Digital Graffiti

Convergence of Social Navigation and Locative Media

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Abstract

The internet has helped evolve technology and art into new forms of creative interaction and communication. This has created new cultures and subcultures in society and in some cases become an integral part of life. With technology and the internet being a part of everyday life it is obvious that some cultures have moved over from the physical to the virtual. Graffiti for instance is one example of this, evolving into Digital Graffiti. Applications utilising location based media and social navigation have enhanced the digital space that surrounds us. Digital Graffiti is a convergence of both. This dissertation examines the possibilities of this new technology to see its impact and investigate the cross over of Graffiti to the digital world.

Introduction

The Internet has revolutionised the computer and communications world with creative inspiration since its introduction in the early 90's. It has made the idea of the global village not just a distant thought but almost a reality. It has brought the technological capabilities for almost anyone anywhere in the world to communicate in many more ways that was capable before, and has provided the chance to communicate not just from one person to another but from one person to a multitude of people. Current Internet usage statistics, state that the current worldwide internet population is over 1 billion users (ClickZ, 2006). This has moved globalisation forward since the introduction of the telephone and set the stage for this unprecedented integration of technology. The Internet instantly had world-wide broadcasting capability, a mechanism for information propagation, and a medium for collaboration and interaction between individuals and their computers without regard for geographic location.

The Internet is growing into a web of bloggs, forums and chat based sites. The internet is a powerful social tool on many levels from personal to business use. Social Navigation and interaction are moulding the Internet; it isn't just about sharing information on simple pages anymore it is about socially interacting in a digital medium. The new Web 2.0 is focusing on these trends and is establishing a foothold in the future of the internet, for example the use of RSS feeds from bloggs to allow the author to provide access to their articles from anywhere. Users are socially interacting by using their location and mapping virtual spaces on to physical ones, most notably the London Bloggers are one of the first to put this into practice. Blogging their thoughts and ideas with their location linked to the London tube map, it puts a sense of place back into cyberspace and by doing so, it has the potential to help a group of people participating online, recognise themselves as a real world community and build closer links. It is no longer just about communicating with others regardless of geographical location. Location

has become an important part of a person's identity in both the real and the digital world.

With the evolution of GPRS and the integration of the internet into everyday objects, the application of technology is evolving into a new genre of location based media, a growing mass of social based communication. In the past, location based media referred to displays such as signs, billboards and posters located away from the home. In more recent times it is becoming embedded in mobile devices, artefacts, or even ubiquitous computing. Can these computational influences affect individuals beyond how they are currently affected by the people around them? How could this create social awareness or presence, and how could this affect social life and communication? Does this have the potential to create an electronic subculture within society?

To answer these questions this dissertation will use Graffiti as an example of a subculture through which social awareness and locational influences are apparent in the real world. For many of us, Graffiti traditionally conjures up ideas of messy scrawls of paint splattered on walls in public places such as railway stations or subways. Ernest Abel (1977) writes about how the subject, style and method of writing graffiti vary for each place. The toilet for instance, is a well known place to view graffiti that depicts ideas about toilet behaviour or genitalia. Clearly, the location strongly relates to its message. Consider graffiti in a digital environment, will it be able to deliver the same strong meanings behind its messages from the illegal act of vandalism to legal forms of communication in the digital world? How could this be portrayed and governed?

Advances in technology have had a major impact on our design of computer systems and the way they are used. Consider how much is known about computers and the many forms of interaction with them, is it plausible to have the same impact with graffiti and still keep its meanings with location based communication? To answer these questions the very ideas and concepts behind

digital graffiti have to be explored. Digital graffiti is conceptually the convergence of location based media and social navigation which combines the physical and the virtual worlds. This dissertation will examine different types of locative media that has a social navigation influence using graffiti, with a view to see how they can affect the use of technology and if the technology can be influential. It will investigate the Graffiti subculture moving into the digital age and explore any shifts in its style of writing, language or its method.

Graffiti

Though Graffiti emerged in the late 20th Century, it has been around in some form for thousands of years. It has expanded to encompass the notion of making marks on a public surface, usually without the owner's permission. Graffiti is notoriously known to be around train stations and areas where there is substantial cover to complete the task and not be caught, but there are many forms of graffiti; graffiti on toilet walls for instance is very different from the graffiti seen on buildings. Each has a different meaning, purpose and style. Many years ago when people were still being killed in the tower of London, you would see many inscriptions that were produced by people awaiting their deaths. These inscriptions were written with their nails or any hard object that was at hand. When such an object was not available, it was not uncommon for a prisoner to use their own blood to inscribe their last thoughts or confessions on the walls. These confessions or thoughts were their last chance to tell the world something very personal.

Ernest Abel (1977) talks about how graffiti is written by people who find the walls of our public toilets the only confessional to which they can address their thoughts and unload their troubled minds. Again the subject on which they write varies, most of the time it was about sex or excrement. He states that the graffiti within these confinements can be related to Freud's theory on psychosexual

thoughts. Compare this to the graffiti that is seen on buildings and you can see there is a completely different culture. The graffiti on the walls has its own language and rules for communication. It also becomes an art form and a passion for many.

Those new to graffiti probably know very little about its point and purpose, as graffiti writers aren't particularly vocal about what they do. Generally when Graffiti is on the television or in the paper it's not usually in a good context it's mostly linked to vandalism.

Graffiti is a "rash on the skin on our city" (Macdonald, 2001:1), yet beneath the surface, is a code that only the graffiti subculture understands. Graffiti has its own language, Tagging for example is a form of communication letting others know they are there or fighting it out on the wall. There are conversations between people who haven't met. Much like the forums on the internet they forge their own identity, a virtual communication. Even without physical contact, interaction is constantly taking place between writers that don't know each other. Graffiti becomes an extension of them self. It could be about self perception, or just playing havoc with the art as an expression of what they feel.

The style and position of the tag is very important, it sends a message about them and their intentions. Writing your tag above another one would let the previous tagger know that you think you are better than they are. This is the beginning of a show down a fight for power. An image with a crown is the artist expressing that they are king; generally this is more to do with Bombing, where a writer competes through productivity and coverage as opposed to artistic competence. Bombing is a bit like a game that becomes your life. It's no use doing it for a year then stopping as you will lose credit and you will be seen as a 'nobody' who came and went. Bombing is not always a mere game of I am better than you. In some places such as America gangs claim areas for them selves by

tagging areas. This of course can cause more than just a graffiti war, as gangs fight for control and power.

With the graffiti language that has been discussed, it is clear that it has developed its own language. The communication and the sharing of ideas are strong parts of Graffiti and its culture. This practice is vital to the survival and progress of any subculture as well. For many subcultures, this social interaction and networking occurs in specialized locations.

Anderson (2003) gives examples of specialized locations attracting individual subcultures. In this account of a Chicago working class neighbourhood, Anderson is able to identify the different spatial locations of the various groups of residents of the community. Gerald Suttles work (1968) in Chicago's slums also documents the extensive use of specialized locations for social interaction by urban residents. In both accounts the authors show that the groups of people develop their own language amongst themselves with their location playing an important role in communication. The Graffiti subculture strongly reflects this social interaction using location to emphasise its message.

As urban space becomes increasingly limited due to competing claims upon that space, it is not surprising that people adapt by looking for, or creating, alternative forms of space, in effect adding new layers of density to the urban landscape. Such processes are evident in the formation of a visual density.

Through the internet a ubiquitous layer is being created, that can be connect to using location based media.

Location based media

Locative Media describes a set of location-based technologies that enable information to be tied to geographical space. These include Global Positioning Systems (GPS), mobile phones, wireless laptops, Bluetooth, wireless networks and RFID (Radio Frequency Identification). These enable people to locate themselves and others within geographical space, while also attaching information to geographical positions.

Most modern mobile devices as well as having location aware capabilities are also able to access the Internet, allowing information to be stored and retrieved from remote databases. The mass proliferation of these technologies has rendered them almost ubiquitous. “What is the metaphor for the computer of the future? The intelligent agent? The television (multimedia)? The 3-D graphics world (virtual reality)? The StarTrek ubiquitous voice computer? The GUI desktop, honed and refined? The machine that magically grants our wishes? I think the right answer is none of the above, because I think all of these concepts share a basic flaw: they make the computer visible” (Weiser, 1993). As technology improves the devices that will be used will eventually be a part of us. There are already experimental designs with ubiquitous computing such as the fridge that orders the weekly groceries according to what was currently in the fridge or “wearable devices that have been used to create proximate selection interfaces for room control” (Hodes, 1997) as well as “personalized room controllers for the disabled” (Ross, 1997). In these systems location is sensed on the wearable either by GPS (for outdoors) or indoors by location beacons.

Why is location important? It is important because humans have instinctive spatial awareness. “We are human beings, embedded in and subservient to the spatial and temporal limitations of a physical reality” (Rondeau, 2005). Humans relate things to where they are and what is around them. If proximity were a factor in digital communications when browsing the internet for instance it would

open up possibilities of finding people with similar interests or related information more easily.

The internet does give us small glimpses of this but it is not something that everyone is aware of. Take Yell.com, a web site that is there for us to search for services by location. This is the very beginnings of what could be a location based service on the internet. Consideration of these ideas outside of the internet is not possible without more understanding of spatial information that is known now. Spatial cognitive abilities play an important role in the use of Geographic Information Systems (GIS).

It is important for us to consider the way GIS is playing a big part in locative media. GIS is a computer system designed to allow users to collect, manage and analyze large volumes of spatially referenced information and associated attribute data. Theses systems are already in use, to map where things are, the quantities and the densities in particular locations. Whilst GIS is most often associated with maps it is however only one way you can work with geographic data in a GIS. With a GIS, you can link information (attributes) to location data, such as people to addresses, buildings to parcels, or streets within a network. These details can be drawn from a database, maps or analytic view models. The cognitive aspects of GIS has focused on the relationship between how geographic information is internally and externally represented by the GIS, how users perceive and conceive of this information, and how users perceive and conceive of features and relationships in the world.

These attributes, coalesced into one item with locative media, would give the possibilities to be able to get information without searching for it. It would in essence come to you, your location would be linked to the data and provide you with information based on your surrounding area.

The term Locative Media was initially proposed by Karlis Kalnins at the RIXC Centre for New Media Culture in order to distinguish the latter creative explorations of the medium from the corporate hype surrounding location-based services (LBS). Locative Media explores the social potential of location-aware devices, inspired by the use of tracking technology, wireless media, human relationships, movement and identity by examining ways in which they can be socially constructive and aid new dynamics to occur within everyday life.

It investigates the intersection of the virtual space of the internet with the physical space of the urban or non-urban environment. Over the last year the term locative media has also been associated with mobility, collaborative mapping, and emergent forms of social networking. They all have one common goal; whether at a tourist site, sporting event or enjoying an activity within your daily routine, they provide the ability to deliver information direct to a user, depending on who they are, where they are and what they are looking at. Inexpensive receivers for global positioning satellites have given amateurs the means to produce their own cartographic information with military precision as opposed to the World Wide Web where the focus is spatially localised, and centred on the individual user.

This has been a major factor in its popularity and use, as more and more applications are being produced. Consumers are already experiencing some early forms of locative media with the use of a mobile phone such as the campaigns to allow the user to find shops and places depending on their location. Semapedia, a tourist information system that links the real world with the virtual world of the internet in a social context, is an example of these new hybrid designs and new media concepts with social navigation.

Initially examining the locative view of this system it is apparent that it would not survive without it. Semapedia's goal is to connect the virtual and physical world

by bringing the best information from the internet to the relevant place in physical space (Semapedia, 2006). They do this by using the internet and its global capabilities to link together physical locations with a Wiki, short for Wikipedia, which is a multilingual Web-based free-content encyclopaedia. With the use of a mobile phone the user takes a picture of the tag and uses the Semapedia software to be directed to a Wiki with information on the location they are in. This is an excellent tool for tourists and is one of many projects bringing locative media to the cutting edge of technology.

Location based media in its own right is an art form, networking information and users together to enhance the users spatial experience with technology. It is fundamentally apparent that for it to survive it needs interaction. Graffiti also needs interaction to have an effect on others, without this it would not survive. Graffiti uses its location to reinforce its message, whether it's a tag on a neighbouring gang's wall or as a powerful message to protest against political values. It is the place where the graffiti is located that adds strength to its message or in some cases, is the message.

Locative media offers a conceptual framework by which to examine certain technological conventions and their potential social impacts. "Locative media strives, at least rhetorically, to reach a mass audience by attempting to engage consumer technologies, and redirect their power. Today, this is more important than ever. We are heading towards what can be termed a ubiquitous network society, one in which networks and networked devices are omnipresent" (ITU, 2005). As technology improves, the use of location based technology will have a major social impact on our society as draw us nearer to Mcluhan's idea of a Global Village. Users will have information not just about their surroundings but also including information on other people around them, allowing them to interact. It is this collaboration that will introduce a new genre to social navigation through the use of location based media. Social Navigation instantly

acknowledges the presence of participants in an environment and their importance in defining it.

Social Navigation

Social navigation examines how a user would navigate information spaces in real and virtual environments, how they orient and guide themselves, and how they interact with and use others to find their way in information spaces. This approach brings a new way of designing information spaces, emphasising the need to see others, collaborate with them, and follow the trails of their activities in these spaces.

Research into social Navigation on the internet mainly focuses on social navigation as a form of usability for web sites, and it is also referred to in talks about spatial cognitive systems. This conjures up new areas of research and new methods of design. Designing from these perspectives, changes the overall approach. For example, instead of designing a dead space with efficient search tools, the space will be designed to be full of people or traces of people. Instead of considering issues like task completion time and how many errors users make, consider issues like whether users are having fun, whether they experience a sense of flow, or feel anxious and lost.

Social navigation originates from the idea that when people need information, they will often turn to other people rather than work it out for themselves, for example, asking people for directions when lost in a city instead of studying a map. The concept of social navigation was introduced in 1994 when “exploring the apparent movement of users on the internet as they become influenced by others: moving towards a cluster of other people, or selecting objects because

others have been examining them would both be examples of social navigation" (Dourish and Chalmers, 1994).

In a computer system, this could refer to a recommender system such as on Amazon's web site. The information is built completely from other user's actions. When a user is browsing for a particular book the webpage will also detail related books that have been bought by others who have bought the same book. The recommendations, along with reviews on the book are forms of social navigation.

Social Navigation could be applied to lots of areas from hypertext to ubiquitous computing. Using social navigation with wearable equipment such as mobile devices or see-through glasses is also a new paradigm in the sense that there could be an overlay between the real world and the augmented world. This overlay could trigger new social behaviour. The book Social Navigation of Information Space (Dourish and Chalmers, 1994) reflects mostly on social navigation within the internet. Can these principles be applied to the real world? Artefacts such as frequently asked questions (FAQ) pages on web sites are used as a form of in-direct social navigation on a daily basis, what form could this take in the real world?

There are many systems that have been implemented that explore aspects of social navigation through mobile devices. One such system is GeoNotes "that allows users to mass-annotate physical locations with virtual notes, which are then pushed to or accessed by other users when they come into the vicinity of the location" (Persson et al., 2003).

Positioning technology is often associated with locating people in geographical space. The GeoNotes system, however, makes use of GIS systems and positions pieces of information. GeoNotes allows for tourist applications, digital graffiti, place-based reminders and other location based-information systems. Whilst Semapedia was placing tags in a real location then referencing them on the

Internet with a Wiki, GeoNotes uses your location and references it to the information stored there. It can not find this information on the internet and you have to be physically there to be able to access the information. This plays with spatial awareness within technology combining both locative media and social navigation.

Many Internet users go online to talk with others as they are not socially equipped to do this face to face. Using GeoNotes as a social activity allows users to leave messages in a location without personal interaction. Will it succeed by creating a social group like Graffiti has or could it actually do the opposite with the confrontation of this technology and create users who hide from others? Graffiti relies on social interaction and aids navigation through its own language. Simple images can let others know that they shouldn't be there or let them know who is boss in that particular neighbourhood. GeoNotes encourages social interaction, as without it, it would not function as it is meant to. It would just become a personal tool for things such as reminders and it would inadvertently invert its ideas and become a reclusive technology. This is unlike graffiti which simply can't be a personal tool due to its abusive nature. It can not stop its effect on others. It is there in plain view for all to see.

As with all new technology there is always a surge of inquisitive people wanting the latest in technology who intuitively follow new concepts and ideas. This is the only way that technology can influence others without direct interaction. As each person discovers and experiences new concepts they are instantly passed on either in person or through the use of the internet like a virus.

The Internet is helping to forge ubiquitous computing using locative media however; the internet doesn't reflect the relationship with location. There are examples of such projects that are beginning to use the web as a tool to socially engage locations and users. The London Bloggers write their thoughts referencing their location using the London Underground map. Over the years, the London

tube map has become more than just a travellers' guide. With world wide recognition it's been re-imagined by artists and adapted by advertisers. It encourages groups of people online to recognise themselves as a real world community and build closer links. Much like Graffiti has done in the real world; it has created a strong form of communication. With People beginning to see that location is important, linking the net to the real world may open up all sorts of interesting possibilities. A location-enhanced web will create an urge to be a part of the world wide community and give them new ways to interact with the world around them. The Internet might be a tool for localisation as much as for globalisation.

Graffiti on the Internet

Technology originated from a necessity to improve living and for communication with such things as radio and the television. It also came from mans quest for the unknown. Currently it is used to aid us and for recreation. MP3 players and mobile phones are just some examples of its integration into society with many becoming household names, such as the Ipod an MP3 player, picture and video viewer. It is very evident that society is dependant on the use of technology; anyone who owns a mobile phone won't go anywhere without it and frequently find themselves checking to see if they received a text message, even though they checked ten seconds ago. It is not just technology that is integral part of our lives; the Internet has established itself as one of the most important forms of communication and as the internet grows it is increasingly changing the participation with everyday tasks. Tasks that were once done mostly through personal interaction, such as banking, shopping, or communication, can now be done online. This is proving to be a seemingly simpler and better alternative.

Technology and the Internet currently go hand in hand, more and more it can be seen that the boundaries are being pushed further and further. Originally connecting to the internet required the use of a computer. Now computers, mobile phones and even the fridge is connected to the Internet. It has become part of our language with such phrases as “Google it” that is heard on a regular basis. Communities talk freely with each other as if they knew each other in person but will probably never meet. Users are able to share their thoughts anonymously with millions. Collaborating together with the use of the mobile phone that can also access the Internet from anywhere.

In these examples it is obvious that it is a positive influence on our lives. It is moving society forward with new ideas and formulas, it is forging new boundaries. The influence of technology and the Internet can also be seen in art and other self expression. With the internet being an integral part of life it is no wonder that is it not consciously separate it from our lives and so it is inevitable that the users express themselves on the Internet in the same way they do in the real world. Flirting, competitive play and graffiti are just some examples of everyday expressions and activities that have made the leap from the real to the virtual.

The Internet has allowed us to communicate and express ourselves in new ways but most importantly it has created a culture. Acronyms, shorthand typing, emoticons, netiquette expectations, flaming, are just a few examples of the Internet culture “Traditional forms of culture and politics are being resurrected, imploded into and combined with entirely new cultural and political modes in a global media culture that is becoming increasingly dominated by the corporate forces of science, technology, and capital” (Best and Kellner, 2001). It is recognized that the emerging cultures are taking place in a world that is saturated with growing technologies, media, and cultural awareness. They are being constructed in new cultural spaces and with innovative forms, entering into enhanced global spaces by

technological advances such as the Internet that help produce alternative forms of culture and political activism such as Graffiti a digital art.

“The 1990s brought us technological development of unprecedented speed for the so called digital revolution” (Paul, 2003:7). As hardware and software became more refined and affordable with the advent of the Internet it added to the concept of global connectivity and the global village. The term Digital art refers to computer art and multimedia art as technology is still entangling itself with digital art it is still moving into new areas. Christiane Paul (2003:8) argues that “for obvious reasons, the history of digital art has been shaped as much by the history of science and technology as by art-historical influences. The technological history of art is inextricably linked to the military-industrial complex and to research centres, as well as to consumer culture and its associated technologies” (Paul, 2003:8)

Digital technology has revolutionised the production and experience of art. Not only have traditional forms of art such as printing, painting, photography and sculpture been transformed by digital technologies and media, but entirely new forms such as software art and net art have emerged as recognised artistic practices.

Net art stood for communications and graphics, e-mail, texts and images, referring to and merging into one another; it was artists, enthusiasts, and techno culture critics trading ideas, sustaining one another's interest through ongoing dialogue. From the very beginning, net artists had grand ambitions. For much of net art's brief history, its practitioners have been self-consciously staking out their collective goals and ideals, exploiting the characteristics distinct to the Internet, like immediacy and immateriality. E-mail, the dominant mode of communication among and within net art communities, enabled anyone who was wired to communicate on equal ground, across international boundaries,

instantaneously, every day. Building an equitable community in which art was conspicuously present in one's everyday activities was a collective goal.

With this formula and today's technology new avenues of net art being explored. Art movements are taking advantage of the Internet such as graffiti artists. Street artists use the Internet to celebrate their craft and to forge links with their peers. But while graffiti's roots lie outside the law, artists who go online consistently work within the rules of the Internet. Graffiti artists have brought the excitement of actually creating street art to the web. Graffiti walls are interactive areas where you can add your own tag or piece, joining a mass collaboration to generate an electronic surface full of creativity.

ZEWALL and Bomb the World are two of the best examples, offering a virtual neighbourhood or a train for the user to create their work on. By allowing the user to choose a location to add their work to it allows the same real world messages to be delivered in a digital world. Just like tagging a street corner in the real world the users can do the same online. Street Memes charts various real world campaigns and tags as they spread through different cities while many more sites invite participation with artists and enthusiast in community web tools such as blogging and photo sharing to document a vibrant and fast evolving scene. Graffiti has crossed the divide to the Internet becoming an important part of users everyday life just like graffiti is to some in the real world.

Digital Graffiti

Digital Graffiti is the combination of location based media, social navigation and Graffiti art; it provides users with a unique digital form of expression. GeoNotes is a simple version of this, integrating social Navigation and location based media with the use of the mobile phone. While GeoNotes relies on interaction using virtual post it notes, Siemens are developing a new application that will enhance the digital space around us by overlaying the virtual on the real and invite users to interact using Digital Graffiti.

“In the future, cell phone users will be able to leave messages anywhere in the form of what might be termed digital graffiti. They will be able to post virtual messages referring to a specific location wherever they are needed. Siemens researchers have now created the technical basis and the computer programs for this digital graffiti service” (Siemens, 2005). As an open and mass-scale annotation system, it allows not only commercial or organisational annotators to add to the information space, but all users. In this way it is more similar to graffiti, toilet scribbles, sticky notes and posters than to commercial marketing channels. Public and private spaces will be cluttered with this graffiti.

“A focal point of the research work was to develop different ways of displaying digital graffiti. For the specialists it was a matter of particular importance to use standard commercial devices to enable the new message system to be implemented quickly. As it turned out, a mobile phone with camera function and a very few add-on devices are sufficient to make the messages visible not just in written form but also in a photo of the vicinity. The really clever trick is that the virtual messages are superimposed on the real world (Augmented Reality). The user can take a picture of the surroundings with a mobile phone camera. The digital graffito is then superimposed on the camera photo” (Siemens, 2005).

These traces of other people create a digital social overlay over geographical space, and thus support social awareness and processes in those spaces. This reflects how Graffiti is in the real world by overlaying images on surfaces that are there interacting with others who are part of the subculture and also those who are not.

As a very large portion of our society own a mobile phone and with such a large corporation building the application it will be much easier for it to become an integral part of our lives. It tries to mimic Graffiti in the real world by using physical locations and allowing the user to Graffiti the digital space. While Graffiti in the real world demands your attention sprayed onto walls, street furniture or public transport, it's an unusually physical form of communication. "Graffiti is a form of communication that is both personal and free of the everyday social restraints that normally prevent people from giving uninhibited reign to their thoughts" (Abel, 1977:3). It's amazing how Graffiti is clearly visible yet only a select few have any idea of what is taking part on the urban landscape. Without even a second look it is regarded as vandalism, just a mess on the wall. Yet behind the mess is actually a meaningful and creative display of communication that is only decipherable to those who can read the message. Digital graffiti is all around us even though you might it is not visible to the naked eye. Like graffiti, to be able to understand and read it users need to know how, however users also need the use of a device such as a mobile phone to be able see it. This is something that affects the strong messages that are being broadcasted. Although this may be a problem in the beginning once it is an established mobile application more users will take part and will know how to be a part of the Digital Graffiti culture.

Digital Graffiti is breaks the traditions of Graffiti by removing the physical interaction and replaces them within a digital interactive environment. Graffiti in the real world is defined by walls, streets and physical locations, Digital Graffiti

uses the physical world but overlays it with a digital layer that is accessible to those who have a mobile phone. Digital Graffiti is an extension of traditional graffiti. There are many artists that are forging new art forms such as Banksy a subversive stunt graffiti artist. He breaks the traditional rules of Graffiti by not hiding behind walls or inside toilets. His work is there for everyone to see right in front of you, sometimes so close that you don't see it. One major difference in his work compared to traditional graffiti you see in cities, train stations and the like is that his work has a different meaning whether it is making a joke of an organisation or it's a personal pledge to fulfil the impossible. An example would be when he put up a piece of work in the Louvre after someone said to him that he would never have his work hanging in the Louvre. His graffiti is not only about delivering a message but also about himself. Digital Graffiti will allow a user to put their work where ever they want with no restraints. A user can walk into the Louvre like Banksy did and simply post there work in the position that they are standing. It gives the user the power to do as they please without breaking any laws but is still able to deliver a message from the user.

Conclusion

Graffiti is on one side the blatant, evident destruction of public property; on the other, the potential to turn any chunk of forgotten wall space into art. It's a thin line, and the responsibility for maintaining an open dialogue about it rests on the community's shoulders. Graffiti allows little opportunity for assimilation. It refuses to be incorporated into the system it was built to fight against. In the eyes of a purist, any attempt to legitimize the art by placing it in a gallery or on a commissioned wall is breaking the fundamental language of Graffiti. Graffiti artists bear a unique responsibility to convey subversive, in-your-face, culturally relevant messages, especially when a public wall is the canvas. The potential for real social enrichment is there for the taking.

Digital Graffiti contrives digital art, location based media and social navigation that is pushing the boundaries of conceptual thinking and creating a new culture, a partnership with many systems at once. Once it is a mainstream application it will be given the opportunity to generate expressional art that is seen by everyone. It needs the application to grow for it to thrive and most importantly participation to even begin. The fact that a user is unable to instinctively scrawl on a chosen surface without the use of a mobile phone and learning how to use the application stop the possibilities of impulsive messages being spread. With Graffiti is doesn’t matter if the artwork isn’t brilliant it can still be a strong message but if you don’t know how to use the Digital Graffiti application, it wont allow the user to make anything.

One thing that needs to be considered is the need to govern the graffiti. In the real world graffiti would be washed off and if caught creating graffiti then there would be a fine or even a jail sentence for vandalism. In the digital world this isn’t much of an issue other than the posting of obtrusive or vulgar images that maybe unlawful. It would seem suitable that as it is digital, it is possible to leave

graffiti in the virtual layer forever thus creating a new mass graffiti art. Graffiti would be everywhere just like wireless networks; unseen but existing in the digital layer surrounding us.

Graffiti struggles to cross the divide from the real to the virtual but it is able to meet in the middle bleeding together to create a new subculture within digital art using the digital layer that thrives on both the real and the virtual. The virtual side is not able to communicate the same message that graffiti in the real world is sending because it isn't really there in person as an act of vandalism. This is paramount to its survival as the vandalism is part of the message. By removing the boundaries such as laws and the need to be on a physical surface and placing them in a digital world with just space, Digital Graffiti is unable to carry the same meaning and thoughts because it can only deliver its message to those who wish to participate. Graffiti has its own social language dependant on its location whether it's on the outside wall of a building or in the confinements of the pub toilet.

Digital Graffiti struggles to evolve beyond a gimmick as far as trying to be like graffiti in the real world but it does have some of the same definitions of language. Those who follow in the Digital Graffiti they can appreciate and translate its message in the virtual world. It will be the at the forefront of technology in the future not just on the internet but using forms of locative media and ubiquitous computing to integrate all the technology into one complete item. However although the meanings are transferable and will carry some weight digital graffiti will not be able to mimic the traditional form of graffiti in the real world. It will eventually embed itself as part of a new artistic form of communication and will be a great way for users to communicate political and cultural messages, but it won't have the background of graffiti a form of vandalism.

In the future these systems will be converged into one and instead of using the internet to buy a book off Amazon and receiving hints on what others have bought you will be able walk into the shop and get hints right from where you are standing. This will be a very powerful tool with targeted information based upon your location and your activities.

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