Exhibiting Poetry in Public Places Using a Network of Scattered QR Codes

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Summary. Our goal was to remove poetry from its usual setting, exhibit it in public places and let the unsuspecting citizen engage with it in a way that he is unaccustomed to. We thus came up with codepoetry, a poetry game in the city. A large number of QR barcodes, spray painted on walls around central Athens using a large metallic stencil, tempt passers-by into scanning them using a smartphone in order to reveal a random poem from a curated online collection to which participating modern Greek writers and members of the public have contributed. The experience is further enhanced by allowing visitors to leave comments underneath the verses. The public context in combination with the use of smartphones and the feeling of playful discovery, helps familiarize the audience with poetry and demystifies this form of expression.

Key words: Quick Response code, QR, poetry, street game, smartphone, mobile, scanner

1 Introduction

Even though there is a number of people that read and write poetry in Greece, the vast majority are left with a distorted impression of this literary medium emanating from their school days. Poets are commonly beatified and poetry is often associated with beauty, rhyme, wordplay or esotericism rather than a wide range of emotions, imagery and style in tune with the times. The academic experience of many and the prevalence of prosaic approaches to reality leaves most with little appetite or aptitude to experience a poem, let alone create one.

Our primary goal was to reconcile the public with poetry by raising its awareness and to promote a reflective dialogue with space. To achieve that, we decided to showcase verses in an original way on public surfaces. In other words, we wanted to take poetry out of its traditional setting and into places where people don't expect it to exist. To achieve that on a relatively big scale we combined smartphones, Quick Response (QR) codes and the internet to create a distributed game of poetry in the city. Scattered QR codes invite you to discover the poetry hidden in unexpected places and with the help of a smartphone the scanned QR leads you straight to a random poem from the constantly updated,

curated, online collection. To further enhance the experience we allowed visitors to leave comments underneath each poem or to send a message directly to its author, even anonymously.

Realizing that the QR code contains a poem, before its actual content is read, is enough to change, even temporarily, the lay impression about poetry. Combining the elements of discovery and decryption along with two seemingly incompatible concepts such as poetry and technology, takes members of the public by surprise and positively predisposes them to the random poem that they are served, making its reading more likely. From web page analytics and various forms of feedback from the public one can conclude with some certainty that our effort has somewhat reconciled the unsuspecting receiver with this form of expression.

2 Poetry in Public Spaces

In antiquity, when oral traditions were strong, poetry was used to strengthen communal ties, teach moral values, relieve people from sufferings and even combat oppression. At that time poetry was at the center of public life. With the advent of written tradition, poetry was gradually displaced to a more private sphere. There have been few attempts to place poetry again more prominently in the public realm. Some of these are examined below.

2.1 Poetry on Public Transport

Starting in 1986 some of the advertising space on carriages of the London Underground was reclaimed and short poems fitting in small carriage panels have been displayed. Judith Chernaik first came up with the idea and along with her small team continues to choose the verses that will go up. They make their choices for a wide range of passengers, selecting poems from antiquity, new voices from English-speaking countries around the world, as well as translations. The endeavour has been praised extensively and has been extended to London buses. Perhaps unsurprisingly, it has been adopted by cities around the world such as Dublin, Paris, New York, Vienna, Stockholm, Helsinki, Barcelona, Moscow, St. Petersburg and, most recently, Shanghai and Warsaw [1]. As the creators themselves have noted "Poetry thrives on paradox, and the poems seemed to take a new life when they were removed from books and set among the adverts" [2]. The best poems have been printed on paperback (now in its 11^{th} edition) with the ninth edition of the collection selling an impressive 250,000 copies [3]. On some occasions, such as in Paris, open competitions were held offering to display the winning poems on public transport panels.

In our native Athens, in 2011 and for a whole month, the National Book Centre of Greece (under the auspices of the Ministry of Education) decorated the insides of trains, buses and other means of transport with verses of Odysseas Elytis, Greece's Nobel prize laureate, in order to celebrate the 100^{th} anniversary since his birth as part of world poetry day.

2.2 Poetry on Walls

Since 1992, in the Dutch city of Leiden, a small group of artists started the project Dicht op de Muur (Poetry on the Wall) where they paint poems from all languages on walls in the city center. They are usually painted along the building fronts and the type and style of the lettering is chosen so as to match the poem. For example, painter Jan Willem Bruins said he chose letters that resembled bird beaks when painting a poem about the voice of birds [4]. The poems are accompanied by plaques with translations in English and Dutch and once again the reaction has been so positive that it has been emulated in other Dutch cities. In 2004 the Dutch embassy in the capital of Bulgaria launched a similar project [5] and other cities have done so as well.

Similar efforts have taken place in Toronto where the city's Poet Laureate launched the "Poetry is Public is Poetry" city-wide initiative to transform public spaces into "an illuminating forum for the written word"[6].

3 Our Approach

Poetry adds a layer of codification on top of language. We attempted to introduce yet another layer by encrypting poems using technology before placing them in public view.

3.1 Choice of Physical Materials

Quick Responce Codes In order to encode the poems we chose Quick Response (QR) codes. QR codes were developed by Denso Wave, a subsidiary of the Japanese car manufacturer Toyota [7], in 1994 to track vehicle parts during the manufacturing process. Despite their industrial origin, they are becoming increasingly popular in the developed world for consumer goods tracking, entertainment and transport ticketing, marketing, in-store product labelling, digital content downloads, etc [8].

QR codes have certain characteristics that make their use in our project most suitable. Firstly, they are widely adopted as they are an open ISO standard and Denso has chosen not to exercise their patent rights. Secondly, QR codes can be easily scanned. The rise of smartphones has provided fertile ground for the technology to flourish as people effectively carry a personal barcode scanner with them. All widely used mobile platforms (Android, iOS & Windows Phone) offer applications allowing scanning. Thirdly, their great storage capacity and high redundancy allows for strong error correction capabilities (decoding is still possible with up to 30% QR code damage). This is particularly important in our case as the QR impressions were going to be exposed to the elements of nature and resistance to decay was needed. Finally, coupling the QR code scanner with a smartphone makes the use of QR codes particularly attractive. The code itself contains metadata enabling the phones to respond differently to each content

Fig. 1. The QR code containing the link to the online collection.

Fig. 2. Spray painting the QR code using a metallic stencil.

type. This way, a website address is passed to the web browser, an audio file link opens the media player and so on.

We used one of the many online services in order to generate the specific QR code for our project. We chose to encode the QR content with high error correction (level H) in order to maximize immunity to damage and enable robust reading. Even though a QR code can easily store a very long poem, we chose not to encode poems into the QR code itself. Instead, we encrypted a link to the project's page (www.codepoetry.gr) where a dynamically chosen poem is served to the visitor. If we wanted to encode the poems directly into the QR code we would need to prepare a QR stencil for each poem, an impractical act especially in metal (more on this in section 3.2).

Finally, we placed below the QR code the phrase "THIS IS A POEM" and above it, its Greek equivalent, in order to hint at the contents of the QR code and to ease the possible reservations of a suspicious public as to its purpose. Figure 1 shows the resulting QR code.

Stencil and Spray We originally started by printing out the QR codes on stickers of varying sizes and applying them on surfaces around the city. The short lifespan of stickers along with the greater cost of printing, led us to switch to mainly stencil and spray. Figure 2 shows the application of paint on the metallic QR stencil.

We used free and open source software [9] in order to convert the image of the QR code into a vector-based stencil pattern suitable for laser cutting (see [10] for more details on this conversion). Cheaper alternatives to metal such as plastic, wood and paper were rejected as metal makes cleaning and reusing

possible. After spraying over the stencil around 40 times a strong corrosive is applied to scrape off the paint with metallic brushes and resume painting.

As of September 2012 we have put up more than 500 QR stamps in central Athens and some busy peripheral neighbourhoods. We applied most of these in popular, central locations where people go shopping or out at night.

Fig. 3. Using a smartphone to decode the QR code after it has been spray-painted on a wall.

Fig. 4. A poem displayed on the smartphone after scanning the QR.

3.2 Choice of Software Platform

As mentioned in section 3.1, instead of encoding poems inside the QR code we encoded a web address which leads the visitor to a web service delivering poems. For content delivery we chose Wordpress [11], the free and open source website platform and optimized it for touch interfaces by installing a mobile theme on top [12]. As soon as someone scans the QR code (Fig. 3) the mobile phone detects the URL embedded within it and offers to launch the browser automatically. We found that the experience is so seamless that most people believe the poem is embedded into the QR code itself.

As figure 1 shows, we did not include the web site address in plain text for passers-by that did not own a smartphone or did not know what a QR code is. We felt that the specific sequence of first discovering what the enigmatic signs on the walls are and only then decrypting their poetic content, was of tantamount importance. While visitors using their smartphone get a random poem from codepoetry's collection (Fig. 3 and 4), visitors using a desktop computer are redirected to an "about page" with background information on the game instead. Because, we want the site to be discovered and used mainly from mobile devices,

we have disallowed indexing by search engines. After all, there are plenty of online anthologies. This was about delivering poetic content to an new audience in an original way.

We felt that each poem should take centre stage on the display screen and as the mobile screenshot in figure 4 shows, the page is designed to be minimalistic. We did not want the reader to be distracted and we therefore placed our project's banner and all relevant information underneath the poem. If the reader remains curious he can read on and learn more after giving the poem a chance.

The ability to deliver dynamic content enables us to add and remove poems as we see fit. This allows for an evolving collection as well as the temporary introduction of a poetic theme to commemorate a historic event or poet. Furthermore, we get to enhance the experience by delivering a random poem each time a QR code is scanned. Randomness is a vital element as it enhances the sense of uniqueness. Each scan of the QR reveals a different poem.

Finally, our decision to dynamically serve the content as a web service has the advantage of permiting interactivity. Visitors to the page may choose to respond to the poem they have just read by leaving a comment underneath it, even anonymously, or send a personal message to the contributing author.

3.3 Choice of Content

While traditional publishing routes often focus on established names in poetry, the nature of our project led us towards contemporary and emerging poets. Having greater affinity for city culture and technology, they contributed poems enthusiastically. Wanting to encourage interactivity between poets and their audience, we made the decision to include only living writers.

What is more, we let the door open to unpublished poets and as a result about 20% of poems in the collection have been contributed by members of the public. The only submission rule is that they must have written the poem themselves and it must either be in Greek or in English. Once we receive a poem we make a personal judgement whether to include it in the collection.

4 Results

The reaction from people to our effort has been very positive and supportive and we assess that with various means.

With about 300 surviving QR stamps across the city we are now getting on average 100 visitors daily, with the average visit lasting a minute and a half. The average number of pages per visit is 2.5. Of these, on average, about 80% are direct hits resulting from scanning the QR code with a mobile phone and 20% come from social networks, newspapers [13, 14], blogs [15, 16] or other referrals. We expect these numbers to grow as smartphone penetration and QR code recognition rate increases (see section 5).

Because smartphones are particularly popular among the younger generation, who are also more likely to know of QR codes, it is natural that our project

has had a greater impact on younger people, a group that would otherwise be less likely to count poetry readers among its ranks. Modern technology and its popular incarnation, the powerful smartphone, has worked like a trojan horse in getting contentemporary poetry known to a young audience.

Allowing, after some vetting, works of unpublished authors to appear on the site has also been quite successful as we receive new material every week, although we try to maintain the percentage to about 20%.

The enthousiasm of the general public is also expressed on the web page by means of positive comments that are submitted regularly underneath each poem. Additionally, as we've made writing directly to poets possible, members of the public have often expressed their admiration for the poems and the medium their authors chose to showcase them. Furthermore, a number of readers has approached us for technical advice as they want to emulate the effort in their city.

5 Future Work and Discussion

We expect traffic to increase as our network of QR stencils and as smartphone penetration rates grow. Export.gov estimates that mobile phone penetration in Greece is at 25% while WIRED magazine puts it at 35% [17, 18]. Furthermore, QR code technology is relatively at its infancy. The Pan-European average of people that report using their smartphones for scanning QR codes is at 14.1% [19].

Encouraging people to engage more actively with poetry and public space is one of the mandates of our project. To achieve that we want to give voice to a much greater number of poets. To make that possible, we plan to setup a crowdsourced process for curating the online collection by enlisting volunteer editors. This way we also reduce the bias of the current setup and we prolong the viability of a project with an escalating workload. To further assist us with the latter, we plan to make our QR code stickers freely available on our web site in a printer friendly format.

Realizing the momentum and potential of our project, we decided to expand to other countries. We will soon host international versions of codepoetry and visitors are going to be forwarded to poems written in their language based on their IP address. Embracing the principles of free culture and the free software movement, we plan to setup instructional documents outlining our approach (technical tutorials, printer-ready codepoetry stickers and general advice) to help foreign teams spread poetry in their city.

The dynamic nature of the platform leaves a lot of room for exploration with regards to means of content delivery. Presently, the web page contains text only, but we have been exploring the possibility of including richer material. Audio such as read verses can be easily added to the service and we have been considering the use of augmented reality (AR) technology.

Principles of our technique could also be used to create poetry-based "treasure hunts" in a city. In such a game, a few unique QR codes contain poems,

location-specific audio content as well as hints about the location of the next step constituting a poetic tour of a city.

Taking advantage of new media and the city's concrete canvas, we hope efforts such as the above help poetry regain its public voice and enter the civic landscape more dynamically.

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