

TXT2 - Art on Interaction and Conversation

Glenn Davidson

Artstation,
Chapter, Market Rd., Cardiff,
CF5 1QE, Wales UK
{glenn@artstation.org.uk}

Briony Goffin

31b Beauchamp Street,
Riverside, Cardiff
CF11 6AX, Wales UK
{brionygoffin@gmail.com}

Dr. Ian Grimstead

School of Computer Science
Cardiff University, Queens Buildings,
5 The Parade, Roath,
Cardiff, CF24 3AA, Wales UK
{I.J.Grimstead@cs.cardiff.ac.uk}

Kath Williams

Science Shops Wales,
University of Glamorgan
4 Forest Grove, Treforest, Mid Glam,
CF37 1UB, Wales UK
{kwillia3@glam.ac.uk}

Abstract

During a practice led residency 2007, research by artists Glenn Davidson and Anne Hayes revealed community tensions concerning a proposed re-development. In dialogue with anthropologist Kath Williams an interactive public artwork was conceptualised, which would facilitate safe and open conversation in and around a contested space. This paper discusses the development and testing of the system (TXT2), using Pask's notion of 'mutuality' to examine research outputs and outcomes. The paper concludes that TXT2, successfully serves the objective of open public interaction and in so doing becomes a cross disciplinary vehicle with unforeseen uses in other areas.

1. Introduction

Whilst working on a research project for an artwork in a small community in the South Wales Valleys, an issue around the demolition of a much loved village pub was raised by a number of participants. This inspired Glenn Davidson, lead artist from Artstation and Kath Williams of Science Shops Wales, to begin planning a new artwork that could facilitate discussion in and around such contested spaces.

The resulting artwork uses open source mobile social networking software developed by Glenn Davidson and Dr Ian Grimstead which allows near 'real-time' communication with the system using SMS and MMS messaging.

The aim is to create a tapestry of publicly generated content on the surface of a building which expresses the cultural value of a site in a minimally mediated way. The messages are sent to a centrally (human) controlled computer before being projected directly onto a public space, facilitating an emergent dialogue that can help in recognizing, signifying and recording a 'sense of place'.

2. Mutuality

Pask made a distinction between architectural functionalism, and what he called, 'mutualism' *between* structures and men, or societies. [Pask G. 1969]. He refocuses the lens of architectural pedagogy and practice, through its inheritance of 19th century functionalism, toward a time-based social, systemic and cybernetic vision. A building, Pask said, 'perpetually interacts with its inhabitants...serving them and on the other hand controlling their behaviour'. Pask denotes a feedback within design; a system by which a building regulates its inhabitants.

If this holds true, that people are by turn 'served' and 'controlled' by designed structures, TXT2 may be providing a new method, unimaginable in 1969, by which artefacts of communication which reflect mutualism become observable. Further, in trying to find out how places build up meaning for a community, aspects of mutualism may be upheld to protect an environment; Pask's notion illuminating a route to a clearer understanding and defining future work for TXT2.

Pask also envisaged materials which sensed the presence of and reacted to people in a feedback system. The txt wall created by a TXT2 event is also an architectural feedback system. The teams approach to deploying the technology has so far rendered two comparative methods, one directed content [TXT2Vulcan] the other none directed or open content [TXT2Chapter].

3. Art Practice

Buildings, says Pask, have always been classified as works of Art. Here he makes connection with the literary Art of Surrealism, its use of novelty, juxtaposition and supernatural stimuli, to evoke inbuilt human responses. Pask denotes the 'vegetable surrealism' of Gaudi's Parque Guelle, as a 'symbolic interaction, full of variety and surprise for its human visitor'. [Pask .G. 1969] TXT2 becomes a temporary addition to the cybernetic system conception of a building.

At the aesthetic level, TXT2 reflects site specific works like *Arno 1996*, by Jenny Holzer, who projected, pre-composed, poetic text upon the external surfaces of a building and similarly with Martin Creed's work *No. 203, Everything is going to be Alright*, 2001, which uses neon signage to illuminate a dilapidated Victorian portico in East London [Morley 2003]. These works draw public contemplation to the meaning of juxtaposition of the artists text placed upon an architectural structure. Curators Virginia Button and Charles Esche writing on the show *Intelligence* [Button & Esche 2000] at the Tate Gallery in London, ask how "artists might engage audiences in thinking, and even suggested that they might produce work that reflected some social or even political resonance." [Stellabross 2006]. By contrast, public works like the gaseous 'Memory Cloud' [Spyropoulis 2008] and *Skyear* [Haque 2004] both use mobile communications to spectacularly interact with temporary structures (gas and balloons) at architectural scale. These latter works occupy public spaces and avoid the complexities and relational aesthetics of direct contact with buildings. TXT2 inhabits architecture, channelling the communication of those present and, according to Pask, affected by a place.

Creative writer Briony Goffin met and joined the team through the TXT2Chapter event. She has begun finessing and extending the referential framework, placement and audience for TXT2. This is extending possibilities for her practice as creative writer, building on her community based experience and practice.

4. TXT2 - Rationale

Economic development often subjects the built environment to change, but not all of these changes are desirable. Tensions can occur between development (progress) and heritage (tradition). When developers and community disregard the importance of heritage and a 'sense of place' it can lead to divisions both within and between communities. As discussed in *Heritage Protection and Planning for the 21st Century 2007 'Heritage has a crucial role to play in delivering sustainable communities.'* [DCMS 2007] Existing methods for assessing the preservation of buildings are based on the principles of architectural merit as seen through the lens of the architectural profession. These methods are not always able to engage with the 'sense of place' – a value defined by both permanent and transitory inhabitants. New methodology is required and the action research of art as interactive process is able to provide this.

TXT2 was originally developed to support local communities wanting to highlight the significance of buildings (under threat of demolition) that may lack architectural importance but have considerable cultural relevance. The project was further intended to address the gap between architects and users of the architectural places they design, by creating 1) meaningful

conversation and 2) interactivity from bottom up – to influence and facilitate change.

Consistent with functional mutualism, TXT2 is conceived as a temporary part of a whole system which includes location (building), participants, collaborator team, software and the wider social enterprise.

5. The Team

The team has grown, its evolution is intentionally organic reflecting a living system, 'organisationally closed, whilst remaining informationally open' [Pask. G, 1981]. To work in situ, conversation begins with the collaborator group themselves who have to agree a program or meaning for their actions. In contrast to the first public event, TXT2Chapter demanded some of the team members worked further out of their specialism and comfort zone. As a result there was difficulty in determining what might be analysed and how it might be interpreted. However the team has embraced this complexity, the experience was considered to have afforded both individuals and the group, insights into their own practice and ample opportunity for continuing development. Through the process of a communal conversation between users of an architectural place; new knowledge is being generated across four disciplines and four collaborators. The research methodology remains, 'open', to learn from what emerges on the shared canvases that TXT2 can provide.

The trans-disciplinary process places a skilled team in relation to one another within the public realm, where anything might happen. This is presenting some risks, which the team are attempting to understand.

At the start, in the original proposal, community members were consulted about a new artwork. Whilst a good level of support was evident, there were concerns from a number of potential participants about the discussion becoming 'public', with the main concern being the safety of participants, should their identity become known. With these difficulties in mind, discussions with venue owners began and continued over a relatively long period of time. Unfortunately, given the nature of the complex politics involved in contested places, the difficulties encountered around projecting onto the original site, eventually proved too difficult to overcome.

TXT2 is interdependent on securing a site where real time public interaction can take place. The Welsh valleys experience clearly demonstrated that TXT2 research cannot be done without the consent of those who control suitable public places such as pubs, cafés etc. and that the process, including practice and learning, needs to be a truly co-operative and collaborative experience.

Despite the ethical dilemmas experienced at the original site and the resulting 'abandonment' of the project, even without its implementation, discussion of the TXT2

project in the context of the village influenced events on the ground. Through the externalisation of forbidden or repressed conversations, the community voice was heard and considered and the value ascribed to the building by them acknowledged. This became manifest in an apparent 'mind-shift' for those in control of events, with the building being preserved and renovated.

The project was eventually demonstrated in different locations with a good level of success. The first event was **TXT2Vulcan**¹, an external public space that, although contested, allowed for a safe environment for public involvement and secondly, **TXT2Chapter**², an internal public place, a temporary gallery housed within in a café/bar in Wales's largest art centre - Chapter.

The Vulcan public house, built in 1853, is one of the oldest pubs in Cardiff, capital of Wales. The area surrounding the pub has been cleared and is now used for car parking. Contemporary development of the city centre required demolition of the Vulcan to create a few more parking spaces in the city. These plans met with some opposition and a campaign to Save the Vulcan³ began. The researchers approached the landlady of the pub and suggested a pilot of the TXT2 project. The offer was immediately taken up and a successful evening of public participation ensued.

The developer later offered the landlady a three year extension on her lease. If she declines, the Welsh National History Museum has expressed an interest in securing the Vulcan for its outdoor collection of Welsh buildings. This is a possibility which TXT2 has helped promote by donation of the Vulcan txt messages for future interpretation and living history archives at the museum.

TXT2Chapter presented an opportunity to develop software and the researchers' methods of social engagement. This was a 'sketch' in which creative ideas, associations and understandings were examined. The TXT2 method is evolving through the various journeys taken by researchers towards the object of study. En route, knowledge is gained through comparison and contrast between the insights and different skill-sets of each researcher.

6. Further Applications

Part of the original research design called for the development of a 'Tool Kit' that would incorporate 'best practice' for planners and designers who might be required to evaluate the cultural importance of community buildings and/or other spaces. This is yet to be developed. The team also envisage the system being used outside of the planning process, for example in other

areas of contested space where an open dialogue between users of the space might be considered to be difficult, without balance or even unsafe.

7. The Software System

Driven by the ubiquitous connectivity of the internet, the creative collaboration of remote participants has driven a generation of new technologies and users. Extending or subverting existing software has been a pre-eminent venture of the networked arts for over two decades. The constituency of interest in open-source software overlaps with a global diaspora of individual artists and designers, technology groups and key institutions. The TXT2 system has "evolved", so far, to suit the requirements of two specific locations. Predefined aspects of the software design remain open and adaptive.

For composition, a system of control was required that would allow the placement of a mixture of live text messages, words, images and even films upon the target architecture. Ideally a series of template layouts would be required, similar to the slides of Microsoft PowerPoint. However the project involved live text messaging, incorporated into a page description, a task well beyond the remit of 'closed-source' software such as PowerPoint, where templates are technically resistant to 'hacking' or extending into new functionality.

Writing software from scratch would have been too expensive, the only practical solution was OpenOffice Presenter which is freely available, open-source software which saves template pages in an easy to read (human-legible) XML format.

Running the TXT2 software from a laptop computer uses three open source packages: OpenOffice Presenter, SMS Libraries and the TXT2 Java Application. Presenter synchronised with TXT2, a connected mobile phone is interrogated for messages by the libraries (SMSLib), which were downloaded to the TXT2 software. Finally received messages were deleted from the mobile phone to save space and to speed up receipt of further messages. Incoming messages were screened for security by an operator with an external mobile phone. Cleared messages were then forwarded to the laptop phone and into the system.

Photographs of a building were placed on a page in OpenOffice Presenter, text boxes and images were strategically positioned. The page template, interpreted by TXT2's java code produced a new 'overlay' layer on top of the OpenOffice Presenters projection output.

8. Hardware Technology

The sustainable approach to this research included development of software tools on a small budget, unimaginable through a commercial route. Open-source gave the work a "head start providing a method to receive

¹ See <http://shepherdsarms.blogspot.com/>

² See <http://www.artstation.org.uk/chapter/chapter.txt2.htm>

³ See <http://save-the-vulcan.blogspot.com>

and display text (SMS) messages on architectural surfaces and buildings. High powered (20,000 lumen) projection was the chosen medium used to output gathered message data.



Fig 1 TXT2Vulcan⁴

9. TXT2Vulcan

Widespread media reports, exposing bids to demolish the heritage building, provided the theme of communication for TXT2Vulcan. The Vulcan's community knew immediately what was required, without further explanation, and embraced this novel and stimulating method with enthusiasm.

The txt objects filled the vertical and horizontal spaces between the first floor and portraits of regular bar users were projected into these upper windows appearing like ghosts. The txts simply appeared and updated like magic on the Victorian façade.

The initial software version for TXT2Vulcan was an automatically advancing "slide-show", timed to give people the opportunity to send text messages in response to those already visible on the building within the system. Incoming messages within the software were reserved with time, date and telephone number, in a repository. If no new messages were detected, after a short predefined period, the repository began to play back the history of previously received messages. This carried on until a new live txt was received, which was given priority over the repository playback and displayed immediately.

10. TXT2Chapter

TXT2Chapter, by contrast, placed the team in the café to be seen by all. The event was solely text based no run-time graphic requirement for using OpenOffice Presenter. Textual location on the wall was pre-defined using the XML templates measured from a photo of the wall.

⁴ Photograph copyright Chris Colclough & Artstation



Fig 2 TXT2Chapter

TXT2Chapter presented an opportunity to develop the researchers' methods of social engagement and take a close-up look at message content generation. Various technical developments were undertaken, page design (user interface) was given a more finished and sophisticated feel. New font shapes, sizes, new text designations were also introduced. The system could now handle questions prefaced by letters QQ and answers with AA. Messages, with no prefacing, were treated as statements, all captured in the repository preserving the new designations. Repository playback was also reversed, the newest material being replayed first. These changes improved quality of interactivity and perceived responsiveness of the TXT2 system.

The open canvas of TXT2Chapter installation presented non-mediated communication, an attempt to reflect the spontaneous, even uncorrupted thoughts of those within the place. Without a context or theme, such as those that existed at TXT2Vulcan, would the public participate?

11. Interaction and Text Content

Security quickly emerged as a pressing concern following complaints to managers and curator about the language used during TXT2Chapter. The Café contained, at times, a rapidly changing public, who could interact directly with the researchers in an open and sometimes 'risky' manner. Specific visitors had begun exploiting the team's attention and that of other participants in the place, subverting the un-policed communication on the public wall. This process offered a few painful insights into the meaning of the 'open' system. The possibility of bullying had been raised previously, and the solution, the external security phone had not proved adequate for the volume and speed of decision making required. A new strategy was needed, a new safety message holding feature was quickly and interactively created for the TXT2 software by Grimstead. Decision making on message content was then shared by the team and where no consensus could be reached, further help was provided by Chapter staff. A message could be either held and then released, when accepted, or rejected. Either way all messages were stored in a non projected 'raw' data repository.

The quality of textual content, generated in thirty six hours over three days during TXT2Chapter, was complex and diverse. Goffin's observations on the meaning and dynamics of texting are helping the team to understand how content, ranging from the spontaneous to the reflective, responds to mood and tempo of communication within a given place.

The TXT2 work is defined by its invitation. It makes writers / artists / experimenters out of all who are present, and inherently participating. Writers (texters) and witnesses supply the narrative content and conceptual framework within which the mobile messages are processed. Narrative is in constant flux, according to the emotional, cultural and political bias of those inhabiting the place at a specific time. The work undertaken may be a single text or an elaborate textual-exchange. It is shaped through inner and outer dialogue, private utterances and public conversation, communal or personal resistance, reciprocation or ambivalence.

11.1. Location & Architecture

The mobile phone has umbilical relationship to its many users. The process of texting is an interpersonal vehicle that shapes conversation and can guide the direction of relationship. Texts are used as a form of echo-location for the sender and receiver providing a measure of proximity within relationships, enhancing a sense of social co-existence.

TXT2 events externalise and situate qualities of text functionality, making explicit the implied search for others (audience). In doing so, a private activity, the miniature fingertip action of texting, emerges in a public domain transformed in scale. In this sense TXT2 is monumental and relates to the textual verticality of signposts and the words of commemoration or inscription upon architecture.

11.2. The appearance of the creative-texter

TXT2 defines its participants as 'creative-texters' who are invited to use the system to externalise internal thoughts and impressions. TXT2Chapter was an autopoietic⁵ and self reflective event, one which located a user in communication-loops, which include the internal and the external process of communication, the individual and the social environment. The event exhibits the qualities of an autonomous social life.

- {Im having a tea}
- {Death before employment}
- {QQ Carew, will you marry me? Rickey xxx}
- {The tide ebbs. Sand, to horizon. Last day of summer}

Text messages are ultimately products of *our* cognitive awareness of *our* surroundings. The TXT2 event concretises the act of 'speaking' through txt messaging, by rendering them as both public and aesthetic objects. Texts in TXT2 contain object and subject quality. Creative-texters experience an altered perception, as they communally witness the form of their own 'voice'.

- {In fact B we are doing a great job liaising with the Cardiff intelligentsia here in very rural Somerset. X}

11.3. Anonymity

The broadcasting of thoughts and declarations has its risks, and is open to a multiplicity of questioning, challenging, subversion and even parody. However unlike SMS - phone to phone communication, creative-texters can participate without being identified. However, under the cloak of anonymity, most TXT2 users, it appears, use their discretion whilst also, on occasions taking authorial risk.

- {no I don't Vaf and you knows it}
- {basement cat is watching you}
- {Hey you, yes you, ceiling cat knows what you did}

11.4. Performance

In TXT2Chapter, some people took on different 'voices' when texting, using the transformational nature of language. The performative function of TXT2 manifests as a deliberate scripting, that reveals or disguises a sender's identity. These are moments of public theatre, created by the creative-texters, who also become an audience to a spectacle of their own making.

- {You gotta buy the book before you read it!- Chairman Mao}
- {hi this is lama lobsang}
- {qq Will you be my wooden spoon}
- {aa No but I have a wooden spoon!}

On occasions, the depth and nuance of meaning, as in theatre craft, remain unspoken, left in the air. Texters using TXT2 surrender control of their words, to public appropriation *and*, of course, misappropriation. This process reveals the vulnerability of language to multiple interpretations and ambiguity of meaning.

- {qq is this supposed to be art? Facey loves this kind of expressionism}
- {I have no control over who reads the text, my power comes from manipulating the message}

12. Proof the System Works

One form of potential for the system's use is in action research where results are judged against positive changes within a community. The South Wales valleys

⁵ As used in Maturana, H. and Varela, F. (1988). *The Tree of Knowledge*. New Science Library, Shambhala, Boston. p 242.

experience demonstrated the theoretical potential of TXT2 as an idea, the validity of which was then fully tested at TXT2Vulcan. Both events contributed to more considered futures for the buildings involved.

TXT2Chapter successfully provided interaction within the realm of Art. The team are invited to undertake more events so this is another proof that the system is beginning to work. The method is becoming usable and attractive and it is defining its audience through a new form of interaction, the role of the creative texter.

13. Conclusion

The team are now looking to use the developing potential of the software and the various insights gained at Vulcan and Chapter to probe further questions on sense of place in the context of Pask's 'mutuality'.

Environment, in its broadest sense, is what creates a community's 'sense of place', often including buildings which, whilst having no particular architectural merit, are considered central to a community's sense of well-being. Existing methods for assessing validity for preservation of buildings is limited to architectural merit, as perceived and dictated by the architectural profession, is automatically excluding many well loved and well used community buildings and spaces.

TXT2 was born out of a demonstrated need to facilitate safe and open conversation and interaction in and around contested spaces which, it is hoped, would help to lead to positive changes within a community in dispute. TXT2 methodology facilitates conversation, with a system; the participants, the collaborating research team, the software methods and social enterprise forming a whole system in which a continuous feedback loop can be established and maintained. The software has intentionally been left open and adaptive to allow for development both in real time and for the future sites, the team now feel all software should be open source.

The emergence of the creative texter, has helped the team to define new roles for TXT2 and position future public events. There are also manifest tensions, in TXT2, between the creative and practical problem solving trajectories. The research is engaging within, what has been termed, the back channel⁶, as opposed to front channel or face to face communication. The back channel refers to that old idea of talk-back or back-chat. The form is propelled by mobile and social software's and is creating new behaviour, part of which the researchers

Many thanks to Dr. Chris Groves for his comments and the financial support of Arts Council Wales, UnLtd and Science Shops Wales at University of Glamorgan.

have needed to map to better understand in order to proceed.

Whilst TXT2 research has centred on public (human) authorship (talk back) through the machine, control of the system falls within the politics of communication. Though not generic to the second order cybernetics, politics and communication, the authors have shown, come inextricably linked. The politics of communication is part of the 'system' the team are investigating through modern technology, a multi disciplinary team and action research methodology and practice.

TXT2 is beginning to reveal new dimensions to Pask's 1969 notion of architectural 'mutualism' through the aesthetics of located communication. Future work will focus further on data.

⁶ Extending the use of twitter:

http://www.zephorio.org/thoughts/archives/2009/11/24/spectacle_at_we.html

References:

- [Button & Esche 2000] Virginia Button & Charles Esche *Intelligence is the Great Aphrodisiac*, in the Tate Gallery, *Intelligence: New British Art 2000*. Tate Gallery Publishing. London 2000 pp.9-17.
- [Stellabrass 2006] Julian Stellabrass *HIGH ART LITE : The Rise and Fall of Young British Art: Revised and Expanded edition*. 2006 pp.292-3
- [Haque 2004] Usman Haque *Skyear* Greenwich Park, London 2004 <http://www.haque.co.uk/skyear/>
- [Spyropoulos 2008] Theo Spyropoulos *Minimaforms* Trafalgar Square, London, 2008. www.minimaforms.com
- [DCMS 2007] Department of Culture Media and Sport. *Heritage Protection and Planning for the 21st Century* The Stationary Office. 2007. pp. 30
- [Maturana & Varela 1988] Humberto R Maturana & Fransico Varela *The Tree of Knowledge*. New Science Library, Shambhala, Boston. 1988 p 242.
- [Pask 1969] Gordon Pask *The Architectural Relevance of Cybernetics* Architectural Design September. 1969 pp. 494-496
- [Pask 1981] Gordon Pask *Organizational closure of potentially conscious systems*. In Zeleny, M. (Ed.), *Autopoiesis. A theory of living organization*, North Holland, New York, 1981 pp. 265-307.
- Morley 2003] Simon Morley *Writing on the Wall - word and image in modern art* . Thames and Hudson. 2003 pp. 207-209