this context, QR codes act as “digital makers’ marks” with the potential to hold far richer information than traditional marks. Inspiration for the object’s creation and its maker become the key focus, rather than facts about production and manufacturing. Collaborating with Dundee Contemporary Arts, a case study took place with print-based artists and curatorial staff to tag artworks with stories. These were showcased at Christie’s Multiplied Contemporary Editions Fair in London during October 2010.

Drawing from historical references and practices identifying makers, this paper explores the future of tagging objects with stories at their point of inception. Discussion highlights how collecting and telling tales enables a more human and personal element to be attached to objects, where even QR codes themselves can provide a means of personal expression for the maker. With a focus on the human element, this paper seeks to examine how the tradition of makers’ marks, and their association with finely crafted objects can be relocated to a digital platform which enables communication between the maker and their audience.

Introduction
Based on early research for the TOTeM (Tales of Things and Electronic Memories) project, the potentials for provenance in art and design objects is discussed through stories of the people who created them. This research utilises tagging technologies to create connections through the “Internet of Things”, a term referring to the use of digital tagging technologies to track physical objects in the real world by linking to online databases. Oyster cards for the London Underground or E-Toll tags for use on the Sydney Harbour Bridge are two examples.
TOTeM spans five UK institutions - 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) with each UK institution responsible for different areas of the research. Research at Dundee is art- and design-based, focusing on “Platforms for Provenance”, where storytelling methods are being examined for defining and capturing provenance. Looking back at the history of old objects, as well as forward to the possible futures of new objects, the Dundee team are also exploring new means of providing legacies of provenance for future generations.

Artworks, design and craft objects are linked (known as tagging) via a QR code to digital media content which can be played on a mobile phone. QR codes are two-dimensional barcodes which can be read by “scanning” the tag/code with the camera in a mobile phone. In most cases a web address is embedded in the tag, which links to a mobile-optimised website when scanned. Scanning codes is easily done with free software which can be easily downloaded if a device does not have a reader preinstalled. To make this process even easier, the TOTeM technical team at University College London have created free iPhone and Android apps. Using the public-facing website talesofthings.com (also developed by their UCL partners), researchers at the University of Dundee are working with art and design makers to “tag” their creations with stories in form of text, audio, images and video.

At this point in the research the TOTeM team has chosen to use QR code tagging technologies because they are accessible via mobile phone to wider audiences than other technologies which need specialised readers to “scan” the tag. By using mobile phones, which most people have, the aim is to democratise technology, rather than make it something only the elite can have access to. Internet use on mobile phones has reached such a critical mass that many people’s experiences of the Internet are solely on mobile phones, and this is particularly true of developing countries (Tryhorn, 2009).

In the context of attaching QR codes to creative artefacts, they can act as “digital makers’ marks” with the potential to hold far richer information than traditional marks. Inspiration for the object’s creation and its maker become the key focus, rather than facts about production and manufacturing. Working in a similar way to social networking sites such as Flickr, users of talesofthings.com can comment and build upon stories of objects that have been tagged, with the potential to create a crowd-sourced bank of knowledge about any individual object. This provides future generations with artworks, craft and design objects which have integrity and a traceable heritage.
Authenticity: Provenance and Makers’ Marks

An object’s provenance can be as interesting a tale as the inspiration of its inception. How one comes to own certain objects or who owned those objects in the past can alter perceptions of their value. For example, a second-hand white suit dating from the 1970s, even if by an exclusive fashion house, is probably unlikely to attract an exceptionally high price tag in most cases. But, when it was the white suit worn by John Lennon on the album cover of Abbey Road by The Beatles, it was recently auctioned for USD$46,000 (Burton, 2011).

In almost any art, design and craft discipline there are marks which identify a maker, production house, or factory: labels on textiles or logos on fashion items; backstamps for pottery; hallmarks and assay marks for precious metals; the artist’s signature on a painting or print; red seals on Japanese woodblock prints; a furniture maker’s initials or stamp; trademarks on many contemporary design objects, and the list goes on. Such marks have been around for thousands of years: even in Ancient Greek times, red Attic vases often had the names of two makers inscribed, that of the potter and that of the painter (Boardman, 1979). When examining identifying marks on objects, the details and sheer mass of information can be overwhelming, and even well-versed antique dealers need reference books to match an obscure mark back to the individual who made it. For the purposes of this paper, all such marks will be referred to generally as “makers’ marks”.

The tradition of the maker’s mark is often associated with finely crafted objects. The idea that the maker would put their name to an artefact that they have crafted indicates a level of pride in the workmanship and implies that the work is authentic - in as much as that particular maker was the one who created it. Such marks are the starting point for discovering an object’s provenance for if there is no documentation with an object, a makers’ mark is the first thing that one would look for in identifying its origin.

Makers’ marks for manufactured objects first appeared in continuous use in papermaking and printing, with the earliest examples dating from 1282 in Bologna (Caplan, 1966). The use of such marks stems from the direct links between producer and consumer being broken and the need to maintain the identity of the maker as the goods pass through the hands of third parties. In Britain in 1842, the Design Registration Mark came into widespread use after the Design Copyright Act of 1839, which protected designs in a way similar to patents. There were two types of diamond shaped insignias broken up into separate areas marked with alphanumeric characters: one from 1842 – 1867, then this changed in 1868 and was used until 1883. In 1884, this was simplified to a registration number, often abbreviated to “Rd No” (Collins, 2006). This system is still in use today, and unless one has a very good memory, an index is needed to decipher the details of either type of design registration mark. Added to this, the classes into which materials were organised could be misattributed by a clerk, leading to, for example, a piece of jewellery being filed as a printed shawl. The Trade Marks Act of 1875, meant that all manufactured goods could then be registered for a trademark.
Figure 2 - Design registration mark from 1878, courtesy of Hampshire County Council’s Museum Service

The design of trademarks and makers’ marks in terms of aesthetics has only really started to emerge as a field worthy of considered graphic design in the 20th century when schools such as the Bauhaus promoted awareness of what signs and symbols communicate to their audiences. Prior to this, trademark “design suffered from the conception that trademarks should score as guarantors of authenticity” (Caplan, 1966). Only since the 1960s - with graphic designers such as Paul Rand and the emergence of logo design and branding as specialised graphic design fields – has a stronger emphasis on conveying people-centred concepts such as brand personality and value developed. In today’s convergent media, the boundaries between makers’ marks, logos and trademarks are blurring, however none of these seem to really be able to give us the real stories behind those who make creative artefacts.

Provenance documentation for an object, if it exists, can provide an insight into its past, and a makers’ mark can provide a starting point for further exploration about a work and stories of its maker, but all this information is scattered and quite often hard to piece together and verify. QR codes as digital makers’ marks have the potential for greater richness which enables the human element to come through. By tagging an object with stories at the point of its inception, and then charting those and new stories as the object changes hands, and people add their own impressions, the provenance of the object is built up. Via a social networking channel (validated in a similar way to sites such as LinkedIn), peer review and visible, traceable networks between people become indicators of authenticity and an accessible means of verification.

Tagging art, design and craft objects in order to establish and maintain their provenance is not unique. The Fine Art Registry (fineartregistry.com, 2011) is an online database that does just this. However, this is more a tool for buyers and collectors, which focuses on provenance alone, rather than stories from the artists, or about the objects themselves. A random search on the site also brought up discrepancies that do lead to questions about the reliability of this service. An entry for a Paul Klee work was titled “Abstract Study. Gouache/mixed. media Signed "Klee"”, had a valuation of $105,000, was for sale for $1000 and dated between 1900 – 99. It apparently was “only valued for insurance purposes” and supposedly does
come with all provenance documentation, but going on the dates and price discrepancies, one does suspect if this is perhaps a work of fiction in itself.

The “tamper-evident technology” used is a fairly simple acid-free holographic sticker with a number printed on it, which the user must then take to the Fine Art Registry website, log in and search for the item. From a user’s point of view this is much more arduous than being able to scan a code with one’s mobile phone and have all the information beamed back to them. The way in which art, design and craft objects are tagged with stories by the TOTeM research project creates a far more personal bond than any provenance records or traditional makers’ marks ever could. The stories that emerge allow for a deeper connection with the artist as well as a means of cross-referencing their tales with facts that may be known about an artwork or object’s provenance, making works like the Klee on the Fine Art Registry easier to authenticate.

The Maker’s Voice
Researchers in Dundee have been collaborating with Dundee Contemporary Arts (DCA) to gain insights and tales behind printmaking works created at the DCA Print Studio. Print-based artworks were tagged and some of these were showcased at Christie’s Multiplied Contemporary Editions Fair in London during October 2010. Implementing digital makers’ marks at an event run by one of the world’s most famous art and antique auction houses provided an excellent context for combining design research with a real-world application.

Two groups of print-based artists were involved in the case study. This was to enable comparison between two different ways of tagging the works, how this may or may not affect the artists’ practices, and monitoring whether tagging the works increased sales. Those whose works were showcased at Christie’s were artists whose work has been shown in the Main Gallery at Dundee Contemporary Arts (DCA) as part of the main exhibitions programme, and who then collaborate with the DCA Print Studio to produce print-based artworks for the DCA Editions programme. The works from the Editions Programme are then sold to high-profile museums, galleries and collectors. Each work is sold with provenance documentation and certification from the DCA Print Studio on the authenticity of the print in terms of artist, edition number and other editioning details. This provided an ideal group of makers where there was already a programme in place for provenance documentation, allowing researchers to follow the stories which it is hoped will build up over the coming years. The Editions Programme has been in place for 11 years, so the effects of tagging these artworks on sales can be measured against historical data. In this paper, this group is referred to as the “Editions Artists”.

Prints were tagged by the DCA Editions Co-ordinator. She set up an account in talesofthings.com and entered 13 artists in this account. In this case she contacted each of the artists, collected their stories and uploaded all the content to talesofthings.com. For some of the artists, such as Alex Frost and Chicks on Speed, she also attached videos of their work in the DCA’s main galleries to their entries on talesofthings.com. In this method, the artists went through an intermediary when attaching their stories to the artworks, but they also benefitted from the high production values that the DCA could provide in terms of digital content. This meant that for the Editions Artists the style of content was uniform, in anticipation of
maintaining consistency when presenting the works at Art Fairs, and measuring the success of tagging the works with stories in terms of sales.

There is the option for the artists to add more to the story in own words, as well as those written by the Editions Co-ordinator. Alex Frost is one example of the participating artists who chose to do this. Frost’s work “Wi Fi ZONE” immediately suggests to the viewer that the artist is already engaging with the potentials of the digital platform through the medium of print, so of all the artists in this group, he was considered the most likely to follow through onto talesofthings.com. What is really interesting here is the marked difference in style and content in what he has written about his work and what someone else has written about his work. One gains professional and academic insight into the work from the Editions Co-ordinator. The meaning behind the work and the artist’s successes make him appear invincible, informed and possibly even intimidating to those who aren’t artists:

“Frost’s work presents an awkward marriage of numerous distinct references: digital technology, food science, community craft workshops, speculative fiction and macro-economics. Works in The Connoisseurs exhibition examined seemingly disparate groupings. Referencing cultural sophistication or a refined taste through materials, execution or selection, each work borrowed an aspect of the classical art form: portrait or still-life image, the outdoor or the domestic scale object. Wi Fi ZONE represents the artist’s investigations into areas in which technology and commerce sit alongside more traditional, handmade, means of production typically associated with the area of craft.” (DeRycker, 2010)

This is a direct contrast to the feeling one gets when they read his own words. Suddenly one is aware that is a contemplative person exploring ideas and expressing them in a very personal way:

"The poster as a print format has purpose and place - as an advert or notice in a shop, bedroom or on the street. It is also a format that is still very much alive. The idea for this poster came about at a time when more and more places were offering free wifi access. There wasn't yet an agreed single graphical vocabulary for these wifi zones, hot spots or wireless access points. This seemed an interesting point in the development of a sign; one that mirrored the World Wide Web’s own diversity whilst also seemingly contradicting the notion that the web is a homogenising tool. A little investigation showed that there was an official 'wifi zone' logo. This print is my own version of a wifi sign based on this official version of the logo." (Frost, 2010)

Having both the “official” version of the story of Alex Frost’s print, plus words from the artist himself give a much broader and more engaging experience of the artwork, and one starts to see things a little more through the artists’ eyes. Add to this the video of the work which people can view on their mobile phone when they scan the tag, and the experience of “Wi Fi ZONE” suddenly feels much more embedded within something far larger than just the print and the viewer.
During this time, the Multiplied Art Fair, organised by Christie’s, took place in London (October 15th – 18th 2010). The reception of the tagged works of art 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, whilst the Editions Coordinator (who was representing the works at the Fair) 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. This is because mobile phones are seen to be affective technologies (Lasen, 2004), ones through which we mediate emotion and become attached to. This use of an affective media when engaging with artwork creates a more intimate space between the viewer and the artist, with the potential for a deeper understanding of the work and a stronger connection to the work’s origins.

The second group of artists comprises those who use the DCA Print Open Access Studio, which provides printmaking facilities for artists to come and use for modest membership and materials fees. In this paper, this group is referred to as the “Open Access Artists”. In contrast, to the Editions Artists, the Open Access Artists each signed up to talesofthings.com as individual users. This meant that they were responsible for uploading their own stories and digital content, and for 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 visited the site.

Content such as the title of work, size, medium, paper and date were expected, as these are the key pieces of information that usually accompany artworks in gallery situations (on and offline). Stories of the works in terms of how they 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 is articulated through many of the artists’ stories and is poignant in Annis Fitzhugh’s entry Cancellation Proof:

“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.”(Fitzhugh, 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’ entry also explains printmaking processes to non-printmakers and the comment following up on this by a user called “frogo” shows a discourse beginning to emerge about the work, and about printmaking practices, when they write: “That's sad that a lot of nice images get defaced in such a way :(" (ibid) One can infer that frogo 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 study was the practice of creative practitioners using the site as a new type of sketchbook, or place to post up ideas and work in progress. One such artist to do this was printmaker Marianne Wilson, one of the Open Access Artists in this study, whose candid insights into her work give a real sense of the person behind the works, her thought processes and why she chooses certain ways to work in the studio. In October 2010, the co-operative WASPs (Workshop and Artists' Studio Provision Scotland Ltd) 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. This use of the technology, in terms of the artist’s choice to exhibit her tagged works in spaces where the public can view them 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)

This type of story shows the maker’s vulnerabilities, exhibiting how a digital makers’ mark can be far more revealing than any standard makers’ mark could be. This very personal account is something that would never be gleaned from conventional provenance records without extensive research.

**Conclusion**

Collecting and telling tales enables a more human and personal element to be attached to objects, where even QR codes themselves provide a means of personal expression for the maker. Unlike traditional one-dimensional barcodes, QR codes can be personalised with logos, icons and experimental designs, providing the maker with a means of creating a strong visual identity with interactive functionality. Current research is in its early stages, and as the project develops, the emphasis from the design point of view is on exploring how to make such personalisation realisable for creative practitioners without having specialised technical knowledge of mobile technologies.

![QR code](Figure 4 - QR code designed by Takashi Murakami for Louis Vuitton)

Over time, as this research continues, the hope is for a critical mass of makers to start tagging their works with stories, including those who are not part of the case study, enabling cross-referencing and networks to develop. The tradition of makers’ marks, has the potential to benefit from being relocated to a digital platform, enabling communication between the maker and their audience in a way that has previously not been possible with other forms of makers’ marks. Not only do the stories that the object can be tagged with allow for strong connections with the maker, but easily accessed provenance and crowd-sourced information on authenticity can be embedded in the object right from its inception.

**References**

BOARDMAN, J. 1979. *Athenian Red Figure Vases The Archaic Period*, Norwich, Thames and Hudson.


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