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PUBLIC ART 2.0:

Developing Shared Platforms for Creativity in Public Spaces

Denitsa Petrova

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Abstract

This research explores parallels, connections and synergies between public art, artistic practice beyond the gallery context, and Web 2.0, the Internet platform for user-generated content, online communication medium and host for web-based communities. I look at the impact, actual and potential, of Web 2.0 on the ways in which public art is made.

Through Web 2.0 a different set of criteria and methods can be established in order to re-examine the practice of art. What can public art learn from Web 2.0? What are the possible debates that Web 2.0 can provoke in the field of public art? What novel forms of audience engagement with, and participation in, public art could be inspired by the practices of co-creation and sharing integral to Web 2.0? Has the relationship between artists and audience changed because of Web 2.0? Web 2.0 prompts us to reconsider the ways in which public art is produced. In my approach I take into consideration that Web 2.0 is useful in expanding the possibilities of public art by providing a unique opportunity for shared creativity in the public space. I call this field Public Art 2.0.

This study considers the attributes of Web 2.0 as a methodological framework for public art. It offers a reconsideration of the understanding of the contentious issues surrounding the practice using Web 2.0 as a platform of shared creativity. To validate this argument further, this research investigates two case studies: the Big Art Mob (2006) and the Bubble Project (2002). Both initiatives represent an area where public art and Web 2.0 intersect. This thesis includes a report of findings from qualitative interviews with members of both projects.

Public Art 2.0 is a hybrid type of practice that borrows from the digital world and applies the principles of Web 2.0 in the physical space. Public Art 2.0 is a creative space where changes are welcomed at any time. Public Art 2.0 is open source — a process of creation, encouraging multi-authorship and shared creativity. Public Art 2.0 is viral — it can be replicated and re-presented many times by anyone that wishes to do so. Public Art 2.0 is a platform that anyone can build upon and a process that enhances the ability to create together.

*Dedicated to the memory of my mother Maria
and my grandmother Dina*

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Preface

The in-betweenness of how and why

In a conference proceedings paper from 2002, the architectural designer and writer Jane Rendell discussed the notion of in-betweenness in relation to her life and professional activities. Having moved homes and countries several times, Rendell talks about how this notion is also reflected in her working life, which occupies a space between classroom, art school, library and a studio. The author discusses her practical and theoretical involvement in disciplines such as art, architecture and writing, and the processes of motion and shifts between observation and interpretation, finding herself “situated very much in the middle of things, in motion, pausing only at specific points” (Rendell, 2002: 221-223).

I find myself relating strongly to these circumstances, having moved homes several times as a child, moved countries, and shifted between my art practice (creating objects which you can touch) and my work as a web designer (creating something virtual). Being in between was often uncomfortable as my creative side was looking for something to fill the gap. In a search for connecting links, I started looking back and inwards. What I wanted was to find something which I could take further with me, to help me develop as an artist, researcher and as a person. Being involved in art as a practitioner and working in the virtual world as a web designer has affected the way in which I perceive the two disciplines. As a result, some of my art works have been specifically created for the virtual space, and at the same time my work for the Web has concentrated on creating more aesthetically pleasing websites, rather than those focused on functionality and advanced programming.

Through this study I set out to construct a bridge between public art and Web 2.0 in order to explore what is “in between”. It is an investigation into how can one engage with the liminal space provided by the overlay of the two areas and how to make connections where none previously existed.

Having to structure this thesis in a coherent fashion, I have shifted between various configurations, being drawn in specific directions by the focus of each particular area, my own interests in it, and the search for the connecting elements that would bring my argument together. Eventually patterns started to emerge; nevertheless my position of “in the middle of things”, as described by Rendell, kept me in “constant motion”.

Whilst researching and writing up, I was very aware that the speed of technological development and tendencies in web design and social media will soon change some of the perspectives outlined in this study. For instance, whilst I was researching the Big Art Mob, the design and the whole interface of the online project changed, and at the time of writing some of the Bubble Project’s Facebook groups were about to be archived. In this dynamic environment, having the flexibility to add and move elements as they change and evolve is perhaps more valuable than keeping them permanently in one fixed structure. This function, however, can only work in a non-print context where data can be constantly changed and updated, i.e., a website or a blog.

Referring back to the notion of in-betweenness, I relate to Rendell’s explanation of the place-between as spatial, as “a mapping of the topographies here, there and elsewhere...A place between is social, it is an articulation of the place of dialogue, ongoing discussion, between one and another” (Rendell, 2002: 221). Although in her paper Rendell discusses this notion in relation to the intersections between art and architecture, this view could be applied to other disciplines which are often perceived as being in opposition to one another. In the case of this research this refers to the practice of art in the *physical* space and processes occurring in the *virtual* Internet environment, facilitated by the properties of Web 2.0. The binary opposites¹ here could be seen as those of the real and the virtual, the individualistic

1 The French theorist Claude Levi-Strauss developed the idea of binary opposition positing that the meaning of a thing derives from the thing’s opposite (Klages, 2006). The French philosopher

notion of art and the idea of shared public space or the openness of the Web 2.0 platform in comparison to the contentious ways through which public art is discussed and created today.

Chapter One

Introduction

1.1 Public Art: Critical Investigation

The idea of public art is a strange one. For some, it is an oxymoron: the distinctive relative autonomy of art seems incompatible with the distinctly non-autonomous demands of the public. For others, it is an article of faith that art should be, and is, more democratic and accessible when placed in the public sphere. The collision of the terms 'public' and 'art' seems to demand justification. (Hutchinson, 2002:online)

The aim of this section is to introduce key debates surrounding public art, which are examined in more detail later in this thesis. I outline a number of key issues surrounding the practice and I argue that, for the most part, public art is actually private art which is artificially interpreted as public art practice. I introduce key terms and theories in the field of public art such as the three key paradigms of public art defined by Miwon Kwon - "art in public places", "art as public spaces" and "art in the public interest" (Kwon, 2004:60); the term "new genre public art" coined by Susanne Lacy (1995); and the distinction between public and private in art discussed by Hilde Hein (2006). This discussion is expanded in Chapter Two: Public Art.

Public art can be any artistic practice which exists outside the gallery context: the term can refer to an object placed in a public space or to a whole streetscape. Public art can exist in streets, rural landscapes, suburban neighbourhoods, enclosed public spaces such as airports, shopping malls, or office buildings. Public art can be permanent or temporary. It may take the form of monuments, earthworks, street furniture, performance, guerrilla art or community projects. Public art means works of art that are located in public places and that therefore are easily viewed (Pearson, 2006). Public art is defined as art that is commissioned, paid for and owned by the State (Mitchell, 1992). Public art is placed

in public spaces and “open to everyone to use and enjoy” (Bach, 2001:153). Public art is important as it gives a sense of place, engages people who use this place and assists in urban regeneration (Miles, 1989).

According to the art critic Miwon Kwon there are three paradigms in public art: “art in public places”; “. Art in public places is described as a sculpture placed outdoors to decorate or enrich urban spaces. Art as public spaces represents less object-oriented and more site-conscious art showing greater integration between art, architecture and landscape through artists’ collaboration with architects, city planners and city administrators. Art in the public interest are projects focusing on social issues rather than the built environment. This type of art involves collaborations with marginalised social groups such as the homeless, urban youths, prisoners (Kwon, 2004). Kwon writes that the three paradigms of public art reflect broader shifts in the practice over the past decades:

...the slide of emphasis from aesthetic concerns to social issues, from the conception of an art work primarily as an object to ephemeral processes or events, from prevalence of permanent installations to temporary interventions, from the primacy of production as source of meaning to reception as site of interpretation, and from autonomy of authorship to its multiplicitous expansion in participatory collaborations. (1997)

In 1995 the artist Susanne Lacy coined the term *new genre public art* which focuses on social issues of the surrounding community. In the anthology *Mapping the Terrain* (1995), Lacy writes:

New genre public art call for an integrative critical language through which values, ethics and social responsibility can be discussed in terms of art. (1995:43)

Later, in 2008, Lacy writes that the term new genre public art was not meant to identify a form of art so much as to pose as “a challenge to a discourse around public art” (in Cartiere and Willis, eds., 2008:18). Lacy lists other terms also in common use in relation to public art: dialogic art, civic art, community-based art, engaged art, relational aesthetics, and art as community cultural development. Lacy writes:

There is a satisfying complexity now: a worldwide exchange of practices, engagement from various theoretical perspectives, and blurred lines between field- and museum-based practices. Complicated interdisciplinary collaborations occur within ever more encompassing social and political contexts, rising new issues, muddying the waters, and then bursting forth with astounding clarity. (ibid.)

In contrast, Cameron Cartiere writes in *The Practice of Public Art* (2008) that public art is simply difficult to define. She notes that the vast umbrella of public art covers permanent and temporary works, political activism, earthworks, community projects, and also “plunk” and “plop” art.

Public art has crept into every corner of our society and perhaps, in part, that is why it is one of the most controversial and misinterpreted art disciplines today. (Cartiere, 2008:9)

Cartiere (2008) also notes that it is only public art administrators and officials that are willing to simply use the term public art to describe municipal, country and state government programs. According to Cartiere, while artists may readily accept a public art commission, in general they are resistant to being identified as a public artist. She points out that this is demonstrated by artists, critics and academics in art journals, referring to work made in the public realm as interventions, socially engaged practice, site-specific works, interdisciplinary activism or social practice art.

Ownership and funding issues also contribute to the confusion of public art's place within fine art. Some “public” artworks are funded by private institutions or individuals and located on public property. Access to public art can also be limited... However, regardless of the limitation on physical access or how public art is ultimately paid for, these projects are still perceived by the public as existing in the public domain. (Cartiere, 2008:3)

The author notes that the lack of a discernible definition of public art is a major barrier to understanding its position within the fine art field. At the same time, taking into account issues such as funding, location, interest and intention, she notes that the terminology to describe public art needs to be as flexible as the medium itself. Nevertheless, Cartiere attempts to define the practice through physical location, connection with the community, funding and public use and her definitions are not very different from those offered by Miwon Kwon (2004) and

Suzanne Lacy (1995, 2008). Cartiere writes that public art is outside museums and galleries and must correspond to at least one of the following categories:

1. in a place accessible or visible to the public: in public
2. concerned with or affecting the community or individuals: public interest
3. maintained for or used by the community or individuals: public place
4. paid for by the public: publicly funded (Cartiere, 2008:15)

In searching for answers to these questions Suzanne Lacy (1995) notes that the void between the words “art” and “public” is an unknown relationship between the artists and their audience, a relationship that may itself become the artwork.

Is public a qualifying description of place, ownership or access? Is it a subject, or a characteristic of the particular audience? Does it explain the intentions of the artists or the interests of the audience? (Lacy, 1995:12)

In an essay entitled “Critical Spatial Practice”, the architectural designer and historian Jane Rendell notes that public art is an interdisciplinary practice that refuses to settle as being simply art or design. Compared to design, a practice which is usually conducted in response to a brief, and to fine art, more normally defined by independence from briefs and instructions, Rendell argues that public art draws on both approaches. It can construct a series of different responses to sites, forming a continuum of practice between art and design. Furthermore, the author notes that by operating in the public sphere, public art is expected to address both art and architecture.

‘You can’t design art!’ a colleague of mine once warned a student of public art. One of the more serious failings of some so-called public art has been to do precisely this, to produce public spaces and objects that provide solutions – answers rather than questions. If there is such a practice as public art, and that in itself is debatable, then I argue that public art should be engaged in the production of restless objects and spaces, ones that provoke us, that refuse to give up their meanings easily but instead demand that we question the world around us (Rendell, 2008: online).

According to Rendell, in many public projects, art is expected to take on “functions” in the way that architecture does, for example to alleviate social problems, comply with health and safety requirements, or to be accessible to

diverse audiences and groups of users. But in other sites and situations art can adopt more critical functions and works can be positioned in ways that make it possible to question the terms of engagement of the project itself (ibid). Thus, Rendell proposes a different term: *critical spatial practice*. It is a type of practice that is “critically engaged; it works in relation to dominant ideologies yet at the same time questions them and explores the operations of particular disciplinary procedures – art and architecture” (ibid.). Critical spatial practice, draws attention then to the “importance of the spatial, but not only the spatial, also the critical” (ibid.). Rendell argues that it is possible to extend the “critical” through practices that involve social critique, self-reflection and social change.

My hope is that the work of artists critically engaging with sites outside the gallery can help develop an equally influential terrain of spatial understanding through critical practice, as well as critique through spatial practice. As Roland Barthes reminds us ‘to criticize means to call into crisis’², an undertaking which our current dire situation as one combining peak oil, global food crisis, climate change and military intervention most desperately needs to generate awareness and the need for action. (Rendell, 2008:online)

Anne Ring Petersen, a professor in Cultural Studies, poses similar enquires about the purpose of public art, also referring to the critical function proposed by Jane Rendell:

Should it be provocative and make headlines in newspapers and newscasts, thus transcending its local context and reaching a large audience? Should it be a political means of facilitating social cohesion or agency among marginalised groups of citizens as some types of interventionist art aim for? Or should it serve practical purposes at the intersection between art, design and street furniture? (Petersen, 2011: online)

Petersen notes that the answers to such questions are as many as there are ways for artists to solve the task of making an artwork for a public site. She notes the problematic division between the viewer and the artwork located in a public space, elaborating on the exchanges that take place between public art and “the residents and other people who are regular users of a particular locality”:

2 Roland Barthes, ‘Writers, Intellectuals, Teachers’ [1971] A Roland Barthes Reader, edited with an introduction by Susan Sontag (London: Vintage, 1982) pp. 378–403, p. 379.

If we wish to articulate how users of a given locality relate to public art, I think we have to designate these users as some kind of audience. Public art is usually made for 'the general public'. The question is: how should we define 'the general public' as a target group for art in the public spaces? (ibid.)

Petersen suggests that in order to answer this question we must move beyond the two common ways of thinking about contemporary art³, which are counterproductive to thinking about art in public spaces. According to Petersen, this is possible if we “stop talking about 'the audience' as a unity and 'the user' in the singular when discussing art that ventures out into culturally and socially diverse and agonistic public spaces” (ibid.). The other important element that would make this possible is to move away from categorising art in public spaces as being either “critical” or “affirmative” and associating the former with potentiality, the latter with limitations.

This kind of critical dichotomisation surfaces even in writings by such distinguished experts on public art as Rosalyn Deutsche and Miwon Kwon. Kwon advocates what she calls “interruptive” radical art and considers such art practices to be socially and politically transformative. Conversely, she rejects “assimilative” and allegedly harmonising art that is complicit with the people in power and therefore presumed to be a gatekeeper of existing social systems and the status quo. (ibid.)

Petersen notes that one of the most important questions on public art should be how the general public relates to it. Referring to Hannay (2005:30), Petersen notes that the term “the general public” is used as a socially and culturally inclusive designation of “the public”, as an audience consisting of all the people living in a society. As opposed to 'an audience', 'a public' is only properly so called when a transition has been made from a private to an 'open' event, that is to say, accessibility is an important parameter here. (ibid.)

Being part of the general public means that one can move freely in the public space and public spaces are where you find the public. Thus, “art in public spaces

3 According to Petersen, we should not think about 'the audience' as a unity and 'the user' in the singular when discussing art that ventures out into culturally and socially diverse and agonistic public spaces. A common type of criticism is one that categorizes art in public spaces as being either 'critical' or 'affirmative' and associates the former with potentiality, the latter with limitations. (ibid.)

can be one of the ties that link people together as 'a general public' that shapes an opinion" (ibid). Petersen argues that public art should "address the 'general public' as a heterogeneous and diverse public" (ibid.). In addition, she notes that artworks should focus on the daily users of public urban spaces, not as mere spectators or private individuals, but rather as "a public". This approach is also considered by Miwon Kwon as "art in the public interest" (Kwon 2004)⁴.

The curator and writer Hilde Hein explains that public art presupposes the public sphere and produces a public in relation to that concept (2006:49). She talks about "public" and "private" as correlative and covariant terms set in contrast on a scale of human construction.

They do not exclude but entail one another, for a public is composed of elements that presuppose a whole, and privacy is defined relative to the public from which it secedes. (2006:24)

She argues that public art constructs a public and that

If private art suggests an intimate exchange, public art gathers a congregation...all art is to some degree public, public art merits its name in virtue of the fact that creation of a public is its points of departure. Public art presupposes the public sphere and produces a public in relation to that concept. (2006:49)

Hein notes that unlike popular art, public art does not assume a pre-existing generic audience to be entertained, but rather sets out to forge a specific public by means of an aesthetic interaction. Despite that fact that critics and historians situate art within a substantive social history and environment, art is perceived as being produced by a solitary individual and as the result of purely aesthetic inspiration (Hein, 2006).

The aesthetic dimension that sanctifies private art is pushed to the background by the social and other short-term factors involved in creating and protecting public art. Although they are not irrelevant to its judgement, the features that attract critical attention to private art receive comparatively little notice in discussions of public art. (Hein, 2006:36)

⁴ I discuss in details the types of public art as described by Miwon Kwon in Chapter Two, Public Art.

Hein employs the expression “nonprivate art” as a contrast to art that is produced by the individual for limited display to be experienced by other individuals. In nonprivate art, according to Hein, aesthetics are not ignored but they are secondary to what the work signifies, where it is situated and who pays for it. In contrast to private art, public art is more likely to be remembered for what or whom it commemorates (2006:36).

Melanie Jordan and Malcolm Miles write that the public of public art is “imagined to be the ‘general public’ of the bourgeois disintegrated public sphere, which no longer exists” (2008:117). The authors note that the public sphere has been instrumentalized by business and public relations and that

...public art has become an adjunct to the economic and cultural system, though tourism, town planning, regeneration and the heritage industries. Public art, like the public sphere in general, has been privatized; it is produced for private interests, paid for by or on the behalf of the business and it is attended to by individuals who fail to add up to a public. The public of public art is a nostalgic fantasy. (ibid.)

Discussing public art, the art historian Cher Krause Knight (2008) criticises the limited perspectives through which the practice is defined. She notes that there is much emphasis on physical location, using the words of Hilde Hein:

The sheer presence of art out-of-doors or in a bus terminal or a reception area does not automatically make that art public – no more than placing a tiger in a barnyard would make it domestic animal. (Hein, 1996, cited in Knight, 2008: preface).

Knight suggests that it is best to understand art’s public functions when there is a consideration of the interrelationship between content and audience: “what art has to say, to whom it speaks, and the multiple messages it may convey” (ibid). She proposes an understanding of the practice through the interpretations of the French artist Marcel Duchamp, who suggested that the viewer must complete the creative act and that without someone to interact with the art the artistic process is forever unfinished (1959). Knight refers to Duchamp’s analogy of art in its “raw state” as molasses, which is “refined” into pure sugar by its spectators (Duchamp,

1959). This idea signifies a more involved relationship between the viewer and the work, which is also the basis for participatory art practice.

The context in which participatory public art has been discussed by theorists within the realms of the new genre public art, signify a move away from the work of art as an object in the public space. The art historian and curator Kristian Kravagna provides a brief history of these shifts:

...after public places were initially rather randomly beautified with autonomous art works, the next step led to site-specific artistic interventions oriented to the architectonic, spatial conditions. Following the work and the place, now in a further step the social aspect, a local population (group), minority or “community” is shifted to the center. (1999:online)

Kravagna notes that the concept of a participatory practice is distinct from two others – interactivity and collective action. Interactivity allows reactions that influence the work. Collective practice relates to the conception, production and implementation by many with “no principle differentiation among them in terms of status” (ibid.). He also notes that participation is based initially on “a differentiation between producers and recipients, is interested in the participation of the latter, and turns over a substantial portion of the work to them” (ibid.). In contrast, interactive situations only address an individual. However, Kravagna also acknowledges a higher level of participation, where the active involvement of the people in the origination of the work is essential. He borrows a quote from the British artist Stephan Willats:

I consider that the audience of the work of art is as important as the artists, and that the active involvement of people in the origination of art work is an essential part of the process of generating interventions in the social process of culture. (Willats, cited in Kravagna, 1998:online)

Kravagna explains that there are two important elements to this understanding of participation: the audience is now a co-producer integrated in the origination of the artwork. The audience is also part of the interventionist social process and “the scope of action is beyond the art context itself” (ibid.). Such projects are works that are

...less concerned with the abstract idea of “participation” as some kind of logical successor to the “death of the author”⁵, but are instead oriented from the start primarily to the concrete life context of the people that take part in them, and they always aim to change these circumstances of life. (ibid.)

Thus, Kravagna concludes that participation is more than just expanding the circle of recipients. The participants become “constructive factors of content, method and aesthetic aspects” (ibid.). Such a change where the borders between art and life are bridged by recipients turned co-creators is also conveyed by Alan Kaprow’s notion of “Doing life, consciously” (1993:195); the “author as producer” (Benjamin, 1998)⁶; and the Fluxus manifesto⁷ that everyone can practice art (1963).

In her book “Artificial Hells”, Clair Bishop (2012) argues that the debates surrounding contemporary social art practices have become intertwined with the ethics of using people as material, permitting “everything to be a potential subject or material for art, everyone to be a potential viewer of this art, and denotes the aesthetic as an autonomous form of life” (2012:29). According to Bishop, the role of the artist is to take a challenging position, highlighting tensions, something which is normally inhibited by an aesthetic opposition being maintained between artist and participant. In doing so she advocates for disruptive public art, “one in which artistic strategies of disruption, intervention or over-identification are immediately ruled out as ‘unethical’ because all forms of authorship are equated with authority and indicted as totalizing” (2012:25).

5 The notion of loss of singular authorship relate to the studies of the French philosopher Jacques Derrida, who argues that author and text are unrelated. He challenges the notion of unchanging meaning of a text, noting that that it might have numerous legitimate interpretations. Once the text is completed the author’s input is finished. In an essay titled “The Death of the Author”, the French theorist Roland Barthes argues that author and text are not related, noting that to give a text an author is to impose a limit on that text (1968). Barthes calls the author a scriptor in order to separate the traditional understanding of authorship and its connection with authority. According to Bathes the scriptor is born simultaneously with the text and it is not equipped with a being preceding or exceeding the writing.

6 In 1934, the German critic Walter Benjamin wrote “The Author as Producer.” He challenged the traditional views of authorship as a purely literary activity. Benjamin argued that new forms of communication such as film, radio, advertising, press were melting dissolving traditional artistic genres and corroding the borders between writing and reading and authoring and editing.

7 Fluxus is an international network of artists, designers and composers from the 1960s.

Public art has come a long way since the debates around controversial cases such as that of Richard Serra's *Tilted Arc* (1981).⁸ And yet it appears that through its numerous interpretations, definitions and expectations public art has reached a polluted state. Cartiere and Willis rightly ask "When did *public art* become akin to a dirty word?" (2008:1). It seems that the term is used to describe state programs and justify finding, but professionals in the field are resistant to being identified as public artists. For the most part public art is private practice, despite numerous justifications for its "publicness". The artist and writer David Harding calls for public art to be a "broad inclusive church" (1997:16), but it appears that public art divides, despite its attempts to connect artists, communities and physical space.

The high expectations placed on the ability of public art to resolve social and political concerns have made the concept essentially bankrupt. Lack of perceptible definition is an issue, but since we use the term to describe so many types of art do we really need just one definition to sum up them all? A possible solution is offered by Jane Rendell who offers the term *critical spatial practice* (2008). Hilde Hein suggests *nonprivate art* (2006). Perhaps a flexible and open interpretation would be more appropriate. This way artificial interpretations of the practice, used to justify funding, might be avoided. Through a range of case studies, I address these issues further in Chapter Two. In the same chapter I also explore projects providing alternative approaches to the art practice and thus call for a more panoramic understanding of what public art is.

In seeking solutions to these issues, I have approached the largest public platform today – the Internet in its Web 2.0 version. I explore the parallels, connections and synergies between public art and Web 2.0 and examine the impact, actual and potential, of Web 2.0 on the ways in which public art is produced and discussed.

⁸ The large scale sculpture was placed on the Foley Federal Plaza in New York and attracted much criticism as it was seen as an obstacle to those who used the plaza. After much public debate the *Tilted Arc* was removed from the location in 1989. I discuss this case in detail in Chapter Two.

1.2 The Site of Public Art: A Debate on Public Space

The intention of this section is to examine the site of public art, i.e. the physical public space and to draw parallels with the Internet as an alternative to the physical space and as a phenomenon that has disrupted the traditional understanding of the public sphere.

Rosalyn Deutsche (1998) argues that the term public is accepted as having democratic connotations:

The term "public" has democratic connotations. It implies "openness," "accessibility," "participation," "inclusion" and "accountability" to "the people." Discourse about public art is, then, not only a site of deployment of the term public space but, more broadly, of the term democracy. (1998:online)

The context outlined by Deutsche for considering public space moves away from the traditional understanding of links between site and object. Furthermore, it prompts a reconsideration of this relationship in the context of social meaning, rather than geological terms. The author elaborates on the term public space as a

...component of a rhetoric of democracy that, in some of its most widespread forms, is used to justify less than democratic policies: the creation of exclusionary urban spaces, state coercion and censorship, surveillance, economic privatization, the repression of differences and attacks on the rights of the most expendable members of society, on the rights of strangers and on the very idea of rights. (ibid.)

Thus, Deutsche considers public space to be a democratic concept, crucial to cities, and "space" as a neglected term of public art discourse in need of attention. Basing her argument on Heidegger's definition of the constructed nature of space⁹, Deutsche describes space not as a given entity but rather something that it is "made room for." Furthermore, the notion of space is examined not as an entity but as a relationship, and also as a concept, based "not on location but on the performance of an operation" (ibid.).

⁹ Space is not a given entity; it is "made room for." The boundaries that enclose a space are not generated by a pre-given ground. They are not the natural limits of an interior whose identity derives from an internal property or presence. Rather, space is the effect of marking off boundaries, which generate the sense of an interior, are inseparable from the interior (Deutsche, online).

Dewey (1927) argued that “public” suggests citizenship, commonality and things which are non-private and accessible to all. He insisted that group debate was more important than the decisions of a single authority. He claimed that strangers constitute a public because of a shared condition and a shared interest in addressing their condition. In particular, strangers constitute a public when they share the indirect consequences of the acts of others. This notion was based on the premise that individual acts have two types of consequence: direct consequences are "those which affect the person directly engaged in a transaction," while indirect consequences are "those which affect others beyond those immediately concerned" (1927:12). According to Dewey, the public “consists of all those who are affected by the indirect consequences of transitions to such an extent that it is deemed necessary to have those consequences systematically cared for” (1927:15,16). According to Garnham (1986), the public sphere is a network of media, educational, knowledge and opinion-forming institutions within civil society whose operation is conducive to the emergence of public opinion as a political power.

Referring to the perception of the public sphere, described by Jürgen Habermas as a set of institutions in which private citizens gather to formulate public opinion that may be critical of the state, Deutsche separates “audience” from “public”, where the latter is formed when citizens engage in political discussion. Consequently, the meaning of “public” in public art shifts away from the site or the work as an object, and focuses on its effect. Habermas analyses the public sphere as a

...network for communicating information and points of view...the streams of communication are, in the process, filtered and synthesized in such a way that they coalesce into bundles of topically specified public opinions. (1996:360)

Habermas situates the public sphere between private households and the state, as a space “where free and equal citizens come together to share information, to debate, to discuss, or to deliberate on common concerns” (ibid.).

Sheikh (2004) criticizes this notion, by suggesting that the public sphere needs to be viewed as something fragmented, as “consisting of a number of spaces and/or formations that sometimes connect, sometimes close off, and that are in conflicting and contradictory relations to each other” (2004:online).

Garnham (1986) notes that Habermas’ ideas of the public sphere recognize the impossibility of an ideal public sphere and the limits of human civilization, but still strive towards it. Carey (1995) argues that privatization and mass commercial culture have replaced the public sphere. Putnam (1996) attributes the decline of a current public to television, as it induces a passive outlook on life. Oskar Negt and Alexander Kluge conclude that our interactions as subjects with the public spheres are dependent on experiences:

Federal elections, Olympic ceremonies, the actions of a commando unit, a theatre premiere - all are considered public events. Other events of overwhelming public significance, such as childbearing, factory work, and watching television within one’s own four walls, are considered private. The real experiences of human beings, produced in everyday life and work, cut across such divisions...the weakness characteristic of virtually all forms of the bourgeois public sphere derives from this contradiction: namely, that [it].... excludes substantial life interests and nevertheless claims to represent society as a whole. (Negt and Kluge, 1993, cited in Beaumont et al., 2007)

Sheikh (2004) suggests that the concept proposed by Negt and Kluge is far more valid, as they place the emphasis on the notion of experience, allowing them to analyze modes of behaviour and possibilities for speech and action in different spaces (ibid.).

Similarly, de Certeau’s understanding of everyday practices focuses on spaces, on inhabiting them and connecting with them via memories, observations, via social behaviour attempting to reclaim independence from the invasiveness of one’s surroundings, contested with commercial and political meanings. In exploring how people can reclaim a sense of autonomy from these forces de Certeau suggests “social activity at play with the order that contains it” (1984: xxiv). He continues:

These ways of reappropriating the product-system, ways created by consumers, have as their goal a therapeutics for deteriorating social relations and make use of techniques for re-employment in which we can

recognize the procedures of everyday practices. A politics of such plays should be developed. (ibid.)

In *Right to the City*, Don Mitchell discusses public space in the contemporary city as having been radically transformed in the name of security, prompting new strictures on behaviour, which are both expected and provoked by certain signs prominent within the city.

...face-recognition cameras on lamp poles; police or security officers on every corner; dogs and their handlers roaming the squares and parks; reinforced more bunker-like buildings; traffic restrictions sensitive to changing conditions (through the use of automatic barriers they can rise up through the pavement and close off streets nearly instantly. (Mitchell, 2003:10)

In seeking answers to the question who has the right to the city and its public spaces, Mitchell refers to Anthony Vilder's vision and a call to

...search for design alternatives that retain the dense and vital mix of uses critical to urban life, rethinking the exclusions stemming from outdated zoning, real estate values and private ownership. (Vilder 2001, 4:6, in Mitchell, 2003: 5)

Mitchell underscores this statement by calling for remaking of the city "in a more open and progressive light", rethinking exclusions, and establishing a different kind of order built on the needs of the most marginalized residents (2003: 9, 10). Furthermore, the author refers to Henri Lefebvre's argument that the right to the city is "like a cry and demand", stating that "Now, more than ever, that cry, that demand, must be heard. And it must be put into practice" (Mitchell, 2003:11).

Rob Shields suggests that "the city itself can be treated as a representation of the society which constructed and used it" (Shields 1996, cited in Miles, 1997:14). Similarly, John Short discusses the city as a dynamic entity: "The city is a metaphor for social change, an icon of the present at the edge of transformation of the past to the future" (Short, 1991:41). This begs the question of the politics of occupation and more specifically, as discussed by Zukin, "who has the right to inhabit the dominant image of the city" (1996:43). Miles (1997) and Wilson (1991) focus the answer on providing the freedom and autonomy for urban dwellers to question the

values of city development, as only then “the relation of urban form to social value, the unpacking of the underlying concept of the city, is the point of departure” (Miles, 1997:38). Mitchell discusses contemporary trends in the content and shape of public space today as those “moving toward the sort of mall-like public spaces...toward a sort of suburbanisation of downtown” (2003:10). The author points out that even some of the newest developments today are “modelled not on an ethic of interaction but in an ethic of seamless, individuated movement and circulation: public interaction based on the model of commodity and capital flows” (ibid.).

Two main perspectives can be drawn from the much debated notion of public space. The first perspective relates to those elements of the built environment, such as parks, urban squares, streets, or cities as a whole, which the public have unlimited access to. The second view is associated with the social characteristics of a space, or, as described by Sennett, the “...region of social life located apart from the realm of family and close to friends, but also ... [the] realm of acquaintances and strangers” (Sennett, 1992:17).

Rosalyn Deutsche (1998:online) comments on this division further by noting that public space can also be defined as a set of institutions, where citizens engage in debate and “...space where rights are declared, thereby limiting power; or as the space where social group identities and the identity of society are both constituted and questioned” (ibid.). Similarly, Sharon Zurkin (1996) notes that the most prominent and defining characteristics of public space are proximity, diversity, and accessibility. Dines and Cattell (2006) define public space as an essential component in ensuring positive social relations and it is even perceived as a key element of democratic health.

According to Rob Shields (1996) public spaces, like a city itself, can be considered representations of the society that develops them and uses them. Civic architectural structures become “collective expressions of a city as well as depositories of personal memories...imbued with important, collective meanings”

as noted by Jeffrey Hou (2010:2). Similarly, Henry Lefebvre (1967, in Kofman and Lebas, 1996:34) discusses the human right to interact with the public space, "as an urban dweller... and user of multiple services". Lefebvre points out the importance of the, "...right of users to make known their ideas on the space and time of their activities in the urban area" (ibid.). In the same fashion, Yigal Tzamiir (1979:85) discusses the public space network as simply the physical skeleton of public life, thus "...the social significance of public places has to be understood and given the necessary emphasis if their roles as settings and catalysts for social interaction are to be maximised" (Ling and Tan, 1992:80).

Rosalyn Deutsche (1998:online) examines the term "public" as one that should carry democratic connotations and imply "openness, accessibility, participation" for the people. Yet Deutsche criticizes the contemporary arrangement of public space today and more specifically the creation of exclusionary urban spaces, surveillance, privatization and censorship. She refers to space as a relationship, rather than an entity and quotes the architecture historian Mark Wigley, who states that "there is no space without violence and no violence that is not spatial" (in Deutsche: 1998). Therefore, Rosalyn Deutsche concludes, space is contested with political meaning since it is constructed with the power of exclusion.

Over the past few decades, we have witnessed major changes in our cities' skylines as the result of advances in transportation, infrastructure, and technology. At the same time, public space has changed due to growing privatization, with an increasing number of areas in the city now having limited public use. Jeffrey Hou (2010) notes that streets, neighborhoods, and parks are transformed into malls, gated communities, and corporate venues, and thus public space becomes subject to commodification and control. He further observes that in emulating urban spaces of the past, traditional streetscapes and town squares are "...reproduced, but segregated from the city, to create a supposed safe haven for shoppers and business" (Hou, 2010: 6). Although their appearance may be closely modeled on

similar public spaces from the past, their function and meaning as a public space have become exceedingly limited.

Similarly, John R. Short (2006:41) points out the form of the city is constantly evolving, as a "...metaphor for social change, an icon of the present at the edge of the transformation of the past to the future". Open and accessible social interaction in urban spaces today is challenged by marginalization and everyday activities, often perceived as routine and negative, alienating people from one another and creating obstacles to interaction. Elizabeth Wilson (1995:online) illustrated this point by writing that "...the whole world becomes like a nineteenth-century department store when televised shopping invades the home". Hou (2010) discusses an important point in relation to the increased level of consumerism in today's globalized world. He criticizes those supporters of globalization who argue that neither McDonalds, nor Coca-Cola, nor Nike are forcing people into consuming or using their products; people do so simply because they wish to. Although this might be true, Hou argues that it is the unchallenged dominance of huge corporations that prevents countries from building up and supporting their own industries. Furthermore, the *free* choice that people believe they are making when making a purchase is based on the endless verbal and visual repetition of brand names in all types of medium in our public and private spaces; through banners, radio and television advertising, and product placement. The products of exaggerated marketing campaigns are everywhere around us, attempting to sell anything to anyone who will buy. Referring to Hou (2010), reactions against these processes may only come from people who wish to support diversity across our branded planet from the ground up, in real places and from real people who can create real culture. The author refers to such processes as "the adaptation and reuse of abandoned and underutilized urban spaces for a new and collective functions" (Hue, 2010:13). Furthermore, he points out that "citizens and activists are reclaiming and creating places for temporary, informal gathering in urban cities across the globe" (Hue, 2010: i), and by doing so are challenging how we define public space.

The communication technology scholar Zizi Papacharisi (2002) writes that when thinking of the public, one envisions open exchanges of political thoughts and ideas, similar to those that took place in the ancient Greek agora. According to her, the term “public” denotes ideas of citizenship, commonality, and things not private, but accessible and observable by all. Papacharisi notes that the “idea of ‘the public’ is closely tied to democratic ideas that call for citizen participation in public affairs” (2002:10).

Jones (1997) argues that cyberspace is the “new public space” made by people and “conjoining traditional mythic narratives of progress with strong modern impulses toward self-fulfillment and personal development” (1997: 22). Papacharissi clarifies that a new public space is not synonymous with a new public sphere.

As public space, the internet provides yet another forum for political deliberation. As public sphere, the internet could facilitate discussion that promotes a democratic exchange of ideas and opinions. A virtual space enhances discussion; a virtual sphere enhances democracy. (2002:11)

Papacharissi writes that it is more meaningful to view the public sphere as a metaphor suggesting “a mode and ideal for civic participation and interaction, as Habermas originally intended” (2009:234). Thus, she argues that within this context, online media, including the Internet, could host a virtual sphere or revitalize the public sphere.

The historian Mark Poster (1995) argues that the term public must be reconsidered in light of electronically mediated communications, and the Internet in particular.

Now the question of “talk,” of meeting face-to-face, of “public” discourse is confused and complicated by the electronic form of exchange of symbols. If “public” discourse exists as pixels on screens generated at remote locations by individuals one has never and probably will never meet, as it is in the case of the Internet with its “virtual communities,” “electronic cafés,” bulletin boards, e-mail, computer conferencing and even video conferencing, then how is it to be distinguished from “private” letters, printface and so forth? The age of the public sphere as face-to-face talk is

clearly over: the question of democracy must henceforth take into account new forms of electronically mediated discourse. (1995:online)

The Internet has clearly disrupted the traditional understanding of what is public and what constitutes a public sphere. In light of the evolution in social media, this enquiry becomes particularly pertinent. I explore it further in Chapter Four.

1.3 Art, the Internet and New Media

Some of the possible connections between art and the Internet have been explored through research on net art (Galloway, 2004; Green, 2000; Stallabrass, 2003; Chandler, 2005; Bosma, 1998). Net art, also known as Internet art, has been a focus of investigation since the nineties, where the first net art projects appeared at the same time as the emergence of the Web browser. The term has been used to describe any type of artistic practice within the Internet which utilises browser interfaces, email, or any Internet-related communication protocols (Galloway, 2004: 211). Rachael Green describes net art as a practice which encompasses

...communications and graphics, e-mail, texts and images, referring to and merging into one another;...net.art meant online détournements, discourse instead of singular texts or images, defined more by links, e-mails, and exchanges... (Green, 2000:online)

Net art has its own site specificity — the Internet itself, as experienced via a website or a browser. Therefore, its relationship with the physical world is irrelevant, as net art essentially focuses on the non-physical, either in terms of aesthetics, or in terms of the way in which the project itself is realised. According to Stallabrass (2003), Net art explores the character of this new, dematerialized online art and the environment in which it exists, and, furthermore, it

...addresses its own medium; it deals with the specific conditions the Internet offers. It explores the possibilities that arise from its taking place within this electronic network and it is therefore Net specific. (Baumgartel 2003, cited in Corby ed. 2003:2)

Likewise, Chandler (2005) discusses Net art as distance art, a networked practice which started long before the appearance of the Internet, with mail art and

radio art effectively challenging the widely established idea that net art is technologically determined. In doing so, Chandler moves closer to the contemporary understanding of creative practice on the Internet by suggesting that the fundamental element of Net art lies in its network properties. Bosma (1998) discusses Internet art as a practice carried out through five technology generations, the first of which used other forms of electronic connectivity, such as fax and videotext.

New media art, which extends beyond the boundaries of the computer screen, is defined as “...any contemporary art that uses new media technology – covers the fields of Internet art, CD-ROM, certain kinds of installation art, digital video, electronic games and Net radio” (Galloway, 2004: 211). Virtual environments, sound engineering, digital animation and 3D virtual environments have all become arenas explored by many artists today. Mark Tribe points out that new media demonstrates a constantly shifting frontier of experimentation and exploration, attracting innovators and risk takers (Tribe, 2001: xii). The author explains that “as a result, some of the hottest creative minds spend their time hacking around with new technologies. In this sense the new media artists today have much in common with the video artists of the early seventies” (ibid.). The artist Maurizio Bolognini (2009), however, points out an important distinction between media art and new media art and he separates the two definitions into technological and neo-technological art.

Bolognini notes that the post-digital character of artistic production is reflected not only in the shift in some artists’ interest towards other technologies (such as bio- and nanotechnologies) but also in the pervasive presence of digital technologies. He argues that the neo-technological art lies at the intersection between creative practice, research and media activism and it is a type of practice that moves from interactivity towards democracy, or, as he also calls it, “public generative art” (Bolognini, 2009: online). In order to demonstrate this distinction, the artist uses one of his own projects, *Collective Intelligence Machines*, as an example. This consisted of large-scale video projections which the public was able

to modify in real time by using Short Message Service (SMS) from their own mobile phones. Bolognini comments that

This enabled me both to redefine the device by including the action of the public, and to connect, again via the telephone network, various geographically distant locations, making interactive and multiple installations. What I had in mind was art which was generative, interactive and public. I am thinking of installations at the crossroads between generative art, public art and mobile electronic democracy - participation technologies via mobile communication. (ibid.)

It is clear from this that he is concerned not only with the relationship between the participants and the digital device, but also between each one of them and the “expanded device”, essentially describing the hardware, the software and the public. This type of new media work is more closely related to the scope of this investigation, due to its properties for establishing closer connections between a work and its audience and narrowing the gap between viewer and creator. Nevertheless, neither new media art nor Net art are examined in detail in this study, as they do not, *essentially*, focus on the physical environment and they are not considered public art practice.

1.4 Why Web 2.0?

Web 2.0 has emerged in the past decade as an Internet platform for user-generated content. It focuses on content sharing and collaboration through web applications such as social networking sites, blogs, wikis, media sharing sites and collaborative tagging. Web 2.0 is an online platform, shaped by its users through sharing images, text, videos and music.

This research offers a re-consideration of the understanding of the contentious issues surrounding the practice of public art via the philosophy and structure of Web 2.0, as the platform facilitates dialogue and the exchange of ideas between those creatively engaged with public space. It considers how the Web 2.0 platform can be useful in expanding the possibilities of public art. Web 2.0 provides

unique possibilities to share the creative processes, which gives rise to new means of public discourse through public art. I call this field Public Art 2.0.

Due to the way Web 2.0 supports creativity through participating and sharing, the platform prompts a re-consideration of the definition of the contested term *public art*. Given this, the combination of the two words — *public* and *art* — should be seen not as an oxymoron, but as a new, collaborative type of practice in public space. The term *public* denotes openness, accessibility and participation, while *art* is often related to the notion of individual creativity. This research proposes that Web 2.0 can resolve some of the issues surrounding public art by dint of its virtual nature and the way in which the platform supports participation and co-creation. As the Internet continues to penetrate every aspect of our lives, the distinction between the real and the virtual continue to merge. The art theorist Miwon Kwon defines the essence of behaviour of digital environments as “... spatial experience on the computer structured more as a sequence of movements and passages, and less as the habitation or durational occupation” (1997: 95).

Without disputing the innumerable benefits that digital communication technology provides, as the virtual world continues to penetrate our lives the need for real social interaction in the physical world will become greater. This research presents the opportunity to examine works of art created for the public realm which facilitate social interaction by using digital tools for communication.

The curator and writer Christiane Paul (2008) notes that electronic networks have brought about formal redefinitions of what we understand as “public” and opened new spaces for artistic intervention.

So-called “public art” has a long history, and the term have traditionally been used for art that is displayed in public spaces existing outside of a designated art context (in this sense, the museum and gallery are not public spaces); or for public performative events. ...Affordable software and hardware, the Internet, and mobile devices such as PDAs (Personal Digital Assistants such as Palm Pilots) have brought about a new era for the creation and distribution of media content. The utopian promise of this era is “technologies for the people” and a many-to-many (as opposed to one-to-

many) broadcasting system that returns the power over distribution to the individual and has a democratizing effect. (2008: 163-185)

Investigating the significance of digital tools for communication, Paul Dourish (2010) writes that they must be understood in the context of social practices that render them meaningful in particular settings. Dourish points out that when these technologies are considered within the light of understanding the social organisation of space, the focus moves towards encounters that make up the social glue by which people are connected (2010). At the same time, research into encounters in public places shows that features of built space can hinder rather than facilitate these shared experiences, and that media and technology can be used to replace benefit lost in spatial setting (Garcia, Foth and Hearn, 2010: 224-225). Referring to the historian Lisa Gitelman, Henry Jenkins writes about a model of media which works on two levels — the first is a technology that enables communication and the second one is defined as a set of associated social and cultural practices which have grown up around that technology (Jenkins, 2006:13). The moment when a new set of social and cultural practices grow because of technology, the technology adapts and thus provides a conversation in process, not an endpoint. In turn, our relationships change because of the processes that technology enables. This is particularly apparent when examining how Web 2.0 has opened up new lines of communication and sharing as a public platform which improves as more and more people become involved. The principles around Web 2.1 are organised in order to allow emerging creativity, and are based on the process of sharing and participation. The ideas of sharing and the common use of resources have been revived through Web 2.0, and this in turn prompts us to reconsider the use of physical space and the idea of the commons¹⁰. For instance, Charles Leadbeater highlights this argument in his recent book *We Think*: "...[a] commons belongs to a community – sometimes a tightly defined community, sometimes everyone – and is usually governed by common consent of the people using it" (2009:49).

¹⁰ I discuss the notion of commons and digital commons in Chapter Four.

Referring to Hardin (1968), Leadbeater discusses the criticism of the commons as a system that would fail because of being overused as a shared resource (2009: 51).¹¹ If we engage the same way of thinking about public art as both a practice and a discourse, we may be able to see it as a creative tool which enhances public expression and is able to establish creative forms of socialisation.

In his book *Making is Connecting* (2011), the media and communication scholar David Gauntlett summarises a number of key principles of shared creativity as a process in which people are viewed as active participants in the process of “making and sharing”.¹² He notes that this process, especially online, is invaluable for human happiness: “Communication, exchange, and the production of everyday life, ideas, and community, is much more rewarding” (Gauntlett, 2011:223).

The final two principles, as outlined by Gauntlett, are related to the role of creativity as social glue and humanity’s desire to make its mark in the world and shape the environment in which they live. In this respect, the author notes the importance of Web 2.0 platforms remaining open to audience participation and inviting creativity as much as possible.

The media scholar Olga Goriunova (2011) notes that cultural production on the Internet has resulted in numerous “dynamics and consistencies” (2011:24) that drive considerations of creativity. She proposes that we rethink creativity “as thick (like a fog or like flesh), chaotic, ‘dirty’ and conflicting, as a force of aesthetic desiring production that becomes both conceptual and subjective at a very late moment of its unfolding” (ibid.). Goriunova argues that such creativity is crucially self-organising and suggests the concept of *autocreativity*.

Autocreativity is a means beyond the determination of technics according to need and utility. It provides for the emergence of new

11 I revisit Charles Leadbeater and his argument on the emergent culture of sharing and collaborative creativity in Chapters Four.

12 The five key principles of shared creativity as defined by David Gauntlett are: a new understanding of creativity as process, emotion, and presence; the drive to make and share; happiness through creativity and community; a middle layer of creativity as social glue; making your mark, and making the world your own (2011:217). I revisit Gauntlett’s concept of shared creativity in Chapters Four, Six and Seven.

conceptual tools, new ways of seeing and describing the present and its potential futures. Autocreativity is an autopoietic, autonomous, and automatic creativity. Unlike individual, human creativity, it propels aesthetic desiring production in the very constitution of the human, the cultural and the social. ...Autocreativity feeds the aesthetic operation that human-technical ensembles co-construct, while also being perturbed and effected anew by them. (ibid.)

According to Goriunova, autocreativity as action is impossible to localise or subjectify. Autocreativity is found within technical systems, objects and people active in culture and society. Autocreativity is action that transcends digital networks:

In digital networks, it is a dynamic process occurring in the relationship between network systems, software features, events, cultures, objects and human beings. The concept of autocreativity does not individuate creativity and lock it into humans. Nor does it locate it solely in inorganic systems. Autocreativity allows us to think creativity as a process of becoming in-between the human, technical and the social, and to investigate the roles performed within creativity by the resulting ensembles. ... In short, *autocreativity is a tool to think aesthetic genesis in its changes in state and position*. Autocreativity becomes a vehicle to move through and with technicity, subjectification, society and the production of art or non-art. (2011:25)

Goriunova notes that autocreativity cannot be pinpointed and located in human beings, objects, projects or machines, it is rather evident in their inter-relationships. She takes into consideration the rise of Web 2.0 and its social tools formed “in the couplings between networks, repetitions, protocols, mobile telephones, software, platforms, software functions, laptops, software cultural habits, and a general amplification” (2011:28).

In the case of much social media, this all co-constitutes self-organisation *more self-evidently* than before (thus perhaps locking it down, or at least trying to, for example, onto a platform such as Facebook). Yet self-organisation also describes the means by which autocreativity works through art platforms to achieve a moment of aesthetic brilliance, of singularity or differentiation. (2011:28)

Goriunova uses the term *art platform*¹³ to describe a network platform that produces art (2011:19).

The 'art platform' therefore describes a Website or other ensemble of human-technical objects in terms that are reflective of their own processuality. The art platform acts as a catalyst in the development of a vivid cultural or artistic current. As a locus of activity carried by such a current, it induces the propagation of aesthetic phenomena that transcend the inventory of their formation. As such it is a system for which the behaviour cannot be deduced from the trajectories of its elementary components. (2011:20)

According to Goriunova, an art platform differentiates itself from other portals and art entities by the number of the relations it establishes, and by those that emerge dynamically from within it. Art platforms are self-organising and flexible. The author gives examples of stand-alone websites, but also notes that an art platform can be a large participatory platform "or even as a space in-between a corporate service, artists' work, hacking, collaborative engagement and a process of aesthetic generativity" (2011:19). Goriunova associates art platforms with participatory Web 2.0 platforms, noting that "both art platforms and the participatory web feed on the same machinery of creative energy" (2011:20).

They build algorithms that attempt to allow them to act spontaneously, in order to take on the warmth of this creative energy's 'throbbing' engines, at the same time making the energy involved more structured or functional, more pleasurable, or accelerated and intense. Both art platforms and the participatory web deal with the human capacities, aesthetics, technology and societal structures that generate what is known as culture. (ibid.)

According to Goriunova (2011), art platforms continuously invent and remake themselves, work as catalysts of autocreativity. An art platform is constantly being devised, negotiated and redefined. It is a space that short-circuits itself as it traverses the energies it works with, whilst at the same time it "contaminates" itself with these energies.

Through art platforms a traversal of the common, the agreed, and the domestic is not only induced but also enunciated publicly — and perhaps cooperatively performed. Art platforms work autocreativity through

13 I discuss Web 2.0 as a platform for sharing and creativity in Chapter Four.

mechanisms that are not defined or assigned with any stability, but develop themselves to contaminate the environment, to produce moments of differentiation that can become a kind of general aesthetic brilliance. As autocreativity is about becoming, it can allow for various human-technical ensembles in which people and things can become something they do not expect, or even want, understand or require. (Goriunova, 2011:26)

Goriunova notes that art platforms operate with certain organisational aesthetics which can be understood both as a practical process of working within emergence and as a mode of enquiry (2011:28).

...organisational aesthetics conceptualises aesthetics as a register of becoming, a flow of production, a sphere of experience and a mode of engagement. Such an aesthetics does not directly relate to the sensual apparatuses as we know them, or to art as we know it. Rather, it is about differentials in action. This involves a kind of contemplation which stages a passage, via routes of diversion, a peering through, collapse, despair, humour, pain, flight, dream, trial, contrivance and experiment. (2011:28)

According to Goriunova, the organisational aesthetics of art platforms enables us to notice processes of creativity that are often lost in discussions of a general creative ability. She argues that via an organisational aesthetics, and a consideration of art platforms of networked and digital media,

...We can understand how human-technical ensembles pass through cycles of becoming, and differentiate between the specificities of these cycles. We can describe what the experience and generation of cultural forms involves. In the process, we will be able to enhance the ruptures this ongoing generation is able to produce and co-create moments that make us more alive. (2011:30)

Jane Rendell discusses the role of the artist in the making of social relationships by suggesting that sometimes “artists may step back, operate somewhat at a distance, and simply ask an audience to take notice” (2002:8).

Digital technology today provides the tools and opportunities for artists to become initiators or choreographers, as suggested by Rendell, “...requesting that we pay attention to certain objects and actions as they exist, is also a call for re-thinking the world, re-valuing cultural practices and re-understanding political actions” (ibid.). Thus technology, rather than being a focus, can be used as a tool to

provide a space for meaningful interaction and playful encounters. Such actions are an essential part of the social glue which connects individuals to each other. The digital means employed by artists to create work and communicate with their audience offers an opportunity to explore the scope of interaction that technology enables, at the same time as the technology is still being developed.

Could public art, empowered the tools of the Web 2.0 platform, enable people to become increasingly active in influencing changes in their physical environment, both for themselves and for those around them? The main principles of Web 2.0, those of cooperation and co-creation, may be helpful in resolving some of the issues surrounding the gap between artist and audience in public art.

This thesis aims to contribute to the debate on participation in relation to public art by considering the decreased distance between artist and audience that Web 2.0 provides. The technological capabilities of the Internet, combined with the tools used to share information, allow the discourse on public art to extend beyond traditional media and participants (curators, artists, theorists) — now anyone can take part in the discussion about, the exhibition of, and the dialogue surrounding public art. The virtual world today, facilitated by the tools offered by social networking platforms, presents an opportunity for the audience to openly participate in debates relating to the contested nature of public art. Web 2.0 has contributed to narrowing the gap between the artist and audience by enabling members of the general public to participate in dialogue and discussion on public art related issues. An online platform which offers opportunities to reduce that distance should be researched in detail as it could provide an answer to some of the contested interpretations of the role of the general public in public art.

As this study also shows, many works presented online will receive ratings and comments and/or criticism, providing an excellent opportunity for artists to gain a clearer picture of public opinion. The facilitation of closer dialogue between artist and audience is an important Web 2.0 attribute which should be examined. In addition, the Internet is an excellent forum for establishing contact with people

with similar interests. The process of online communication may lead to collaboration, which may subsequently result in works of art being produced for a physical space.

The media sharing tools embedded in the Web 2.0 platform can be useful in increasing the accessibility of information relating to public art. In terms of the presentation and distribution of public art, the Internet acts as a global data bank which can be of great use to practitioners, researchers, students and the general public searching for relevant information. The issue of territory, or physical location in public art, could possibly find a resolution through the properties of Web 2.0. The mapping of artworks in the public realm, which is so essential to the practice of public art, has finally found a medium where it can be represented on a global scale. Most commonly, artworks in the public realm are specific to their geographical location, while some of them are in existence only for a short period of time. The Internet provides the opportunity for these works to be viewed by audiences across the world.¹⁴ The content creation tools which Web 2.0 offers have enabled many contemporary artists to create a digital space to exhibit their work globally. In addition, Web 2.0 tools have become valuable instruments which enable productivity, allowing artists to create new works and experiment with the public space in new ways.

In a chapter of the forthcoming book *Digital World: Connectivity, Creativity and Rights*, edited by Gillian Youngs, David Gauntlett investigates how the Internet can enable people's creativity and innovation, noting that

The digital world does not 'cause' more of that activity to happen, but it does *enable* people to make – in particular – connect, in efficient and diverse ways which were not previously possible.... The difference that high-speed internet connections make is not just a boost in convenience of communication, but represents a significant transformation in how those

¹⁴ This has implications for the quality and commodification of the image and issues around decontextualisation of the way in which the image is received. This notion is explored by the French philosopher Jean Baudrillard, who argues that "the territory no longer precedes the map, nor does it survive it. It is nevertheless the map that precedes the territory—precession of simulacra—that engenders the territory" (1981:1).

human beings who are online can share, interact and collaborate (Gauntlett, 2013, forthcoming).

Gauntlett borrows the notion of disruptive innovation as defined by Clayton Christensen (1997). In his book *The Innovator's Dilemma*, Clayton Christensen writes:

Disruptive technologies bring to a market a very different value proposition than had been available previously. Generally, disruptive technologies underperform established products in mainstream markets. But they have other features that a few fringe (and generally new) customers value. (1997:xv)¹⁵

Gauntlett investigates three types of disruptive innovation, showing ways in which ideas when shared and discussed through the Internet can challenge the status quo, “not necessarily by *replacing* the old with the new, but by introducing novel elements into the ecosystem, necessitating change and renewal throughout the environment” (2013, forthcoming). The first type of disruptive innovation discusses how ordinary people disrupt professional media practices. The second type relates to disruptions to the traditional approach of media and communication studies through the Internet by academic professionals in the field. The third case study of disruptive innovation addresses situations where “ordinary people” disrupt professional academic practices (Gauntlett, 2013, forthcoming). Gauntlett brings in examples showing that the creativity of ordinary people has broadened through the creative tools that the Internet (such as blogs for example) provides (2013). He also notes that one of the key disruptions relates to the connections and collaborations that people make because of the Internet, pointing out that

...the biggest shift is that all these new homemade media artefacts – unlike most professional media products – are nodes in networks and communities. Online videos, blogs, images and audio are typically hosted on social network platforms which emphasise comments and/or linkages between elements. (Gauntlett, 2013: forthcoming)

¹⁵ Clayton Christensen's model of disruptive innovation (1997) is based on the transformation of a historically expensive and not accessible to all product or service into an affordable and accessible commodity.

Gauntlett summarises that “the disruption which puts ‘ordinary people’ back in the driving seat of storytelling and creativity is therefore a vital and fruitful one” (Gauntlett, 2013: forthcoming) and that “...today, the dominance of professional experts in being disrupted by the conspicuous appearance of online enthusiast who are doing similar work, usually performs and shared for free, and often to a high standard, just because they want to” (ibid.).

Web 2.0 and its social networking tools offer the opportunity for a member of the audience to become a creator, and this opportunity can easily be transferred from the virtual to the physical space. This, in turn, is reflected in the way public art is produced and viewed today. This research reveals that in many cases audience members are willing to take part in the creation of the artwork. (The case studies discussed in Chapter Five support this claim). Such participation makes it evident that the audience is looking for an opportunity to be creative and it does so by participating in projects initiated by artists via the Internet (Figure 1).



Figure 1. Author’s visualisation of the relationship between the virtual world and public art.

In turn, the audience’s creative involvement affects the physical space through the creation and distribution of art, facilitating a connection between the virtual environment and physical space by creative means. Here a text by Marcel Duchamp, which he wrote in 1959, is particularly relevant. Duchamp discusses the creative act and its two poles: the one of the artist and the one of the spectator who later becomes acknowledged (in Rebel, 1959: 77-78). He notes that millions of

artists create, but only a few thousand are discussed or accepted by the spectator, and even fewer are consecrated by posterity:

... the artist may shout from all the rooftops that he is a genius: he will have to wait for the verdict of the spectator in order that his declarations take a social value and that, finally, posterity includes him in the primers of Artist History. (ibid.)

I already noted the solution to issues of territory and accessibility that the Internet and Web 2.0, in particular, can provide regarding the geographical position of artworks. The mapping tools that Web 2.0 offers are an excellent opportunity for artworks to be viewed globally. On the other hand, the “rooftops” are now the vast number of pages, sites and opportunities on the Web that can be used to promote work and disseminate ideas and opinions. The period during which any “verdict of the spectator”, as stated by Marcel Duchamp, can be received is now significantly shortened. The opportunities for open communication that the Web provides are condensing this distance. They provide something much more important – the opportunity for involvement, not only via commenting on the work but also by active participation.¹⁶ This relates to some of Duchamp’s observations about the creative act:

All in all, the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualification and thus adds his contribution to the creative act. This becomes even more obvious when posterity gives a final verdict...(ibid.)

What is observed today in terms of how Web 2.0 is used in creating, collecting and discussing art in general is vital to the act of creativity that Duchamp discusses. Web 2.0 offers opportunities to challenge traditional notions of creativity of the single author by encouraging multi-authorship and co-creative practices. The notion of shared creativity becomes particularly relevant when discussing public art, as the meaning of the word “public” is often contested.

¹⁶ I discuss the options for participation, sharing and creativity that Web 2.0 provides in this chapter and throughout the whole thesis.

Since advances in digital technologies means the Web is constantly changing and evolving, it is to be expected that the outcomes of the relationship between art in the public realm and Web 2.0 will also continue to develop. This study describes the situation at the current point in time, but also aims to provide a foundation and a starting point through which the as yet uncharted field between the two disciplines may continue to develop. With this study, I hope to prompt further enquiry into how the future development of the Internet may affect the ways in which public art advances as both a practice and a discourse.

Throughout the research process, it became apparent that there is still limited research concerning the connections between Web 2.0 and public art. Given the need for further investigation in this direction, I address the knowledge gap concerning the relationship between the two, focusing on how art can become a bridge between the physical world and the Web by connecting people and creative ideas.

1.5 Aims and Objectives

This research explores the parallels, connections and synergies between public art, artistic practice realised outside the gallery context, and Web 2.0, the Internet platform for user-generated content, which offers an online communication medium and hosting of web-based communities. I look at the import, actual and potential, of Web 2.0 on the ways in which public art is produced and discussed. The goal of this research is to demonstrate that the discourse around Web 2.0 is relevant to the discourse of public art and that the process of bringing these two fields together would be beneficial for the practice of public art. In order to achieve this I set out to answer the following research questions:

- ☐ What can public art learn from Web 2.0?
- ☐ What are the possible debates that Web 2.0 can provoke in the field of public art?

- What novel forms of audience engagement with, and participation in, public art could be enabled by the practices of co-creation and sharing integral to Web 2.0?
- Has the relationship between artists and audience changed because of Web 2.0 and if so, how?

As part of the review of public art and the discourse around it (see Chapter Two), I present a selection of works which I will argue relate to the principles of Web 2.0 as a concept and its properties as a platform. I review forms of public art involving audience participation that relate to the ethos of Web 2.0, which implies accessibility, openness and inclusion. Despite the fact that such types of public art and Web 2.0 exhibit similar observable characteristics, this does not necessarily mean that they have influenced one another, nor that public art has been affected by the most recent changes to the Internet. Through the analysis of the case studies of the Big Art Mob and the Bubble Project, it becomes apparent that these two initiatives represent an area which lies between the physical and the virtual world. This thesis focuses specifically on *this* area, aiming to lay the foundation for further exploration into the relationship between the two disciplines.

1.6 Methodological Framework

This investigation into public art, Web 2.0 and the relationship between the two uses and integrates several research methods. I have employed a combination of qualitative primary research data such as email interviews with participants in the Big Art Mob and the Bubble Project. I have investigated books, magazine articles, research reports and journals. In order to study already existing data further, I have also made extensive use of source materials from the Internet, such as online journals, video documentaries and websites.

As noted above I carried out two case studies of public art related projects – the Big Art Mob and the Bubble Project. I visited both of their websites on a regular

basis, noting new entries on the discussion forums, new works being added to the projects' online platforms and any comments which followed such additions. This approach is also known as "lurking", where the observer remains invisible and does not actively participate in any discussions or conversations with the online participants (Pasfield-Neofitou, 2012). The objective of the interviews is to explore possible connections between public art and Web 2.0 from the perspective of the participants taking part in the two case studies. I chose this method as I was looking to place my interpretations of the relationship between Web 2.0 and public art in a wider context through the experience of those who use the platform of Web 2.0 to collect, make or discuss art. I present a detailed discussion on this particular research method in Chapter Five, 5.3 Methodology of Empirical Study.

The two case studies are intended to challenge the non-engagement of most public art by being open to anyone and by providing an opportunity for anyone to be not only a spectator but a creator and contributor in the physical space. As this approach is facilitated mainly by Web 2.0, the projects were consequently chosen to be subject to detailed investigation. I investigate the projects via online interviews, the results of which I present and discuss in Chapter Five.

In addition, I present my point of view as an artist, most recently having been involved in the field through public art initiatives relying on audience participation and encouraging interactivity and communication directly via works of art. I present one of my recent projects, *Wishing Trees* (2011) in Chapter Seven. Some of the feedback I received during the installation of this work from members of the audience prompted me to think further about what it truly means to be an artist working in the public space. Brookfield (1986) notes that the process of reflection-in-action is essentially artistic, where the practitioner exercises skills with no particular rationale, but rather relies on an intuitive sense of confidence. This could be said about the process that I went through while creating the artwork in question. At the time, my research had already advanced to a stage where I could see clearly how some of the principles of Web 2.0 could be used when thinking about artwork for the public space. Thus, my work was based on my intuition and

belief that if I tried to use these principles the project would be successful. Similarly, Argyris and Schön note that success is “developing one’s own continuing theory of practice under real-time conditions” (1974:157). Although this thesis is not practice-led, the work that I did confirmed some of the assumptions I held on how the principles of Web 2.0 could be beneficial for public art. According to Brookfield, the reflective practitioner should be able to reflect on their theories of action, and specifically what ideas will actually work in the real world (1986:245). My artistic experience, combined with knowledge gathered as part of this research process and the artwork which I created to test my assumptions, allowed me to draw further conclusions on how public art may employ the methodology of Web 2.0.

1.7 Summary and Thesis Outline

This chapter focused on introducing key concepts relating to public art and public space, as well as introducing the discussion on the links between art and the Internet and, more specifically, public art and Web 2.0. The first section outlined the main terms, theories and issues surrounding public art, a practice which falls into a number of categories: art in public spaces, art as public space and art in the public interest. This section provided the basis for development in Chapter Two, Public Art.

The second section of this chapter focused on public space as the site of public art. It examined the key characteristics of public space associated with democracy and openness, while at the same time contrasting them with the creation of exclusionary urban spaces, surveillance, privatization and censorship. The second section of the chapter also discussed the concept that cyberspace is the new public space where civic participation and interaction occurs, and argued that the Internet has disrupted the traditional understanding of what constitutes a public sphere.

The third section examined possible intersections between art and the Internet. While these do not relate to Web 2.0, it was imperative that they were

mentioned as the predecessors of current artistic practices that involve new and emerging digital technologies. It was particularly important to mention new media art, which uses various virtual environments and new technologies and also often focuses on the relationship between the participants and the digital device (Bolognini, 2009). This relationship is closely linked to the examination of the links between public art and the participatory properties of Web 2.0, a platform for user-generated content, as introduced in section four: Why Web 2.0? The fourth section also deals with a type of self-organising creativity which feeds the aesthetic operation that human-technical ensembles co-construct (Gourinova, 2011).

In the light of Web 2.0 and its social tools, this type of creativity becomes particularly pertinent as it connects networks, mobile devices and people. Furthermore, autcreativity feeds on constantly changing technical ensembles such as website and user-generated platforms, which foster artistic production (ibid). Thus, technology provides tools and opportunities for creative initiatives, which is a notion that I expand on in Chapter 4: Web 2.0.

Section five presented the aims and objectives of this thesis, which focuses on exploring the parallels, connections and synergies between public art and Web 2.0, the Internet platform for user-generated content. It stated the goals of the thesis as demonstrating how the discourse around Web 2.0 is relevant to the issues of public art and the benefits of bringing these two fields together in the practice of public art.

Section six introduced the methodological framework used in this thesis as a combination of a number of research methods: qualitative primary research data, secondary research into books, magazines, journals and reports as well as extensive use of materials from the Internet. Section six also provided the basis for a detailed explanation of the methodology of the qualitative research, which forms part of Chapter Five.

This thesis has the following outline: after introducing a series of issues relating to public art in Chapter One, Chapter Two discusses a number of projects

which illustrate these concerns. Chapter Two also aims to lay the foundation for analogies to be drawn between the practice of public art and Web 2.0. Chapter Three deals with the intersection of public art and digital technologies by examining public art that exists due to websites and augmented reality. Chapter Four is dedicated to Web 2.0. It discusses the underlying philosophy and its structure as a platform supporting innovation and creativity. Chapter Five looks at how the platform of Web 2.0 contributes to the representation, discussion and creation of public art through case studies of the Big Art Mob and the Bubble Project. Both the Big Art Mob and the Bubble Project rely primarily on Web 2.0 tools in order to achieve their goals of mapping, documenting, discussing and creating art in the public sphere. Chapter Six follows this discussion by defining the field of Public Art 2.0.

Chapter Two

Public Art

My own short definition of public art: accessible art of any species that cares about, challenges, involves and consults the audience for or with whom it is made, respecting community and environment. The other stuff – most of what fuels public controversy and the mass media's rhetoric on public art – is still private art; no matter how big and exposed or intrusive or hyped it may be. (Lippard, 1997:264)

2.1. Introduction

In the introduction I outlined a number of issues relating to public art. It appears that despite efforts to connect artists, communities and spaces public art is actually divisive and creates controversies amongst all those involved in its production and reception. There is an abundance of definitions outlining every possible approach — from an art object placed in the public space, to critical spatial practice, to dialogical art and non-private art. But to whom are these descriptions useful? It seems that artists do not wish to be categorised as public artists, they just want to create work. The general public is rarely concerned with definitions, however they have no choice but to notice what is placed in the public space. What, then, is the language of public art? Who understands it and who benefits from it? Expectations of the outcomes of public art are numerous. They range from purely decorative purposes to promises to resolve social issues. Does the use of public funding justify such assumptions? Isn't public art lost in a tangle of predictions, expectancies and calculations? This chapter investigates a selection of case studies illustrating these issues. The breadth of the projects enables analogies to be drawn between the results of commissioned public artworks and those that are not officially endorsed as public art, calling for more panoramic understanding of the practice. This chapter sets the context in order to lay the foundation for analogies to be drawn between the practice of public art and Web 2.0.

2.2 Art in Public Places - Not Such an Old Notion After All

In her essay *For Hamburg: Public Art and Urban Identities*, Miwon Kwon describes art in public places as “typically a modernist abstract sculpture placed outdoors to “decorate” or “enrich” urban spaces, especially plaza areas fronting federal buildings or corporate office towers” (1997:online). She notes that such works were typical for the period of the 1960s and 1970s in the United State of America and that around this period the US Government started to recognise the importance of using state funds for supporting the creation of public art. One of the pioneering moments in that respect was the Works Progress Administration Programme which was established during the Roosevelt administration in 1935. As part of the programme, visual artists and writers were commissioned to document America by creating series of concerts, art and written works. Seven percent of the Programme’s total budget was allocated to arts projects, with 225,000 concerts being performed to audiences totalling 150 million, and almost 475,000 artworks being produced (Cartiere and Willis, 2008:8).

Later, in 1959, the first *percent-for-art* legislation was passed in Philadelphia (William Penn Foundation Report, 2008). This stated that one percent of the city’s construction funds would be allocated for the commissioning of public artworks. The main aim for introducing the legislation was “...to serve as a catalyst for artistic growth and aesthetic excellence in our communities, and in doing so, enhance the vitality of the City and enrich the lives of its citizens (Kansas City Missouri Arts Convergence Report, 2013).

During the 1960s and 1970s modern artworks appeared in various public places. Although this was an entirely new approach to art planning and funding and the artists creating the pieces were not under obvious political or state influence, the artworks were still symbolic and had no connection to the places where they were installed. Art works were simply created in studios and transported to the public spaces without any consideration for the context provided by the surrounding area. For instance, the first civic sculpture jointly financed by federal

and private funds (National Endowments for the Arts Archive, online), *La Grande Vitesse*, created by Alexander Calder, started as an object in the artist's studio and Calder did not visit the plaza where the work was to be placed at any time during the creative process. He designed and created the sculpture in his studio in France and later the structure was transferred to Grand Rapids and assembled at the plaza (Figure 2).



Figure 2. *La Grande Vitesse*, Alexander Calder. Grand Rapids, Michigan, USA, 1969

One of his contemporaries, the sculptor Chris Burden speaks about this indifferent attitude towards the site:

I don't know what public art is... I just make art. Public Art is something else. I think it's about social agenda. (in Lacy, ed. 1995:79)

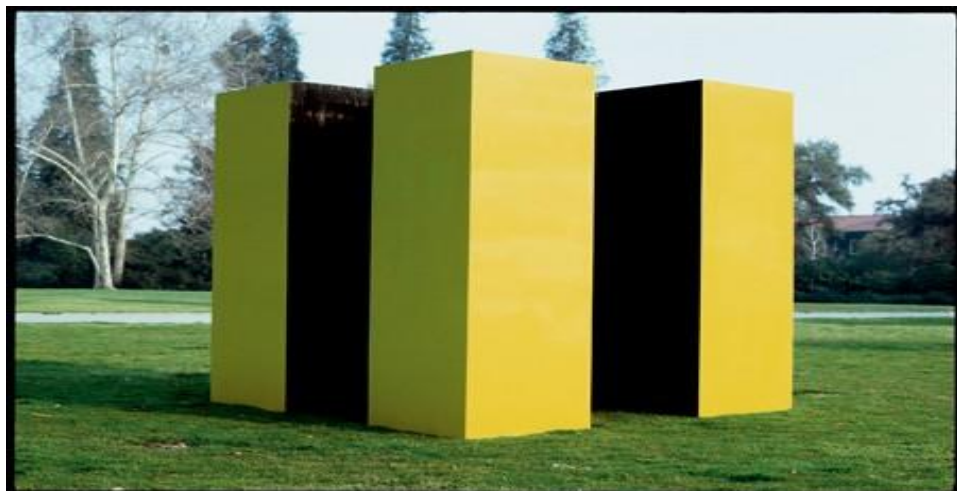


Figure 3. *Untitled*, Chris Burden. Photo credit: Chris Burden, 1967

Indeed, the early sculptures of Burden reflected his position, and art-in-public spaces in the 1970s was as described by Miwon Kwon, functioning more like an extension of the museum and advertising individual artists and their accomplishments, rather than engaging in any way with the site where the art was placed (Figure 3):

Many critics, artists, and sponsors agreed that, at best, public art was a pleasant visual contrast to the rationalized regularity of its surroundings, providing a nice decorative effect. At worst, it was an empty trophy commemorating the powers and riches of the dominant class—a corporate bauble or architectural jewellery. (Kwon, 2004:65)

The understanding of this type of art was of the object, which was meant to have a decorative effect on the space in which it was installed, especially as many public sculptures at the time were financed by Percent Per Art Programs.

The supplementing function of these monumental large-scale monuments was much criticised for its indifferent position to the site in which the artwork was located. Kwon writes:

This kind of "plop art,"¹⁷ which appeared on many similar plazas throughout the major cities of the United States during the 1970s, was meant to be a "gift" of the government - local, state, or federal - to the public. With its panels and committees of select experts deciding the fate of public art commissions, with the purpose of bringing the "best" accomplishments in art to a general public. (2002:online)

A notable contribution to the discourse surrounding public art is the interpretation by the artist Mark Hutchinson. Analysing contemporary public art, he defines its four dimensions, tracing the transformations in the possibilities of the practice and attempts to analyse it as an open system with emergent properties (Hutchinson, 2002). Similar to the model offered by Kwon, Hutchinson begins with the first stage describing public art as "putting some art in some public place" (2002: online), where he indicates that this is a type of monumental art, defending

¹⁷ Kwon writes that the term "plop art" is commonly attributed to architect James Wines. Wines is also known to have coined the phrase "turds on the plaza" to describe the ubiquitous abstract modernist sculptures on urban plazas (Kwon, 2002:182).

the independence of the artist. This is precisely what we can be seen in the works discussed above – the works bear no relation to the site nor to the audience occupying it. Such works appear indifferent or meaningless to the public and naturally, they would be completely unengaged by them. Indeed, this is a type of practice that played its role in the discourse of public art, but the fact is that many of these works were artificially inserted into spaces as a result of public art commissions. Although it may seem that the art in public spaces model is no longer popular, it would appear that after nearly fifty years public money is still being spent on commissioning works that achieve the same result. For instance, a work called *Arria* was commissioned in 2010 to

...create a distinctive image of Cumbernauld; increase residents' pride in their town; raise awareness across Scotland of Cumbernauld's attractiveness as a destination to live, work and play; create a sense of place and provide a positive statement about the town. (McElroy, 2008: online)

The 32 foot sculpture was commissioned from the artist Andy Scott by North Lanarkshire Council to promote the town of Cumbernauld. (Figure 4)



Figure 4. *Arria*, Andy Scott. Cumbernauld, Scotland, 2010

The critic and curator Igor Toronyi-Lalic writes that in 2011 the public art industry was said to be worth £56 million, much of it subsidised by the taxpayer.

According to Toronyi-Lalic, despite this subsidy the industry has left us with a "mountain of mediocrity" (Toronyi-Lalic, cited in Adebowalde, 2012:online). In his report on public art entitled *What's That Thing?* he writes:

Public art is becoming an increasingly ubiquitous and controversial presence. ...Despite the notable successes, the surge is being met with rising public and critical disquiet. Very little public art of the past twenty years has much to do with the public it purports to be addressing and with which it presumptuously associates itself. Yet the reason why there is so much of it and why so much of it is of such dubious quality is that it claims to be a public service. Today's public sculpture claims to foster 'community cohesion', bring in investment, boost property prices, fight crime and ease traffic. (ibid.)



Figure 5. *B of the Bang*, Thomas Heatherwick, Manchester. 2002

Another example is the highly controversial 56-metre monument *B of the Bang* by Thomas Heatherwick, which was commissioned to mark the 2002

Commonwealth Games. Sir Richard Leese, the Leader of Manchester city council said that

Thomas Heatherwick's *B of the Bang* is a magnificent artistic statement that was just right for modern Manchester. (Leese, cited in Siddique, 2009:online)

Despite its cost of £1.42m, the monument had major structural problems and was taken down not long after the installation (Figure 5). Again, this situation highlights that many artists remain indifferent to the physical conditions of the site of their artwork.

Toronyi-Lalic writes that recently there have been numerous examples of public money being spent on public art with expectations for unreasonable outcomes, providing the example of the public art strategy in Hastings. The strategy proclaimed that it would be able to "reduce death rates from circulatory disease (coronary heart disease and stroke) and cancer in people under 75" (2012:online). Toronyi-Lalic goes even further and summarises that:

In the former mining town of St Helens, a £2 million 66-foot baby's head bulges out of the ground. On the approach to the new town of Cumbernauld, a 33-foot busty silver mermaid gestures at passers-by like a Vegas barmaid. Half a million pounds' worth of hand-crocheted lions will soon grace the streets of Nottingham. Another half a million will go into felling a stretch of Highland forest for a football pitch installation. In Northumberland, £2 million of landscaping will see a 400-foot naked "green goddess" (to be called Northumberlandia) emerge from a rubbish dump. (ibid.)

In the words of Malcolm Miles, public art is "a form of street life, a means to articulate the implicit values of a city when its users occupy the place of determining what the city is" (Miles, 1997:3). The public art that Miles describes is very different from public art that is determined to serve a predefined outcome. Public art is often thought of as a solution of various social issues rather than as an open, discursive approach to making art. The cultural analyst and consultant Sarah Selwood describes public art as a cultural investment, vital to the economic recovery of many cities:

It attracts companies and investment; is a feature of cultural tourism; adds to land values; creates employment; increases the use of open space; reduces wear and tear on buildings; and levels of vandalism; humanises environments; brings about safer areas; encourages greater care of areas by residents whose pride in their locality has increased. (Selwood, 1995)

This is an example of how public art is expected to resolve deeper social issues such as unemployment or crime. It is also an example of how language is used to create unreasonable expectations of art works. Expectations of the work are driven by what has been said about it in advance rather than by witnessing the finished work itself. Language becomes the key means by which public art is evaluated, aggrandised and justified, more often than not by conflating the outcomes of the work with economic benefits. This type of “hard sell” is accepted in the art world today because we have become so used to being subject to marketing campaigns.

The complexity of the relationship between all parties involved in the process – artists, urban designers and planners, architects, commissioning bodies, local communities and politicians – is enormous. Commissioned public art projects represent an important part of the whole field of the practice as they are developed with public funding. According to Toronyi-Lalic,

Public art has come to be seen as a cure for society’s ills, which has meant that it has increasingly been co-opted by various arms of government. This might be justified, were any of the claims correct: if public art really were a panacea, who would carp at the government using it to improve our lives? But in fact the myriad claims made on behalf of public art are, statistically and conceptually, without foundation. (2012:online)

According to the public art consultant Emma Larkinson (2004), the way that public artists evaluate if their work has been successful is not based on social or economic factors, but on whether or not she can sleep well at night. Clearly, the agendas of the groups involved in commissioning public art often lie at the opposite end of the spectrum to those of the public artists they work with.

An approach that is trying to understand and analyse art by using economical and financial terms is condemned to fail and can only lead to less funding for the arts, because it would show the failure of that rhetorical model. It might create

more vacancies for art administrators and public art officers, but ultimately they will be jobless if there are no artists who would want to do the work. We are trying to systematise and understand something that by its nature is indefinable. Good public art is a form of street life, rather than a supplement for shopping environments and corporate spaces.

In a text from 1972, the artist Robert Smithson talks about the cultural confinement which takes place when it comes to curating exhibitions.

Artists are expected to fit into fraudulent categories. Some artists imagine they've got a hold on this apparatus, which in fact has got a hold of them. As a result, they end up supporting a cultural prison that is out of their control. Artists themselves are not confined, but their output is. Museums, like asylums and jails, have wards and cells- in other words, neutral rooms called "galleries". A work of art when placed in a gallery loses its charge, and becomes a portable object or surface disengaged from the outside world. (Smithson, in Flam, 1996:154)

Although Smithson's words refer to artworks presented in a gallery context, they have validity today when it comes to commissioning art for the public space. As a result of prescribed agendas, when it comes to awarding public art commissions, many artists simply don't bother applying for funding.

What are the alternatives to artificial and costly public art commissions? What is the practice which can achieved though more organic interaction with the site and those who occupy it? I will look into such examples later, a lot of which fall into the category of art activism. The art critic Patricia Philips defines public art and activist art as inseparable and, "...united in an inherently cooperative model of social-aesthetic practice" (in Felshin, ed. 1995: 285). According to this notion, art can be defined as "public" based on what it does, but not where it is located.

Art in public places is not different from any studio work except for the location that it is placed in. David Harding notes this in his book *Public Art – contentious term and contested practice* (1997). The author argues that the use of terms such as "art in public places" clearly signifies a resistance to the whole notion

of anything called public art. He notes that all art is public and therefore it is unnecessary to define a certain art practice as more public than any other.

Toronyi-Lalic offers a rather radical, but worthy of consideration approach for de-centralisation, where public art should “regain its artistic integrity by disentangling itself both from the extra-artistic aims of the Arts Council and the commercial imperatives of private developers” (2012:online). He notes that

Instead, a less coercive and more organic process should be encouraged, in which 21st-century versions of public subscription (like crowd funding) are harnessed to create a real public link. (ibid.)

2.3 Art as Public Spaces: the Unfolding of the Site

Art as public places is a type of public art described as less object-oriented and more site-conscious art that requires greater integration between art, architecture, and the landscape (Kwon, 1997)¹⁸. Kwon notes that such art calls for collaborations with members of the urban managerial class such as architects, city planners and administrators and urban designers “in the designing of permanent urban (re)development projects such as parks, plazas, buildings, promenades, neighbourhoods” (ibid). Such public art calls for further integration with the physical location, in contrast to the works such as *La Grande Vitesse* by Alexander Calder (1969) or *Arria* by Andy Scott (2010). Kwon argues that site specific art is antithetical to the claim “If you have to change a sculpture for a site there is something wrong with the sculpture,”¹⁹ (1997: online). According to her, “ site-specific art, whether interruptive or assimilative, gave itself up to its environmental context, being formally determined or directed by it” and “the space of art was no longer perceived as a blank slate, a tabula rasa, but a real place” (ibid.). Site specific art is about relating, decoding or recoding and exposing the site and its meaning.

18 Other books that focus on site-specificity are Erika Suderburg’s *Space, Site, Intervention: Situating Installation Art* (2000); and Claire Doherty’s *Situation* (2009).

19 Here Kwon refers to William Turner, as quoted by Mary Miss, in “From Autocracy to Integration: Redefining the Objectives of Public Art,” in *Insights/On Sites: Perspectives on Art in Public Places*, ed. Stacy Paleologos Harris (Washington, D.C.: Partners for Livable Places, 1984), p. 62

In the mid-1970s and early 1980s, the debate as to whether public artworks should be objects placed in a public environment or an artwork which was integrated into the physical environment increased. According to the curator Patricia Fuller, even early in the 1970s some artists and administrators began to differentiate between “public art” — a sculpture in a public space — and “art in public” places, with a focus on the location or space for the art (in Lacy, ed. 1995).

The Apollo Pavilion was created by the artist Victor Pasmore and completed in the town of Peterlee in the UK in 1970 (Alexander, 2009). Pasmore produced experimental housing plans for the town in the early 1960s and became involved in the design of the pavilion after the original architect left the project (Figure 6). The idea of the Pavilion was to emphasise the focal point created by the small lake which separated the road from the pedestrian system. Victor Pasmore described it as

An architecture and sculpture of purely abstract form through which to walk, in which to linger and on which to play, a free and anonymous monument which, because of its independence, can lift the activity and psychology of an urban housing community onto an universal plane. (cited in Alexander, 2009:34)

The structure soon became a canvas for graffiti and a gathering place for anti-social activity. As a consequence, in 1981 the local authorities were looking into the possible demolition of the Pavilion. Pleading against its demolition in a 1976 letter to the General Manager of Peterlee Development Corporation, Pasmore writes:

... it is impossible to justify in rational terms anything which depends purely on feeling, taste or fashion at any given time. But I tried to make it clear that the object of all the sculpture, including the Pavilion, was to give dignity, focus and “impact” at various central points in the environmental complex of what is virtually a Council housing estate. But, to my mind, Peterlee is not a housing estate, but an important town. If for nothing else, therefore, the function of the sculptures is justified to underline and demonstrate this (Pasmore, 1976: online).

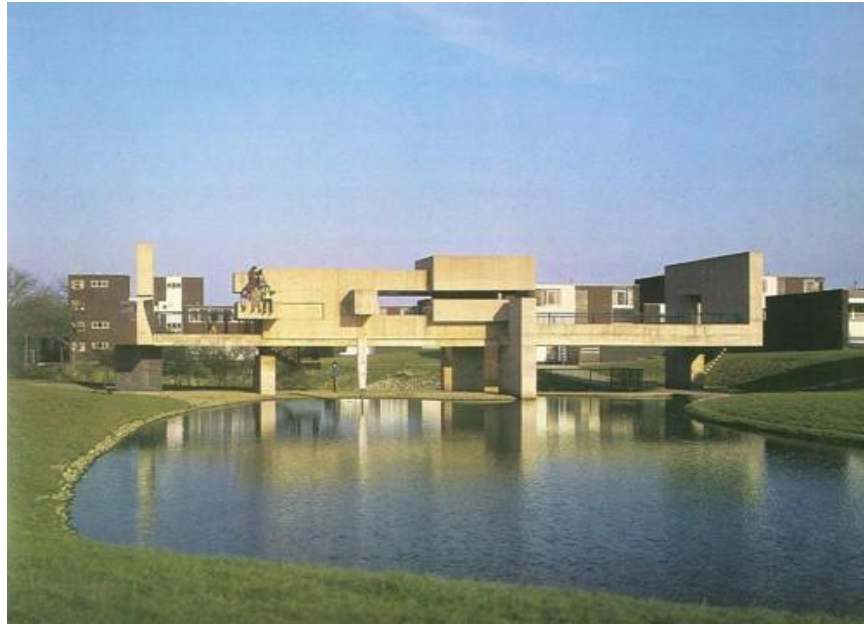


Figure 6. The Apollo Pavilion, Victor Pasmore, Peterlee, UK. 1970

This controversial case, reflecting the idealistic approach to town planning of the 1960s in the UK, is an example of a large scale experiment in synthesising art and architecture. Having been at the centre of local debate for years, today the structure has been restored, together with the surrounding area.²⁰

In contrast, a project that did not survive the pressure of public debate was the much debated Richard Serra's *Tilted Arc*, installed in 1981 in the Federal Plaza in New York as part of a public art commission (Figure 7). The solid steel plate was an attempt to interrupt the space in front of the building and to challenge the movements of the dwellers passing by. Serra comments on his work:

The Tilted Arc was constructed to engage the public in dialogue... The viewer becomes aware of himself and of his movement through the plaza. As he moves, the sculpture changes. Contraction and expansion of the sculpture result from the viewer's movement. Step by step the perception not only of the sculpture but of the entire environment changes. (Serra, cited in Lewis et al. 2009:69)

²⁰ In 2004 the Baltic Centre for Contemporary Art in Gateshead commissioned Jane and Louise Wilson to make a video installation featuring the ruined structure. In 2008 the District of Easington Council was awarded a grant from the Heritage Lottery Fund to restore the Pavilion. The work involved re-instating the lighting features and staircase allowing access to the upper level, in addition to restoring the two hand-painted murals. The surrounding area was re-cobbled and a reed bed and plants were added to the west end of the lake (apollopavilion.org).

The work generated controversy soon after it was installed and after much public debate, it was removed from the Plaza in the spring of 1989. During the public hearing, in an attempt to protect his work, Serra stated that to re-locate it from the plaza would be equal to destroying the work, as its scale, size and location were determined by the site (Serra, in Kwon, 2002:73). This debate poses questions about the specifics of a site as well as those who occupy it, and the need for audience involvement in decisions concerning public space. Serra discusses site-specificity in public art in relation to works which:

...deal with the environmental components of given places. The scale, size, and location of site-specific works are determined by the topography of the site, whether it be urban or landscape or architectural enclosure. (Serra, cited in Kwon, 1997:85)



Figure 7. *Tilted Arc*, Richard Serra. New York, USA, 1981 – 1989

Tilted Arc prompts a series of questions about public art, an increasingly controversial subject through the late 1980s and early 1990s. The role of government funding, an artist's rights to their work, the role of the public in determining the value of a work of art, and whether public art should be judged by its popularity were all heatedly debated during this period. The critic Suzy Gablik notes that

...the Tilted Arc controversy forces us to consider is whether art that is focused on notions of pure freedom and radical autonomy, and subsequently inserted in to the public sphere without regard for the relationship it has to other people, to the community, or *any* consideration except the pursuit of art, can contribute to the common good. (in Lacy, ed. 1995:79)

Tilted Arc was all about the site, but was neither intended to serve a decorative function, nor to integrate with the site in terms of enhancing it. The way the sculpture cut across the plaza and divided it was rather aggressive. In the words of Kwon,

In doing so, as proponents of the sculpture have pointed out, Tilted Arc literalized the social divisions, exclusions, and fragmentation that manicured and aesthetically tamed public spaces generally disguise. In destroying the illusion of Federal Plaza as a coherent spatial totality, Serra underscored its already dysfunctional status as a public space. (2004: 74)

Serra was neither interested in art as affirmation or complicity, nor in subordinating, accommodating or adapting his work to the space. He notes that

...in such cases it is necessary to work in opposition to the constraints of the context so that the work cannot be read as an affirmation of questionable ideologies and political power. I am not interested in art as affirmation or complicity. (Serra, cited in Kwon: 75)

The critic Rosalyn Deutsche highlights that the removal of the sculpture was about discrediting a particular model of site specificity in public art, the model that critically questions the space, rather than to promote it as a unified totality (in Kwon, 1997: 80).

Miwon Kwon notes that site-specific art “is becoming more and more “unhinged” from the actuality of the site...both in a literal sense of physical

separation of the art work from the location of its initial installation, and in a metaphorical sense as performed in the discursive mobilization of the site in emergent forms of site-oriented art” (Kwon 1997: 96).

James Meyer refers to site-oriented art practice using the term “functional site”, where the site is seen as a process, as a mapping of discursive filiations and bodies that move between sites, and as a movement (Meyer, 2000:23-37). Meyer’s interpretation relates to the way Miwon Kwon (1997) discusses the site in relation to the third model, art in the public interest, as work which seeks to be no longer an object, but a process, provoking the audience. In this case, the relationship between the site of the work and the viewer is experienced as an “unrepeatable and fleeting situation” (Kwon, 1997:91).

Illuminating this perspective and illustrating the site as a place for dialogue and exchange, Miwon Kwon describes the distinguishing characteristics of site-oriented art through:

... the way in which both the art work's relationship to the actuality of a location (as site) and the social conditions of the institutional frame (as site) are subordinate to a discursively determined site that is delineated as a field of knowledge, intellectual exchange, or cultural debate. (Kwon, 1997:93)

Kwon continues by stating that the site is generated by the work and then verified by its convergence with an existing discursive formation (ibid.). An example of this could be given with the works of American artist Michael Rakowitz, whose projects not only try to focus the audience’s attention on social issues, but actually provide real solutions to problems such as homelessness. The artist utilizes typical structural functions of architectural design, such as offering shelter and protection for the body, in creating inflatable shelters for homeless people. The structures, called *paraSITES*, utilize air flow from building ventilation systems to keep them inflated, and once they have been slept in overnight, they can be packed up and carried around throughout the day by a homeless person. In addition, Rakowitz allocates areas within the shelters where personal belongings can be kept (Figure 8).



Figure 8. *paraSITE*, Michael Rakowitz. 1988

In a similar fashion, the British artist Lucy Orta embraces the overlap of ideas between art and architecture with her series entitled *Modular Architecture*. By creating portable body structures, Orta responds to social issues such as the displacement of refugees and homelessness. In *Modular Architecture*, she designed individual waterproof body units that allow people to travel independently, but which created a sleeping shelter for several people when multiple units were connected to each other (Figure 9).

Orta uses aluminum coated materials so that the installations reflect sunlight when placed outside and, at the same time, retain body heat when being used. Orta admits that her work expresses "...the idea that our body is in complete interaction with the surrounding environment" (Orta, in Bolton, 2002). Fulfilling the notion of "body architecture" which the artist sees as one which promotes the opposite of individual isolation (*ibid.*), Orta borrows typical architectural techniques by allowing her works to act as a protective environment. She sees them as a shelter for "displaced people who must carry their belongings and homes with them as they migrate within or between cities" (*ibid.*). Miwon Kwon writes that site-specific works are

...focused on establishing an inextricable, indivisible relationship between the work and its site and demand the physical presence of the viewer for the work's completion. (Kwon, 2004:12)

Modular Architecture and *paraSITE* are examples of a new form of site specificity – one where a human presence is not only required, but the body itself becomes the site and the space around which the work is created. Such works challenge the traditional relationship between the individual and the building that they inhabit, following Sigfried Giedion's argument that one of the main goals of contemporary architecture is to reflect life in the present (Giedon, 1967).



Figure 9. *Modular Architecture*, Lucy Orta. 2002

Although considered artworks, these projects can be seen to challenge the notion of site-specificity in public art by shifting the roles of art and architecture. They can be seen as a reactionary process and as a critique of postmodern life, adopting critical roles typically associated with art. Jane Rendell describes the relationship between art and architecture as often defined by their differences in terms of the functions they possess. She notes that, "...architecture is taken to be functional and art is presumed to have no function" (Rendell, 2006:156). In the case of *paraSITE* and *Modular Architecture* we observe that art, in its attempt to respond

to the site and those who inhabit the site, is beginning to occupy spaces which traditionally are perceived as architectural.

In 2004, Bernd Truempler and Karsten Huneck, both members of the Office of Subversive Architecture (www.osa-online.net), embarked on a project which started as a relatively simple makeover plan, but concluded as a guerrilla style “intervention”. The project, called *Intact*, was planned as a refurbishment of an abandoned railway signal box in Shoreditch, London. The authors comment:

This house looked like a small and forlorn version of a stereotypical and slightly “twee” cottage. Although it was old and weathered these idyllic associations made it appear out of place in its rough urban environs, like a strange “Building-Alien”. We immediately thought that this structure needed a treat and set about refurbishing the house in a way that aimed to express the idealized vision of a dream property. (Truempler, Huneck, 2004:online)

After attempts to obtain permission for a makeover of the building from the local authorities proved unsuccessful, the group decided to conduct their project “guerrilla style”, by covertly starting their makeover work very early in the morning and completing it ten hours later. Their “intervention” turned the signal box into a beautiful home with white exterior walls, window boxes, and a balcony covered with fine artificial grass. They installed a light switch, powered by a car battery, which turned a light on inside the house every night (Figure 10).



Figure 10. *Intact*, Office of Subversive Architecture. 2004

Intact reflects the notion of “humanized space” as discussed by Yi-Fu Tuan in his book *Space and Place: The Perspective of Experience* (2001). In several respects, this project embodies the ideas of Tuan. The author argues that, without personal influence and an element of possessiveness over a space, the emotional bond between a person and a place is slow to develop. The location of the project plays just as important a role as the “intervention” itself. The picturesque home stood out among the rest of the houses in the area and attracted more attention to their poor state. Karsten Huneck comments that

Through a simple, low budget and temporary action on a specific site, such projects capture the imagination and raise awareness and debate around the spaces that we often pass by without so much as a glance. (Huneck, 2004:online)

Intact re-examines the use of urban spaces in two ways – by looking at the choice of location and the type of intervention possible. Situated in an area of the city where the results of failed private capital interests have marginalized the human need for space and shelter, the project tries to direct public attention towards the fact that many spaces in our cities have been abandoned and forgotten. Such works also question the organization and use of contemporary public space through the non-conventional approach to architecture that they use. They take us back to Hundertwasser’s approach to the building as the “third skin” (Hundertwasser, 1967)²¹, towards the creative individual freedom of building.

The art historian Rosalyn Deutsche discusses site specificity as a discourse which combines “...ideas about art, architecture, and urban design, on one hand, with theories of the city, social space, and public space, on the other” (Deutsche, 1996:xi). *Urban Oasis* is a type of intervention which combines elements of these theories and practices. Initiated in 2005 by the OSA, the project aim was to create a green area in the middle of Broadgate Circus in the City of London. The architects of

²¹ Friedensreich Hundertwasser, an Austrian artist and architect who lived and worked through the twentieth century (Restany, 2001).

the project aspired to create a “...living piece of nature in the heart of the city” (OSA website), where the structure resembles an outdoor pub with chairs and tables covered by grass (Figures 11 and 12). They installed a jukebox that played sounds from nature and posted a warning notice reading “Keep on the grass”.

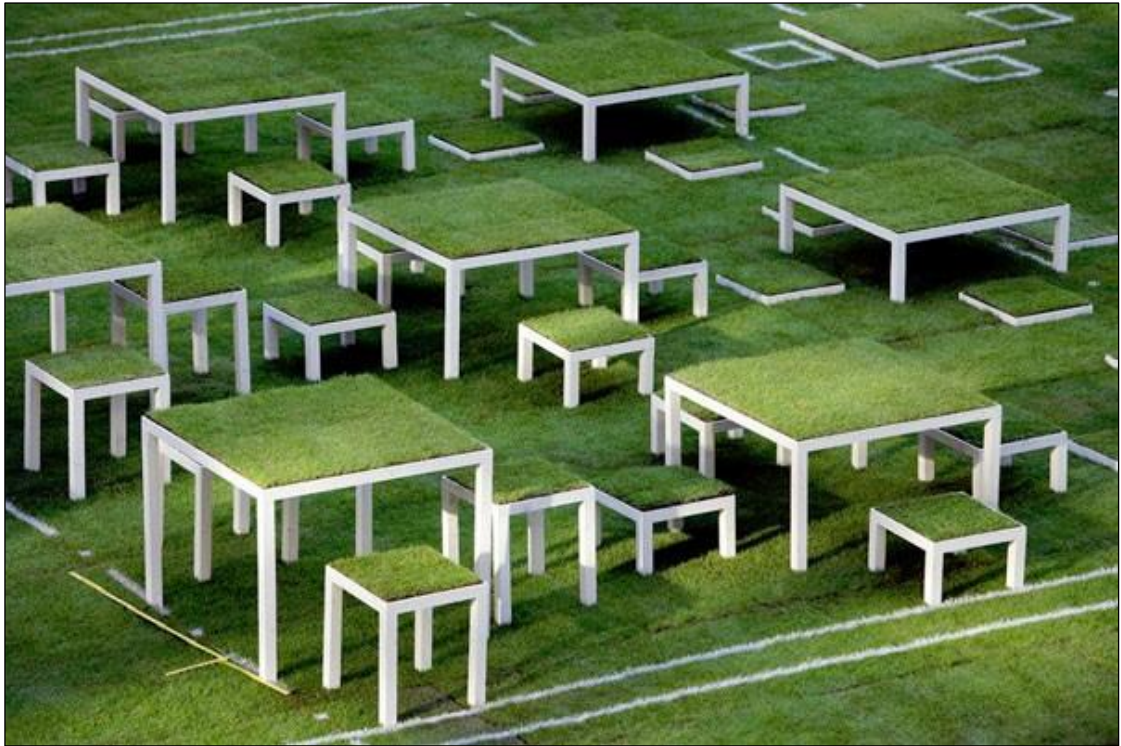


Figure 11. *Urban Oasis*, Office of Subversive Architecture. 2005

Karsten Huneck, one of the creators of the project, observes:

A major part of our work with OSA focuses on those areas of the city which tend to be overlooked, forgotten or abandoned. All over London you can find neglected sites that invite exploration and engagement. They offer up opportunities to create temporary projects that explore their potential and the possibilities for positive future development. (Huneck, 2007:online)

By responding to the needs of city dwellers in the local area and creating “...breathing space amid the concrete surroundings” (ibid.), this work is not simply site specific but also audience specific and issue specific. The American curator Mary Jane Jacob explains that this change of direction is a

...logical step toward a more intimate and meaningful relationship between the artist and his/her audience, a way of shrinking the poles of production and reception. (Jacob, cited in Kwon, 2004:9)



Figure 12. *Urban Oasis London*, Office of Subversive Architecture. 2005

The ability of *Urban Oasis* to shrink the distance between the work and its audience and the fact that the work itself is a facilitator, “a partial object, a vehicle of relation to the other” (Rendell, 2006:149), links the project with the ideas of Relational art. This type of practice is defined by Nicolas Bourriaud, where he argues that “encounters are more important than the individuals who compose them” (Bourriaud, cited in Bishop, 2006:65). *Urban Oasis* is more than an intervention in the City of London. The project not only removes distance between the work and its audience but it also acts as a catalyst for social networking between audience

members. This is why the concept of *Urban Oasis* can be linked to relational art practices where prompting human relations is a crucial point of the artwork.

A parallel could be drawn between this project and the notion of relational aesthetics, which considers the position of the viewer of the work as paramount in the creation of the work:

The work of art may thus consist of a formal arrangement that generates relationships between people, or be born of a social process; I have described this phenomenon as “relational aesthetics,” whose main feature is to consider interhuman exchange an aesthetic object in and of itself. (Bourriaud 2000: 32-33)

The artwork is then seen as a period of time to be lived through, as encounters and experiences demonstrated through the exchange between its viewers and its participants. Relational art is about modelling possible universes, “an art taking as its theoretical horizon the realm of human interactions and its social context, rather than the assertion of an independent and *private* symbolic space” (Bourriaud, 2002: 14). It focuses on the interactions that occur through the work and that they are meaningful and relevant to those who perceive the work. The meaning of the site shifts beyond the physical into the realms of meaningful social interactions between those who occupy it. Clare Bishop emphasises that for Bourriaud, relational aesthetics is not only a type of interactive art, but a process prompted by the desire for more physical and face-to-face interaction between people whilst also being a do-it-yourself approach (Bishop, 2006).²²

22 In the early nineties Suzi Gablik published *Connective Aesthetics* (1992), arguing that with the emergence of interactive and participatory works, “a new, less specialized, less monocentric mythology of the artist is emerging that affirms our radical relatedness. At this point, we need to cultivate the connective relational self as thoroughly as we have cultivated, in the many years of abstract thinking, the mind geared to the principle of individual selfhood” (1992:2). Similarly, art theorist Grant Kester developed the theory of dialogical aesthetics (2004), where art breaks down the conventional distinction between artist, artwork and audience and allows the viewer to become part of the artwork through this dialogue. Kester explains on dialogical aesthetics, “I concentrate on works that define dialogue itself as fundamentally aesthetic (as opposed to works centred on collaboratively producing paintings, sculptures, murals, etc.)” (2004: 13). The concept of dialogism was developed by the Russian philosopher Mikhail Bakhtin through his work on literary theory, where he contrasted monologic work to a continuous dialogue where “even past meanings, that is, those born in the dialogue of past centuries, can never be stabile” (1986:170).

The advanced concept of site specificity – the social context of human interactions - which addresses not only the physical conditions of the site but also encourages dialogue with the audience and public participation, is demonstrated in *Park Products*, a collaborative project between the artist Kathrin Böhm and the architect Andreas Lang.

Böhm and Lang collaborated with visitors to the Kensington Gardens and Product Design students from the Royal College of Art, London, to create their project as part of a residency at the London Serpentine Gallery in 2004. Being interested in socio-geographical networks, the duo investigated existing social structures as a starting point for collaborative work. They worked with a wide range of people, from scientists at Imperial College, London, to gardeners, dog walkers and park visitors. They created products that used the raw materials of the park and reflected the diverse interests of park users. These products were chocolate-bar shaped compost blocks made from compressed Royal Parks compost, bird houses for some of the rare birds living in the park, and shiny jewellery to attract magpies.



Figure 13. *Park Products*, Kathrin Böhm and Andreas Lang. 2004

The products were distributed using non-traditional methods. For example, people were invited to stroke the trees or to weed the gardens as payment for "purchased" goods. Visitors within the park were also encouraged to exchange possessions amongst themselves: this was an integral part of the project itself, designed as a method to promote dialogue (Figure 13).

Böhm and Lang let the participants make their own choices when designing products and opting for the type of product-exchange that they wished to make. The goal of the project was not to achieve a controlled final outcome, but to provide an environment in which an unpredictable direction of the project could develop. Jane Rendell writes about *Park Products*:

The products are both residues of the processes that produced them, but they also 'trigger' the final form of the work. Yet the final manifestation of *Park Products* is not predictable in advance and depends entirely on the actions of the users of the Park.Rather than press forward to try to uncover the processes that I felt sure had been used conceptually to structure the project, I realised the situation asked for a different approach. To choose to relinquish control over the final work, and hand the decision-making process over to others, marks the surfacing of different creative consciousness, which in turn asks for a new form of critical engagement, not a holding down, but a letting go. (Rendell, 2004:online)

Projects such as *Park Products* and *Urban Oasis* are evidence of sophisticated site specificity, where it is not just a single human body participating in the work, but the community and community participation becomes the focus of, and an inseparable part of, the work itself. Through such examples we can observe how these processes start to merge into a "critical spatial practice" as described by Jane Rendell (2006:4):

... in other sites and situations art can adopt critical functions outlined above and works can be positioned in ways that make it possible to question the terms of engagement of the projects themselves. This type of public art is critically engaged; it works in relation to dominant ideologies yet at the same time questions them (ibid.).

Although Jane Rendell discusses such practices in terms of the intersections between art and architecture, the meaning of spatial can move away from the physical conditions of a space towards a new form of site specificity, where the

human body becomes the site around which the work is created. I have already addressed such examples in the works of Michael Rakowitz and Suzy Orta.

This section began with an examination of two artworks from the 1970s and 1980s – the *Apollo Pavilion* and the *Tilted Arc*. Clearly, the *Apollo Pavilion* was an attempt to integrate site and artwork through the architectural function that it served. Despite the intention of the artist however, *Tilted Arc* was seen as a type of plop art, not connected with the space in which it was installed. The intention of Serra to dislocate, to shift and re-structure an already established public space was not successful. After all, those who walked and used the Federal Plaza were responsible for the removal of the artwork. In contrast, works such as *Intact*, *Urban Oasis* and *paraSITE* provide a different view towards site specificity – trying to shift the site through those who use it. This approach towards public art prompts further questions about the role of those who occupy the site in which the work is situated. An advanced notion of site specificity is observed, where the artwork not only points towards the issues of those who occupy the site, but also becomes a possible solution for the problems in question. Such works represent a shift away from the “possible relationship with a potential audience”²³.

2.4 Art in the Public Interest?

This section is included as there is much debate today on the role of public art and its benefits for the audience. Miwon Kwon (2004) defines art in the public interest as projects that focus on social issues and Suzanne Lacy (1995) calls this new genre public art, where values and social responsibility can be discussed in terms of art.

In 1991, two years after the removal of the *Tilted Arc*, the American artist John Ahearn was commissioned to create a new public space as a “bridge” between the precinct and the community in the Bronx (Finkelpearl, 2001). As someone who

²³ Here I refer to the second stage of public art, described as negation by Mark Hutchinson (2002).

lived in the local community, Ahearn decided to represent real people and proposed three bronze figures: a boy with a pit bull, a girl on roller-skates and a young man with a basketball. His proposal was accepted and Ahearn created three sculptures using his established approach of making casts of people in the neighbourhood. He used models from the area to cast the three figures which were then installed in front of the local police station. Ahearn wanted to represent the people of the Bronx and his models were of Latino and Black backgrounds, but after the works were installed they were heavily criticised for being racist, threatening and negative role models. Ahearn was looking for “a balance between harsh reality of life that the art should respect and relate to as a real and honest portrayal of life” (Ahearn, 1991, cited in Finkelpearl ed. 2006:88). However, the work was removed days after being installed.

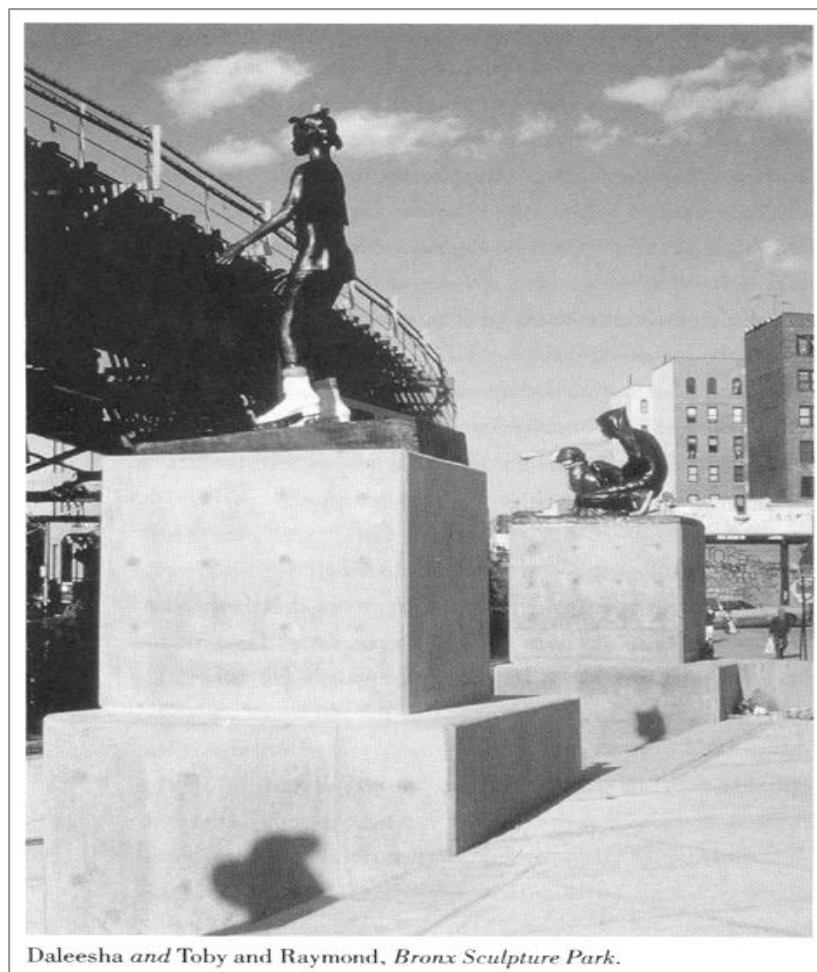


Figure 14. John Ahearn's figures in front of the police station in the Bronx. 1991

The *Tilted Arc* was seen as a dislocation of the public space of the Federal Plaza and described as offensive by people working in the Federal Building. Ahearn's sculptures were seen as a glorification of criminals and threats were made that they would be destroyed if they were not removed from the site. Ironically, although both works were created with the idea of avoiding disturbance and violence, they were subject to a series of violent attacks. This might have been because they were made *for* but not *with* the community. The type of work represented by Ahearn's Bronx Sculpture Park was created with the community occupying the spaces where the works were situated in mind, they represent a top-down approach to the creation of public art and they are the result of the work of one person, the artist.

In 1992, a community-based art project called Culture in Action took place in Chicago. The project was organised by Mary Jane Jacob, the director of Sculpture Chicago, and the aim of the project was to bring art to urban communities (Jacob, 1995). Jacob invited artists to propose projects which emphasized dialogue and social interaction for the public sphere. Each of the projects involved collaboration between an artist and a particular community with whom the artist chose to work. Two of the projects deserve particular attention in relation to this study: *Full Circle*, initiated by Suzanne Lacy and *Flood*, by the art collective HaHa.

One of the selected artists, Suzanne Lacy, organised a project called *Full Circle* that created much controversy in the city of Chicago. One hundred half-tonne rock monuments were placed on sidewalks in downtown Chicago. Each limestone rock came from a woman-owned quarry in Oklahoma, and displayed a bronze plaque recognising the contributions of a Chicago woman: ninety who were still alive at the time, and ten from the city's past. The monuments were placed in a city which had no major monuments dedicated to women.

HaHa, an artist team from Chicago, formed a volunteer group called Flood, which involved artists who lived in the community in which they worked. The group transformed a vacant lot into a vegetable garden and created a hydroponic garden in the neighbouring storefront. Envisioning bacteria-free produce as being

particularly important for those with HIV, the artists included a space for discussion and the dissemination of information on local services available to AIDS sufferers. Haha saw this as a model that could be reproduced in other areas. The director of *Culture in Action*, Mary Jane states:

As public art shifted from large scale objects to physically or conceptually site specific projects, to audience specific concerns (work made in response to those who occupy a given site), it moved from an aesthetic function, to a design function, to a social function. In the 1990s the role of public art has shifted from that of renewing the physical environment to that of improving society, from promoting aesthetic quality to contributing to the quality of life, from enriching lives to saving lives. (Jacob, in Kwon 2004:111)

In the cases of both Lacy's *Full Circle* and *Flood*, the artists established a relationship with community groups and achieved a sense of collective ownership of the projects. Instead of addressing the physical conditions of the site, the works focused on concerns related to those who "occupy the site". Mary Jane Jacob describes the projects as both "issue-specific" and "audience-specific". According to her, this was

...a logical step toward a more intimate and meaningful relationship between the artist and his/hers audience, a way of shrinking the distance between the traditionally separate poles of production and reception. (Jacob, in Kwon (ed) 2004:107)

Culture in Action is evidence of a major shift that has taken place in the dialogue surrounding public art since the controversy created by the *Tilted Arc* and it is an inspiring example of what can happen when artists work for social change, as defined by Kwon in the art in the public interest model. The artists became more concerned with issues such as ecology, urbanisation and race, and, according to Suzanne Lacy

...the new genre public art became not only about placements or site for art, but about the aesthetic expression of activated value systems. (Lacy, 1995:30)

Lacy notes that artists, when dealing with some of the most profound issues of their time, have "developed distinct models for art whose public strategies of engagement are an important part of its aesthetic language" (Lacy, 1995:19).

Furthermore, the source of their artworks is not simply visual or political information but “rather an internal necessity perceived by the artist in collaboration with his or her audience” (ibid.). This, in essence, is what Lacy calls “new genre public art”. This definition is an attempt to distinguish it in form and intention from public art, the term describing sculpture and installations sited in public places. Lacy describes the focus in new genre public art as being on interaction with the audiences about issues directly relevant to their lives and on audience engagement (ibid.).

But here one has to question the meaning of “engagement” that Lacy is referring to. Is the work engaging because it highlights a specific issue? Is it engaging because it involves collaboration between the artist and his or her audience? This poses further questions about the role of the artist in relation to the expectation for works considered to be new genre public art. What does it mean to engage with work in the public interest? How can we understand what the public needs or wants?

Here, the second model of public art as defined by Mark Hutchinson is rather relevant. The second dimension is indicated by a closer relationship between the object of art and its surroundings which comes about once the idea of art’s detachment from everything else is no longer in play. At this point, the issue of the site in which the work is situated becomes crucial. Through this element Hutchinson’s interpretation of the second dimension of public art could be connected with Miwon Kwon’s interpretation of art as public spaces. However, it is in this stage that Hutchinson describes the audience (in the form of community groups) being encouraged by an artist or an art-teacher to create art. In a way, Hutchinson mixes Kwon’s two models of art as public spaces and art in the public interest. At this point Hutchinson’s interpretations become more sophisticated as he questions the role of the artist in art that supports the interests of a community in greater depth.

The main principle of Hutchinson's second stage is that only members of a certain community are able to produce cultural goods which have meaning for, and are sensitive to, the needs of that community. Hutchinson summarises that in this type of practice the role of the artist is closer to that of a technician running a workshop. This stage carries the idea that community art replaces alien art with something integral to the community in question.

Hutchinson criticises this dimension by noting that an "art practice that disempowers in the name of empowerment is a form of bad totality" (2002: online) and "rather than opening up new possibilities it shuts them off, reigning in the power of negation" (ibid.). Such art is described by Hutchinson as conceiving "of possible (and the possibility of) relationships with a potential audience or audiences" (ibid.).

In 2010, I attended a one-day conference in Dundee, Scotland, called *Mapping the Future: Public Art*. The event was dedicated to seeking new and effective strategies affecting commissioning, policy-making, research and creative practice. During the many involving and thought-provoking presentations and discussions, the word "empower" was repeated a number of times as being one of the key purposes of public art - empowering our society. To empower means to give someone official authority, or the freedom to do something. The word "empower" also relates to "enable", which could be interpreted as providing the means or opportunity to do something. When it comes to discussing art in general, it seems that the word "empower" is not used with the same frequency as other words. We mostly see words such as "inspirational" or "moving". And yet, somehow, when it comes to evaluating public art one of the questions that critics, curators and commissioners frequently ask is whether public art can empower our society, and if a particular project may positively influence the community. One of the conference delegates shared with the audience that he was once asked: "How can we use public art to stop terrorism?" This led me to think about the reasons why this subject has become so important in relation to public art. The most obvious answer would be because public art is in the public space and it is funded by public money.

And these are important questions, but there should be a limit of what are reasonable expectations when it comes to public art. Such expectations become unrealistic when we think about commissioned public artworks such as *B of the Bang* (2002) or *Arria* (2010), discussed earlier in this chapter.

The attempts to set the outcome of a public art project in stone in advance can do two things: one, it can restrict the imagination of the artists and two, justify the pay cheques of the stakeholders commissioning the works, who as it stands have power, but do not bear responsibility if the project fails to produce the expected result.

Earlier in this chapter, I engaged with the ways public art is evaluated by commissioning bodies and the issues relating to the understanding and discussion of public art by all parties involved in the process. Unreasonable expectations and pre-defined outcomes appear to be damaging and this is reflected in some of the public artworks being made today, as demonstrated by *Arria* and *B of the Bang*.

There are alternatives to such approaches, which are not the result of public art commissions and which are done with no permission from the authorities, and thus they are not officially recognised as public art. Such initiatives fall into the category of public art activism. Nina Felshin, in a collection of essays from her 1995 book *But Is it Art? The Spirit of Art as Activism*, notes the ability of socially engaged art practice to act as a tool for political critique. According to Patricia Philips' definition that the notion "public" in art is based not on where it is, but what it does (1995:285), then public art should encourage "the development of active, engaged and participatory citizens, a process which generally can occur only through the activism of an artist and the provocation of art (ibid.:286). Public art is based on what it does, but not where it is located and according to Philips, no one can be an activist artist without accepting the conditions of contemporary public space. Following the debate on public space which I presented in the introduction, such works could be seen as a response from those excluded from the decision making

processes concerning that space. The artist Mark Jenkins discusses the controversy of such projects:

And it's good for people to remember public space is a battleground, with the government, advertisers and artists all mixing and mashing, and even now the strange cross-pollination taking place as street artists sometimes become brands, and brands camouflaging as street art creating complex hybrids or impersonators. (Jenkins, 2011: online)

Such works are not officially endorsed as public art, but their main goal is to creatively evaluate and re-claim their public spaces. Examples of this can be seen in the work of the New York based artist Poster Boy, described as "...anti-consumerist Zorro with a razor blade and a talent for collage" (Kennedy, 2009:online). Swapping paper slices from one poster to another, the artist provides the billboards of the New York subway system with unusual facelifts (Figure 15). In an interview from 2009, Poster Boy comments:

In regards to social change, I want people to interact with their surroundings differently and reconsider private property. People should understand that there is a difference between what is legal and what is just. If there is a law that is outdated, impractical, and/or immoral, people have the right to challenge it. (Posterboy, in Sherwin, 2009: online)



Figure 15. Defaced billboard, Poster Boy. New York.

This idea of a more critical engagement with the street, which Poster Boy supports, is similarly promoted in the works of the New York based Anti-Advertising Agency. In the mission statement published on their website the group expresses concern about the way corporate advertising is taking over the public space:

The steady normalization of invasive advertising dulls the public's perception of their surroundings, re-enforcing a general attitude of powerlessness toward creativity and change, thus a cycle develops enabling advertisers to slowly and consistently increase the saturation of advertising with little or no public outcry. (The Anti-Advertising Agency, online)

In a response to advertising dominated public spaces, the group created *Light Criticism*. Cutting the words "New York's True Graffiti Problem" into a black foam core, the activists attached the screens onto flashing billboards above subway entrances in the city (Figure 16). The project is a simple, but effective, approach to sharing an important point whilst at the same time addressing the problem of excessive advertising itself. The founder of the Agency, Steve Lambert (2007), explains that although artists and activists may be aware of the difference between graffiti and vandalism, placing the signs in popular places such as New York City's Union Square was an attempt to speak to a broader audience. Lambert hopes that "Perhaps another campaign could work to better educate a public that equates graffiti with vandalism" (Lambert, online).

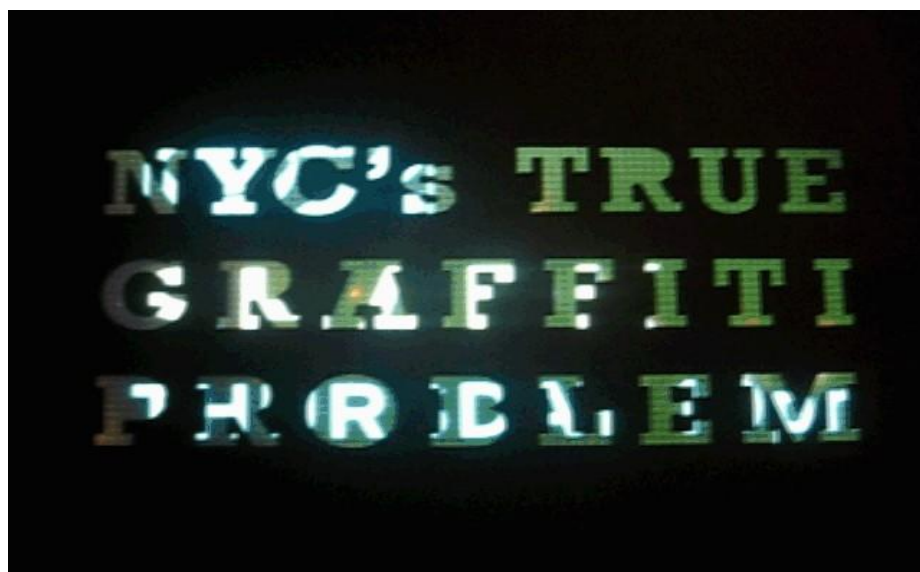


Figure 16. *Light Criticism*, the Anti-Advertising Agency. New York, 2007

Light Criticism is an important work as it not only highlights the commercial use of public spaces, but also aims to point out that just as some consider graffiti an unlawful act, advertising could be seen as an attack on the senses that cannot be avoided. Henri Lefebvre (1966) discusses the human right to interact with the public space, "...as an urban dweller... and user of multiple services" (1996:34).

The author points out the importance of the "...right of users to make known their ideas on the space and time of their activities in the urban area" (ibid.). The works of the Anti-Advertising Agency and Poster Boy could be seen as an attempt to creatively retrieve slices of what is supposed to belong to the public, whilst at the same time criticise seductive, but often deceptive, advertising messages.

The Anti-Advertising Agency presents the work as an open source method of subversion by placing a manual for constructing the foam core signs on their website and encouraging people to replicate, improve, and expand the project to different locations around the world. This property of the initiative relates to the platform of Web 2.0 not only because it is in essence a hacking project, but also because it is organized so it can be replicated by as many people as possible. I discuss the notion of open source in detail in Chapter Four. The viral aspect of this work is the one that makes the work itself a shared instrument through which people can become more engaged in their urban reality. The term *viral* originates from biology, where an infectious agent can replicate inside the cells of other organisms (Nalty, 2010: xvii). It is also used to refer to harmful programs that can negatively affect a computer and most recently it refers to the process where the platform of Web 2.0 facilitates the rapid spread of video files across the Internet (ibid.). Tim O'Reilly notes that the viral effect of the digital platform, i.e. allowing anyone to share files across the Web, is an organic way of getting information to spread (2005: online).

Bringing people together through projects aiming to re-discover and re-create the public space may establish groups which act more responsibly towards their surroundings. This responsibility is a part of the process of being a citizen, actively

reclaiming what is meant to be public. Through the power of art, an original and extended connection with others may be formed. Di Cicco, a poet and professor in Italian-Canadian studies, talks about artistry and citizenry as part of the same ethos, where “...a vibrant urban art teaches the art of life” (in Pivato, 2011:111). He advocates a new way of seeing ourselves as a part of the city, which combines creativity and citizenship into a single philosophy and attitude towards life. The art historian Grant H. Kester writes about such ways of seeing and experiencing space:

...the work of art is less a discrete object that it is a process of dialogue, exchange, and even collaboration that responds to the changing conditions and needs of both viewer and a maker...an activist art is premised on what Habermas has defined as an intersubjective “communicative action” ...Artists recognize that the process of shared dialogue can proceed most effectively if they function not as privileged outsiders, but as co-participants who are intimately involved... (Kester 1998: 15)

Mark Hutchinson’s third dimension of public art is described as *totality* (2002:online). It suggests a form of interaction that is a dialogical and reciprocal phase where the artist and the audience are in close dialogue, thus the artist “is responsive to the sense of place in terms of its various occupants and meanings, rather than to its spatial characteristics” (ibid.). The third dimension could be seen as the one relating to Kwon’s model of art in the public interest; however, the difference pointed out by Hutchinson is in the type of interaction between the artist and the community in question. In this stage, he distances the practice from the artificially prescribed roles of the artist and the community as opposite sides, focusing on more reciprocal and organic interaction between them.

Such approach is seen in the mp3 experiments of the art collective ImprovEverywhere. The project involved participants downloading an mp3 from the collective’s website, transferring it to their portable music player, and turning up at a specific time and place ready to press play simultaneously with others who had downloaded the file as well. Since the mp3 file contains music and voice instructions, the result is a synchronized combination of dance and performance

(Figure 24). One of the two thousand participants in the last mp3 experiment shared:

It was like one big get-to-know-each-other warm-up exercise. I met some great people during the event and hung out with them afterwards. The moment I knew it was going to be special was when all the participants stood up in unison and we finally got to see how many people were in on it. (Improveverywhere, online)



Figure 17. *The mp3 experiment 6*, ImprovEverywhere, 2009

The idea of this work could be linked to “flash mobs”, a new social morphology which denotes “...a public gathering of complete strangers, organized via the Internet or mobile phone, who perform a pointless act and then disperse again” (Oxford English Dictionary 2004). Wasik (2009) describes them as social experiments facilitated by technology, similarly to the classifications of Nicholson (2005) and Leadbeater (2009). Although ImprovEverywhere argues that their missions do not fall into this category, mainly because the collective was created two years before the term “flash mob” was introduced, their initiatives could be classified as such. Their ideas demonstrate originality and focus on creative interaction by breaking up the everyday patterns of life, whereas, according to

Wright (2005), flash mobs can be seen as a way of socialization in the streets and may be useful in adding to a society's overall sense of playfulness.

The mp3 experiments of ImprovEverywhere offer the public and the participants a chance to view and experience their public space by establishing a bond with other entities; a playful connection which is essential to maintaining a positive social milieu. This is precisely the point, as described by Rudolf Frieling (2008), that through a creative idea, the city dweller

...becomes a producer of and an arena for social and aesthetic experiences, temporarily interrupting singularities through the presentation of participatory art that actively generates a discursive public space. (in Atkins et al. 2008: 48)

The constant transformation of our cities has and always will carry certain social and political pressures connected with the changes of society. The dynamic of the urban environment provides a venue for creativity and improvisation, but also prompts critical thinking and unscripted social interactions — all qualities that many street interventions carry today. Hue notes that

...as a strategy, reclaiming residual spaces provides a venue for testing innovative, unconventional urban ideas through rethinking the overlooked potential of undervalued cities. (Hue, 2010:95)

The works discussed above could be seen as a global exploration of that potential, both as they focus on problems that many cities across the world possess, but also because the projects can be installed in various locations across the world where citizens feel the need to actively participate in the creation of their urban space through creative practice. As Hue points out, “Only through taking responsibility for the creation and evolution of the environments in which we live can we truly point ourselves in the direction of a better future” (Hue, 2010:95).

The concept of “everyday life”, which was discussed by Marx as the notion of dull repetition resulting from the oppression of the working class in capitalist society (in Mszros, 2006), and later in the work of Henri Lefebvre (1947), who

defines the everyday as a concept different from work and leisure activity (in Nicholson-Smith, 1991) has often been viewed as a negative, as a synonym for uninteresting, tedious activity. The everydayness of the street that many of us experience today can be shattered or cracked by the playfulness and imagination of many creative interventions in the urban environment.

2.5 Summary

Following the introduction of this thesis, in which I outlined a number of issues relating to public art, this chapter expanded on the investigation of definitions, theories and public art discourse. The chapter began with a critique of art in public space. I looked at the possible reasons why such types of decorative art are still supported and funded and offered a critique of projects that have no relation to the physical characteristics of a particular place nor to those who occupy it. It could be concluded that artificially designed funding strategies for public art might be a reason why such projects continue to be made, supported as they are by the policies of city planners and art administrators.

The third section of this chapter investigated developments in site-specific public art, where the location is the focus of the work. Apart from providing a historical overview of such projects, this section analyses contemporary public art projects which focus on participation and audience engagement, thus making their audience a key element of the work. I discussed the limited ways in which the meaning of the site is interpreted in relation to public art. It would appear that it should not be assumed that if a work of art is placed in a public location it will engage its viewers. Examples of such projects were contrasted with works that focus on audience participation and facilitate meaningful interactions in the public space. I examined a number of public art projects which direct the meaning of site towards the human body and which open up a new platform for audience engagement and participation in public art.

The fourth section of this chapter examined art in the public interest, also defined as new genre public art (Lacy, 2005). Analysing a number of projects that fall under this category I questioned who decides what the public needs and what is the role of the artist in such projects. I also criticised the concept of art in the public interest, as it refers to assumptions which public art policy makes regarding what is considered to be good public art. The variety of the projects investigated in this chapter allowed analogies to be drawn between commissioned public artworks and those that are not officially endorsed as public art, calling for wider understanding of the practice. Alternative approaches are seen in examples of public art that fall into the category of Art Activism as examined earlier in this chapter. Such works focus not on physical location but on encouraging active and engaged citizens through creative provocation in the public space.

Through art, a new space for critical thinking is revealed, prompting citizens to not simply pass by, but to imagine, participate and build. The works discussed above are not only a response to marginalized city spaces; they are also a way of humanising these spaces by creating a connection with others and uncovering a new meaning to everydayness and everyday creativity. They reveal new properties, meanings and use of the street as a public space. The street is no longer a place where dwellers pass by each other, but also a place for leisure, for discussion, or simply for reflecting on one's thoughts. Only once this becomes a reality can the public space can be experienced without feelings of isolation, unfamiliarity and exclusion.

Public art should be associated not only with the physical conditions of a site, but more importantly with those who occupy it. It is about creating spaces for unexpected encounters, providing room for the messiness of everyday life and the diversity to thrive. Public art is about responding to the social conditions of a site, facilitating dialogue between the members of the site, looking to establish connectedness or debate; it is also about being critical, decoding and exposing the site through critical engagements with its elements and questioning its organisation. Such public art may provide opportunities for exchange and debate

between the creators and the audience as well as meaningful connections between the members of the audience themselves.²⁴

Mark Hutchinson describes the fourth stage of public art as agency, or the process of self-transformation of the practice. It is a practice which transforms its audience but also allows itself to be transformed by its audience. Hutchinson concludes that such art might be hard to see and judge as it will transform what counts as seeing and judging, noting that “what art might be, and become, is open ended. In a radically open system, what radical art is, is open to radical transformation in practice” (Hutchinson, 2002:online). It is at this point, where the dialogue between the sides previously described as opposing – artist and audience – could be seen to be conveying deeper meaning, delivered through reciprocal interaction of the two sides. At this point art in the public interest is not just about engagement between the artist and his or her audience, but about creating a space for collaboration and organic forms of engagement between the members of the audience themselves.

The next chapter is concerned with public art that uses digital technology. I will relate the practice of public art in the physical space with the equivalent, virtual space, i.e. the Internet. The purpose of the forthcoming chapter is to consider if and to what extent public art has changed due to the penetration and use of digital technologies.

24 I seek further development of this notion through the investigation of the Bubble Project, as part of Chapter Five, which reveals that through the work ordinary people become co-authors of public reality and through the project implementation they communicate and establish ideas together. Furthermore, the use of technology and digital media has enabled the artists to produce and distribute work for and throughout wider audiences, allowing works to continue to exist via the Internet, whilst at the same time their audiences re-create and distribute them in the physical world. It is through these principles it that we could attempt to reach a more sophisticated concept of public art, one of open-ended practice with a more meaningful connection between the work and its audience, one of reciprocal interaction and constant transformation.

Chapter Three

Public Art in the Digital Space

3.1 Context

Prior to defining and exploring the term Public Art 2.0 in Chapter 5, the developmental rise of new technologies and its impact on public art need to be explored. This chapter is concerned with the intersections between digital technologies and public art. Here I also question if the increase in digital technologies might be responsible for major developments in public art, or it is only when the developments in Web 2.0 are taken into consideration that we can account for the notion of Public Art 2.0.

Bruce Klopfenstein (1997) discusses digital technology as a transition of all forms of content into forms that are easily manipulated by computers (1997:22). Digital devices gadgets and electronic equipment such as computers, mobile phones, music players, tablets or personal digital assistants (PDAs) offer us digital information in forms that we can understand and use (text, images, audio, video).

The rapid development of such technologies over the past few decades and the open access to information facilitated by them has created a new public space for dialogue. This process has opened up an enormous arena for social interaction and a platform for creative exploration and experimentation. Such creative experiments are evident in the forms of Net art and new media art²⁵, through the use of augmented reality²⁶ or virtual worlds which exist on the Internet.

²⁵ I discuss Net art and social media art in Chapter One.

²⁶ I discuss the term augmented reality and its intersections with public art later in this chapter.

Christiane Paul (2006) notes that networked new media art which exists in the public space of networks can be understood as a new form of public art.

Compared to more traditional forms of public art practice, Internet art, which is accessible from the privacy of one's home, introduces a shift from the site-specific to the global, collapses boundaries between the private and public, and exists in a distributed non-local space. As opposed to public art in physical space, artworks in the public space of networks are largely not regulated and sponsored by the government but often develop their own systems of governance. (Paul, 2006:online)

The editor of Public Art Review journal Steve Dietz argues that there are a number of technological converging trends that create new and exciting possibilities for artists working in the public sphere. According to Dietz, these trends include the ongoing miniaturization and increasing firepower of computing technologies; the increasing ubiquity of robust network connectivity; and the rise of locative services such as GPS and sensor networks (2009:11). Such trends, combined with creative intentions, provoke new forms of art. According to the curator and writer Susanne Jaschko, such art is "ongoing, changing, and processual" and it relies on its community of users.

The city is a living organism shaped by both quick change and permanence. Processes inside this organism progress at different levels of speed and complexity. But even in times of growing mobility, one of the more permanent parts of this organism is the community that inhabits and uses the urban territory. ...If art in public space is to create a strong connection between a space and its users, it must be process-based, responsive, interactive, or participatory. New media is uniquely suited to move us beyond the historic monument, as it centers on the human individual acting within a social group - hence, according to the principles of democratic society. The contemporary process-based monument mirrors the city as a living organism whose parts are in constant exchange with its environment. (Jaschko, 2009:16-17)

The new media artist and theorist Patrick Lichty writes that one of the most interesting functions of the Internet is its role as "an agora for new forms of electronic art, especially those that fit under the general classification of 'Web 2.0' and sites with user-created content" (2009:42). Lichty notes that social media sites,

blogs and virtual worlds such as Second Life are spaces where many people explore, build, congregate and create art. Such forms of art, according to Lichty, shape community, form gateways between physical and virtual spaces, “create a virtual sense of agora or stimulate conversation about the potential of virtual space as public space” (ibid.). Lichty defines virtual worlds as

...online “places”, a cross between a 3D video game and a spatial version of the Web, populated by digital bodies called avatars, which can walk, fly and take the form of anything from human beings to mythical beasts. There are two main kinds of virtual worlds: games like the World of Warcraft and Eve Online where people can act but not build; and open-ended environments like Second Life (SL) and OpenSims, which are spaces created almost entirely by residents. (ibid.)

Lichty notes that user-created content can make for wide variations of work and that groups of artists are making their own spaces. This brings up the question what constitutes a public art space and, according to Lichty, certain limitations need to be considered. For example, in Second Life users can limit access to areas, although this is not common; Second Life is hosted by a private corporation which has its own terms of service. Lichty writes that a variety of public art spaces in Second Life nevertheless serve as centres for congregation, community and conversation (ibid.).

Some have similar functions as public art in the physical world; others bridge physical and virtual space or foreground unexpected interactions in agoras around SL, while other sites present “remediated” (reproduced) historical artworks. (ibid.)

The impact of digital technologies on public art could be categorised in three key ways: public art that exists merely online via virtual worlds, such as Second Life; public art that exists through websites, and public art that exists through augmented reality (or mobile public art). In the next part of this chapter I will explore these three categories. What they all have in common is that the majority of works that fall into these three groups involve public participation enabled by digital technology.

The term “participation” has become integral to the debate on socially engaging art practice. It relates to the role of the artist as a facilitator of settings where passive viewers can become active participants in the artwork.

The German theorist Walter Benjamin discusses the notion of participation, maintaining the position that a work of art should actively intervene in, and provide a model for, allowing viewers to be involved in the process of making:

What matters, therefore, is the exemplary character of production, which is able first to induce other producers to produce, and second to put an improved apparatus at their disposal. This apparatus is better the more consumers it is able to turn into producers — that is readers or spectators, into collaborators. (Benjamin 1983: 233)

The contemporary debate on participation has been also altered by the notion of relational aesthetics as defined by Nicolas Bourriaud, which I discussed earlier. Bourriaud considers the artwork to be an experience which is generated by the relationships of people participating in the process which the work enables.

As the emergence of the Internet has increased the opportunity for people to produce artifacts online, so has the debate around Internet enabled participation. In his book *Bastard Culture, User Participation and the Extension of Cultural Industries* (2011), Mirko Tobias Schäfer notes that the Internet first and foremost distributes the qualities of computers and software on a global scale, whereby

Through the Internet, a single computer is situated in a larger network that exceeds the locally confined social networks of the pre-Internet era. In addition to its usefulness as an office machine, it has developed as a convenient communication device. It serves as an infrastructure for distributing data, and through accumulating resources of collectively amassed texts. (2011:71)

Schäfer also notes that participation has become a key concept framing digital media art practices.

[Participation] considers the transformation of former audiences into active participants and agents of cultural production on the Internet. Popular media acclaimed the new possibilities for consumers to actively create and produce media content. Users became explicitly active

participants in the cultural production thanks to the latest WWW developments. (ibid.)

Participation has been perceived as an “appendix in the struggle against exclusion from political decision-making processes, as well as exclusion from ownership of the means of production, and the creation of media content” (ibid.).

Richard Barbrook discusses the role of the digital artisans in the Internet culture of contemporary society:

As the history of the Net demonstrates, hacking, piracy, shareware and open architecture systems all helped to overcome the limitations of both state and commercial interests...Already, a minority of the population can use the Net to inform, educate and play together outside both the state and the market. Once a broadband network is built, everyone will have the opportunity to join this hi-tech gift economy. Most current Net users don't simply download other people's products. They also want to express themselves through their own web sites or within on-line conferences. Unlike traditional media, the Net is not just a spectacle for passive consumption but also a participatory activity. (1998: online)

Henry Jenkins describes the participatory culture as a new model for cultural production using five key factors. One, the barriers for artistic expression and civic engagement are relatively low; two, there is strong support for creating and sharing creations with others; three, the most experienced are passing knowledge on to novices, creating a type of informal mentoring; four, participants believe that their contributions matter; and five, participants feel some degree of social connection with one another. Not every participant has to contribute, but all must believe they are free to contribute when ready and that what they contribute will be appropriately valued (2009:5-7).

Writing about Internet-enabled participation, Mirko Tobias Shafer notes that work undertaken by Internet users can be mapped according to the following three categories: accumulation, archiving or organizing, and construction (2008). Accumulation concerns the activities that revolve around popular media content,

where fans expand the content by contributing to related debates, as well as by creating related media content. Archiving and organising involves the storage of artefacts by users, the creation of archives and the reorganising of cultural resources and knowledge bases. The most important category is construction, where the processes occur beyond the established cultural industries and relate to the production of new content and new technologies, as opposed to the processes of re-organising or accumulating of content. Shafer also notes that in light of the new Web 2.0 technologies and applications, the three areas of accumulation, archiving and construction overlap, where construction and archiving are often inseparably connected (ibid.).

YouTube, for example, is an online platform that combines all three categories. Whilst it is a place for storing and distributing popular media content, it is also a space to which anyone can upload and make their homemade movies or musical video clips available for viewing or distribution. Furthermore, YouTube is also a communication channel which offers discussion for all – participants and viewers. Another prime example of the DIY nature of the Internet is Flickr, a platform for storing and distributing images. This is a place where archiving and construction merge, as participants not only upload their photos but also add titles and keywords and by doing so they contribute to the system used to navigate the stored content.

Prior to the genesis of the World Wide Web, a prominent figure who played an important role in the ethos of the every-day making, creativity and the DIY movement was the American writer Stuart Brand. Between 1968 and 1972 he published *The Whole Earth Catalog*, which was, in essence, a paper-based database offering thousands of hacks, tips, tools, suggestions, and possibilities for optimizing life. This catalogue could be seen as the paper version of the Internet, as its goal was to bring knowledge to the people. Moreover, as anyone was able to submit a review to the catalogue, it could even be viewed as a paper version of Web 2.0, an environment where opinions, suggestions and ideas were shared amongst all.

Emphasising pragmatism and promoting self sufficiency, The Whole Earth Catalog's unique viewpoint was its focus on human creativity and sustainable living. The Catalog did not sell anything, but rather disseminated information. Indeed, Brand's work could be seen as a predecessor to the Internet. For instance, Google today is an expression of the ethos of the Whole Earth Catalog – it helps us find useful information, it provides us with knowledge and links to sites disseminating enormous amount of data.

David Gauntlett notes a similar but different version of the DIY philosophy through the lo-fi music and punk scene:

This DIY culture is characterised by a rejection of the glossy, highly produced, celebrity-orientated mainstream of popular culture, and its replacement with a knowingly non-glossy, often messily produced alternative which is much less bothered about physical beauty, and declares an emphasis on content rather than style. (2011:53)

In her book, *DIY: The Rise of Lo-Fi Culture*, Amy Spencer notes that "The Internet has enabled DIY culture to become more accessible and less elitist" (2008:13). David Gauntlett adds that the DIY ethos of the Internet is responsible for the move away from the "sit back and be told culture" (associated with traditional media such as television) to the "making-and-doing culture" of the Internet, turning traditional media consumers into media producers. He also notes that the Web is not only a new place for such processes occur, but also a new vehicle for communicating, showing projects and connecting with others (2011:63).²⁷ During the first decade of the 21st century, rapid technological growth meant that the concept of the user as producer became widely popular through the digital tools of the Internet. These developments challenge the idea of individual creativity and authorship, changing them into activities which involve large number of participants: ordinary people who become producers of content with artistic merit.

In the rest of this chapter I discuss how the process of interactivity enabled by the three dimensional environments of virtual platforms contributes to public

²⁷ In Chapter Four I discuss in more detail Gauntlett's ideas of "making as connecting" in relation to Web 2.0 and creativity.

participation and how artists base their work on this key notion when creating virtual public art. I also look into how the audience is engaged in works concerning the public space, using digital technologies such as augmented reality, geo-tagging and virtual worlds.

3.2 Public Art in Virtual Worlds

The term “virtual world” is defined as a computer-based environment, through which users interact with one another (Bishop, 2009). The term is also explained through its properties as an online community, where people represent themselves via avatars — a graphical representation of their character — in a three-dimensional virtual environment and as a “synchronous, persistent network of people, represented as avatars, facilitated by networked computers” (Bell, 2008:2). The virtual world is a shared environment which depicts space visually and in which interaction takes place in real time. Such environments allow the formation of communities based on interest where users can also create or alter content which continues to exist regardless of whether or not they are logged in. The most common applications of virtual worlds are online gaming via single player and multiplayer platforms, education via virtual learning environments and online community building. Virtual worlds can be divided into two key categories: one where users can interact, but not build, and one where the world is built entirely by its users.

For the purpose of this investigation, I look at the representation of public art in virtual worlds, using the platform of Second Life (SL), one of the most popular 3D virtual platforms. Many of the properties of the platform apply to other virtual environments where spaces are created almost entirely by the residents. Second Life is based entirely on user-created content and amongst the numerous individuals building and interacting with one another, there are various artists using the platform to create and display work virtually. In Second Life users can restrict access to spaces created by them, but this is not common.

When considering Second Life in light of this dissertation the following questions come to mind: What is its potential as a public art space? How do the works created here compare to those created in the physical space? Does the virtual 3D platform provoke unusual approaches when creating public art and if so, how can they be applied to the practice of public art in the physical space?

Investigating what constitutes a public space in a virtual environment, Patrick Lichty (2009:42) notes that in Second Life:

...there are many different kinds of spaces, from accurate, three-dimensional reproductions of real world galleries, to malleable spaces that utilize the formal qualities of virtual plasticity. A variety of public art spaces in SL serve as centres for congregation, community and conversation.

Lichty uses as an example *Brooklyn is Watching*, a public Second Life exhibition space, where anyone can place their works and let others build upon them. Another example which relies on the interactivity of the Second Life residents is the *Flower Tower* of Eshi Otawara, which represents a tower of psychedelic flowers with compartments that allow avatars to fly through and dance around. Lichty notes that this work is a prime example of how “virtual public art becomes a focal point that attracts, guides and directs the flow of the virtual public” (ibid.). (See Figures 19 and 20)

According to Lichty, this work resembles the functions of Anish Kapoor’s *Cloud Gate* (2006) in Chicago. Lichty also notes that one of the most exciting elements of art in virtual worlds is how the space itself can become fluid and “responsive to presence, even leaving traces of visitation” (2009:44). In a way this function can be related to graffiti art, which initially begun as a way of “tagging” or leaving your own signature in the public space (Powers, 1996:137).²⁸

28 Drew Hemment (2005) uses the term “geograffiti” to describe a process that creates a parallels between the virtual and the physical worlds through locative media art.

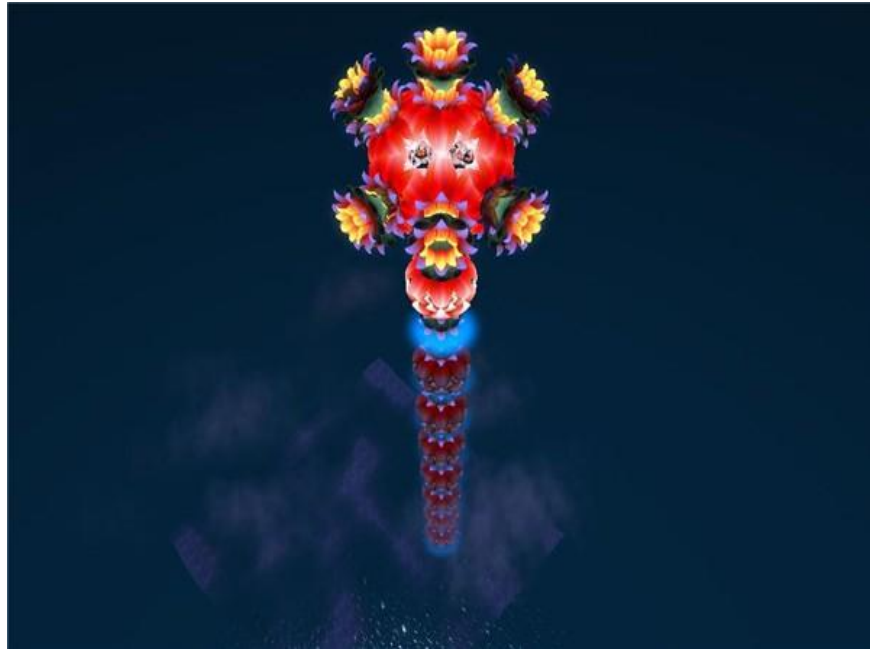


Figure 18. *Flower Tower*, Eshi Otawara. Second Life. 2008



Figure 19. *Flower Tower*, Eshi Otawara. Second Life. 2008

Some spaces in Second Life function as sculpture parks, similar to those in the physical world. Odyssey Island, for instance, is a space hosting large-scale sculptures and serving as an outdoor exhibition area. One of its most prominent works is *Seventeen Unsung Songs* by Adam Nash, created in 2007. Nash created seventeen

monumental audio-visual sculptures, and invited avatars to explore and interact with them (Figure 20).



Figure 20. *Seventeen Unsung Songs*, Adam Nash, Second Life. 2007

Another work hosted by Odyssey Island is *This Land is Your Land* by Second Life artist Gazira Babeli. Here, instead of focusing on the object of art, as seen in *Flower Tower* and *Seventeen Unsung Songs*, Babeli allowed any avatar to landscape the region for a period of two hours, which resulted in a severely altered landscape as residents carved their own mark on it. What was important for Babeli was that the process lasted for a period of time, as she wanted to move away from the monumental element of the work and focus on the experience of the event for each participating avatar. From the point of view of my investigation of public art and its intersections with the Internet, the Second Life platform offers great potential for artists to create and exhibit work in public virtual spaces. Furthermore, compared to public art, which is situated in the physical space, Second Life offers numerous opportunities for exploring the interactive potential of the medium of the Internet

when constructing works that prompt audience participation by inviting viewers to alter the original artistic idea.

A crucial aspect of the characteristics of Second Life is highlighted by Sherry Turkle, who writes that

You can experiment with different kinds of people, but you don't assume the risks of real relationships. Should you get bored or into trouble, you can, as Nora puts it, "move on." Or you can "retire" your avatar and start again. Does loving your Second Life resign you to your disappointments in the real? These days, if you can't find a good job, you can reimagine yourself as successful in the virtual. You can escape a depressing apartment to entertain guests in a simulated mansion. But while for some the virtual may subdue discontents, for others it seems just a way to escape the doldrums. (2011:2019)

Turkle (2011) points out that the relationships in Second Life move with hyper-speed, they are quickly initiated and as quickly let go, which poses questions about the nature of human identity and what happens in real personal relationships.

When online life becomes your game, there are new complications. If lonely, you can find continual connection. But this may leave you more isolated, without real people around you. So you may return to the Internet for another hit of what feels like connection. Again, the Shakespeare paraphrase comes to mind: we are "consumed with that which we were nourished by". (2011:227)

Nevertheless, Second Life is treated as a public environment and as a platform where people can connect with one another. From an artistic point of view this interactivity is useful when working on participatory projects in this virtual world. Some artists focus on the object of art placed in the virtual public space (i.e. the sculpture parks of Second Life). In this sense, this is art in public places, as theorised by Miwon Kwon (2004), but in a virtual public space. In other artworks, which are the subject under investigation in the next section, we see a move away from the object to a focus on the experience and the process prompted by the work. The interactivity embedded in the 3D virtual platform allows the work of art to be

transformed by its audience; this type of virtual public art practice could therefore also be classified as participatory, where the artist is the facilitator of a setting enabling viewers to become active participants in the artwork. Similar characteristics are exhibited by artworks which are located in the physical public space, but which have an existence on Internet platforms thanks to the use of mapping software and GPS technologies. This is the subject of the following section.

3.3 Public Art through Browser Software

If the Internet emphasizes on participation²⁹, then what happens when the concept of relational art, the one of encounters and experiences, the one of modeling possible universes, is merged with the virtual space? And what are the outcomes when such encounters occur in the physical space? The end result of such artistic experiments is often unpredictable and to a great extent this is what it makes them unique. They are hybrids of different media and modes of expression and the final outcome is not as significant as the actual process of participation of each individual contributing to the work in his or her own unique way.

There are numerous artistic projects that explore the notion of participation through the relationship between the Internet and the physical space. The number of these projects is exhaustive, and thus I have chosen a selection of examples that represent the idea of participation in public art, enhanced by the participatory properties of the Internet and locative media.

Locative media is a term coined by Karlis Kalnins in 2003 to describe digital media which have an application in the real, physical space, as well as communication media which are linked to location and thus trigger real social interactions (Thielmann, 2010). Saul Albert (2004) explains locative media as “artwork that utilises media that can express an index of spatial relationships” and argues that locative media practitioners “are keeping the technologies close to the

29 In Chapter Four I discuss the architecture of participation of the Web.

ground, available for hacking, re-wiring and re-deploying in non-authoritarian ways” (Albert, 2004:online).

Drew Hemment (2007), a scholar of locative media, notes that

...while the ‘true’ location of the artistic content is a database, by making it possible to access that content from a particular position, its place migrates into the physical environment...Locative art’s focus on digital authoring within the environment, on a dynamic relationship between database and the world, offers the chance to take art out of the galleries and off the screen. (Hemment, online)

According to Hemmet, “Then locative arts come to be seen not as distanced from the world but as offering a potential for transformation and engagement, content circulating through location aware networks opening up a field of relations and affects” (ibid.).

A project called *Map My London* (2006) presents a selection of inimitable memories of its participants, which are added to an embedded Google map of London together with a picture of the specific location (Figure 21).



Figure 21. *Long Tall Sally*, Minitraveller. Map My London Website

An initiative by the Museum of London, the website of *Map My London* offers six main categories: Love and Loss, Beauty and Horror, Friendship and Loneliness, Joy and Struggle, Fate and Coincidence and a generic one under the title What Else. Registered participants can add their experience or association relating to a specific location in the city to each category together with an image, sound and video. This way one can discover what the London map of Fate and Coincidence looks like or what memories are used to chart the Beauty and Horror locations of the city. A text by a participant called Minitraveller reads:

I was working close by when I took this photo of City workers taking their lunchtime break in bustling Leadenhall Market, shortly after the Baltic Exchange was destroyed by a bomb. Who'd guess that a year later the whole area would again be covered in thousands upon thousands of shards of shattered glass and tattered pieces of paper following the detonation of yet another bomb in Bishopsgate. (Minitraveller:online) (Figure 22)

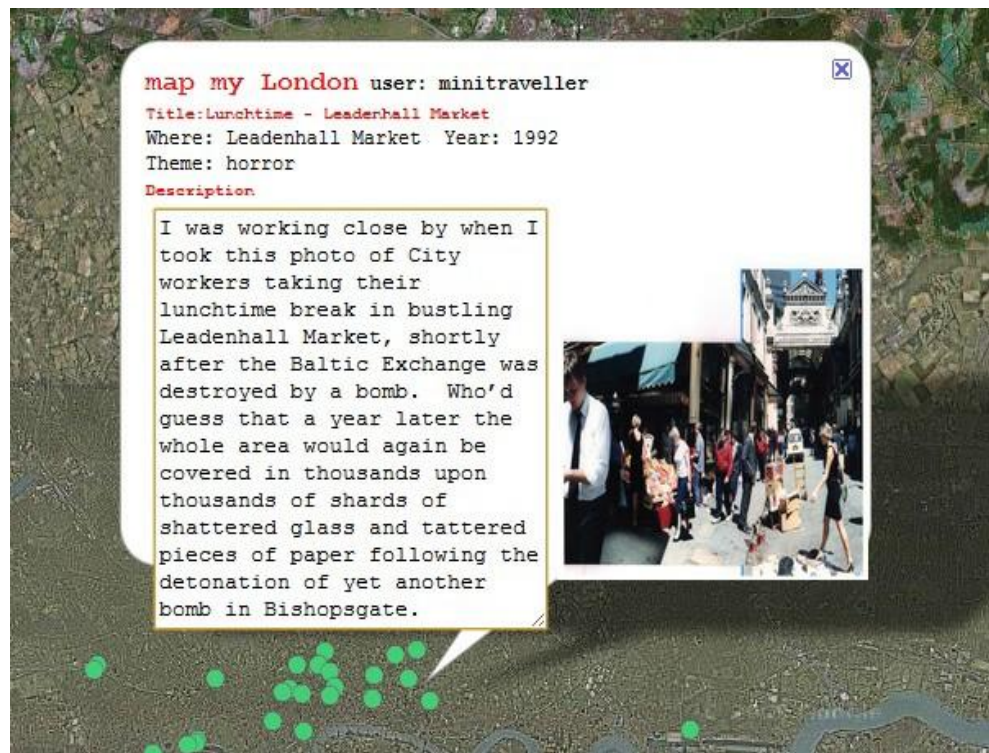


Figure 22. *Leadenhall Market*, Minitraveller. Map My London Website

The memory of Minitraveller refers to a series of bombings organised by the Provisional Irish Republican Army during the 1990s in the City of London. The façade

of the historic Baltic Exchange Building, which dated back to the beginning of the twentieth century, was badly damaged by two successive bombings in 1992 and 1993. As proper restoration was not possible what remained of the building was completely demolished a few years later; only the stained glass of the Baltic Exchange was memorial was restored and put in the National Maritime Museum. The site is now home to the Gherkin, one of the symbols of London's financial district.

Map My London records memories of a place, provides a network of recollections and in doing so represents the city in a much more personal and intimate way. Browsing through the emotional moments of each participant presents a different view of London, a view of the city as a living organism and a city that holds many stories.

In his book *Winter's Tale* (2008), Mark Helprin describes the city as a living thing whose soul goes beyond its streets and stone buildings. *Map My London* helps us imagine exactly that, a place with a beating heart, where memories and human experiences make the city come alive.

If you're born here, or if you come here from some distant place, or if you see the city rising over fields and forests from a house not far away, then you know. Rich or poor, you know that the heart of the city was set to beating when the first axe rang out against the first tree to be felled. And it has never ceased, for the city is a living thing far greater than just its smoke and light and stone. (Helprin, 2008:520)

Map My London is not only a map of good memories. It is a map of real ones – sad or happy, scary or soothing. It is a map exploring genuine human experiences and their place in the city. How often do we pass by a place and we remember an old friend, lost love or a special moment that we experienced there? By some means *Map My London* reveals memories concealed behind the fast-moving pace of the city. The streets are not only a collection of roads and buildings and the map of the real city is not simply made up of lines and charts. The idea behind this work seems to be revealed in the fact that participants have to stop and take a minute to share their thoughts and memories. They are, in a way, forced to look at the

surrounding space from a different angle and to transform it into a place with a meaning. To quote from Yi-Fu Tuan's book, *The Perspective of Experience*, "...if we think of a space as that which allows movement, then place is pause, each pause in movement makes it possible for location to be transformed into place" (Tuan, 2001:6).

Map My London creates a feeling of closeness and connection with others, strengthens the value of place and responds to the basic human need for community. Although the project does not have a physical presence, as it can only be viewed online, it is a good example of how technology can be used to help us connect with and relive the memories of a city.

Similarly, the Montreal Sound Map project creates a database of sound recordings from the city of Montreal, contributed by its citizens. The sound files are organised in a browsable tagging system which groups files according to the date of the recording, the location and the recording equipment used. The sounds are available for download together with an image of the location where the sounds were recorded (Figure 23).



Figure 23. Screenshot from the website of Montreal Sound Map. 2008

When discussing and experiencing public space we often concentrate on the most obvious, visual representations, ignoring the significance of hearing. But what does public space sound like? How is a soundscape created, and how is it represented and interpreted? These are some of the questions raised by the Montreal Sound Map, which represents the city in a way we rarely stop to appreciate. Listening to the sounds of a place can create an impression of being there, engage the imagination or even raise a specific memory. The project embodies a unique way of experiencing the audio vibrancy of a place and at the same time sharing this experience with others. The recorded sounds are not simply endless streams of traffic noise; the site offers surprises such as the sound of the Westmount park waterfall, national flags flapping in the wind outside the Olympic stadium of the city and a recording of a scene from an outdoor screening of *North by Northwest* as part of the World Film Festival's "Cinema Under the Stars".

Our sense of hearing in the past was much more important than our sense of sight. Today, we live in a visual world and one can easily assume that everyday sounds are insignificant and therefore easily take them for granted. However, sounds can tell us a lot about a city, its character, its inhabitants and their ways of life, work and enjoyment. Such sounds, which in their own way are reclaiming urban spaces, have the potential to become historical records of how a city sounded at a specific time. This is what makes projects such as the Montreal Sound Map significant for the public realm. Together with collaborative works that map the city visually, in the ever-changing urban settings these projects will become important elements of the way our past is documented. Furthermore, these records are unique in a sense that they are provided not by historians but by people who experience life in the moment, and they therefore offer a bare and honest portrayal of the urban environment.

Works such as *Map My London* and the Montreal Sound Map represent a unique niche in the practice of art in public space. They employ the potential of the Web to engage participants whilst at the same time they make them re-examine the public space and feel part of a group which has contributed to such

experiments. Such ideas could be related to the concept of “dialogical aesthetics”, representing a model of communicative interaction establishing dialogue and a connection between the participants (Kester: 1998). Similar views are expressed through the concept “connective aesthetics” introduced by the artist and art critic Suzi Gablik (1992). She describes it as a profound and necessary paradigm shift, where art is used to increase the sense of connection with others³⁰. The Internet provides alternative ways to increase this connection and projects such as Map My London and the Montreal Sound Map are evidence for that.

Another example is Amsterdam RealTime (2002), a work by the Dutch artist Esther Polak. This project is a large-scale exploration of a city using GPS (Global Positioning System) mapping. The website, www.realtime.waag.org, plays a supportive but important role for this work. The online facility enabled participants to register basic personal information about their lifestyle relating to their family life, the way they travel around the city, and their social activities and to select a period of two weeks when they would be available to take part in the project. The selected volunteers were equipped with a portable GPS tracking unit which allowed their movements to be followed for a selected period of time. The traces of the routes were embedded in an online map as well as being shown in real time on an outdoor exhibition space in the city. The seventy volunteers who took part in the project walked, cycled and drove around Amsterdam for forty days and produced a series of maps outlining their routes. The maps were created by a number of participants, including a subway driver, cyclists, and a marathon runner. (Figure 24)

With this work, Polak was attempting to visualize the mental maps of the inhabitants of the city, by examining their behavior when in motion. In an interview from 2008, she comments:

30 According to Gablik, connective aesthetics locate creativity in a kind of dialogical structure which frequently is the result of a collaboration between a number of individuals rather than an autonomous self-contained individual. Gablik writes that “at this point, we need to cultivate the connective, relational self as thoroughly as we have cultivated, in many years of abstract thinking, the mind geared towards individual selfhood” 1992:2-7) and that connective aesthetics “makes art into a model for connectedness and healing by opening up being to its full dimensionality-not just the disembodied eye” (cited in Lacy ed., 1995:80). The curator and writer Maria Lind (2009) notes that connective aesthetics is the antithesis of modernism and it is listener-centred and not vision- oriented.

I have used locative media as an interactive and storytelling tool, although that was not the initial goal. With *Amsterdam Real-Time*, for example, the main goal was to give people a sense of their own perceptions. We did not want visitors to adopt the 'surveillance' perspective or the voyeuristic gaze, we wanted them to try to identify as much as possible with the participants. (Polak, in Dekker, 2008)



Figure 24. Combined route map of *Amsterdam RealTime*. Website screenshot from www.realtime.waag.org

Using a software program, the path of each participant formed a new map of the city. The visualization technique used in the work represents clearly the areas and routes that were visited most often. Viewers were able to witness how certain areas gradually changed colour as the number of visitors there started to increase. The routes that became brightest were used more often and by a large number of volunteers, where the spots in red were those visited the most. This presents a very revealing portrait of the city and perhaps demonstrates how small our lives are. *Amsterdam RealTime* is telling a story and creating a living picture of the landscape of the city and its people. In the words of the artist "... it is all about revisiting spatial

experience – as a way of bringing about a new perception"(ibid.). Polak is trying to create a new insight into the urban environment and make people revisit their usual routes but this time with the awareness of being followed. This element of the work raises many questions regarding our awareness of the urban space during everyday situations.

As part of the projects the participants were asked to talk about their own route and were also shown how the software drew their route again. The way one experiences the urban environment depends on lifestyle, work, family and social commitments. It also depends on who one is: male or female, a child or an adult, or what time of the day one is outside. For Polak, it was important to find out how people described their own route, but furthermore how they connected with it and how they identified themselves with it.

Linde and Labov identify two distinct types of description of spaces, the "map" and the "tour" (in de Certeau, 1984:119). The "tour" could be described with a statement such as "I turned left and came onto a main road, then went under an arch", where the map could be explained with "The concert hall is next to the central park". The two different types can be divided by the action that they describe. In the case of the "tour" the description relates to movement, and in the case of the "map", it is identified with seeing. In its own, unique way, *Amsterdam RealTime* mixes the two modes of description as participants had a chance to view the "map" version of their route but at the same time to discuss their own way of experiencing the travel undertaken during the experiment. To quote from an interview with the artist:

The main goal was to give people a sense of their own perceptions. ...We had absolutely no idea how much impact the print-outs would have on the participants. People pored over their printed-out routes in utter fascination and couldn't wait to share their stories. (Polak, in Dekker, 2008)

A number of similarities are to be found between *Amsterdam RealTime* and *Landlines*, a project created by the Canadian artist Jen Hamilton and the British artist Jen Southern. The website of the project, www.landlines.org, is used not only

to promote the work and to offer free access to the Landlines open source software, but most importantly displays live tracks of the project participants. Similar to *Amsterdam RealTime*, *Landlines* uses Google maps and a specifically developed Flash application that interacts with the GPS devices of the participants. The application, Mapper, provided each participant with the facility to view the routes of other project members in real time. In addition, the developed interface offered the capacity for image, text and video input. Standard Google maps were used in conjunction with the tracks created by each participant in order to understand how people related to the roads and buildings. The project was also used to create a tapestry map of Brighton with volunteers creating a map of the city in real time (Figure 25).

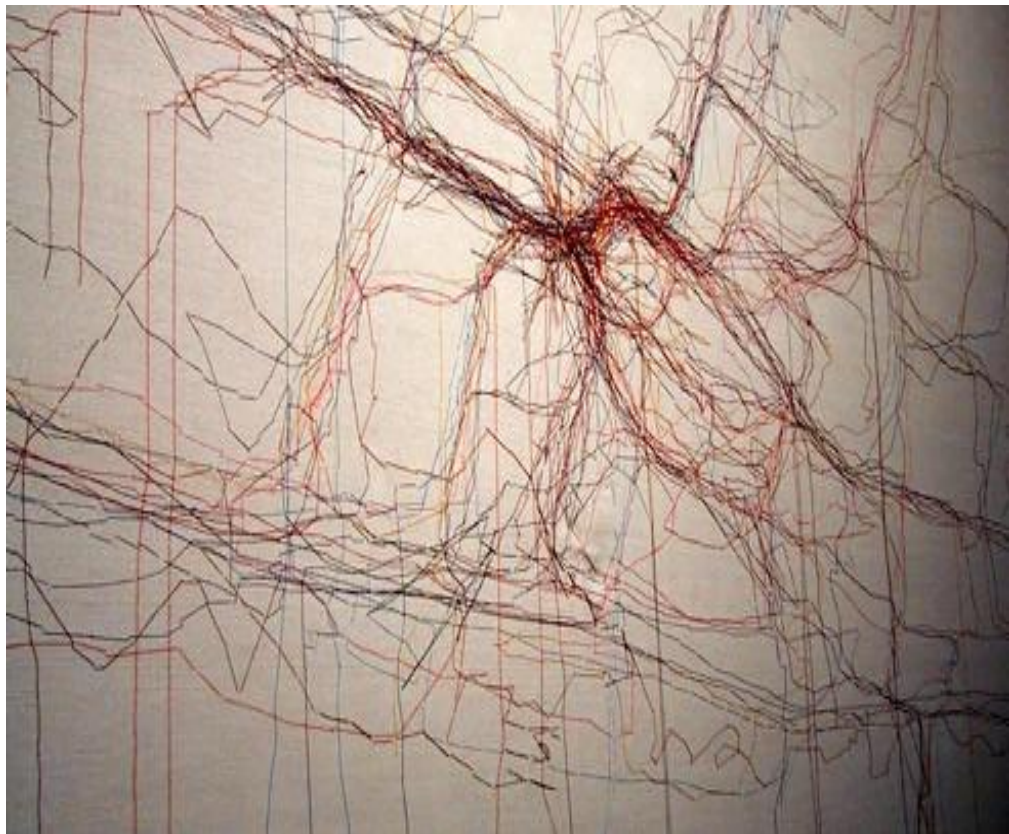


Figure 25. *Running Stitch*, Jen Hamilton and Jen Southern. 2006

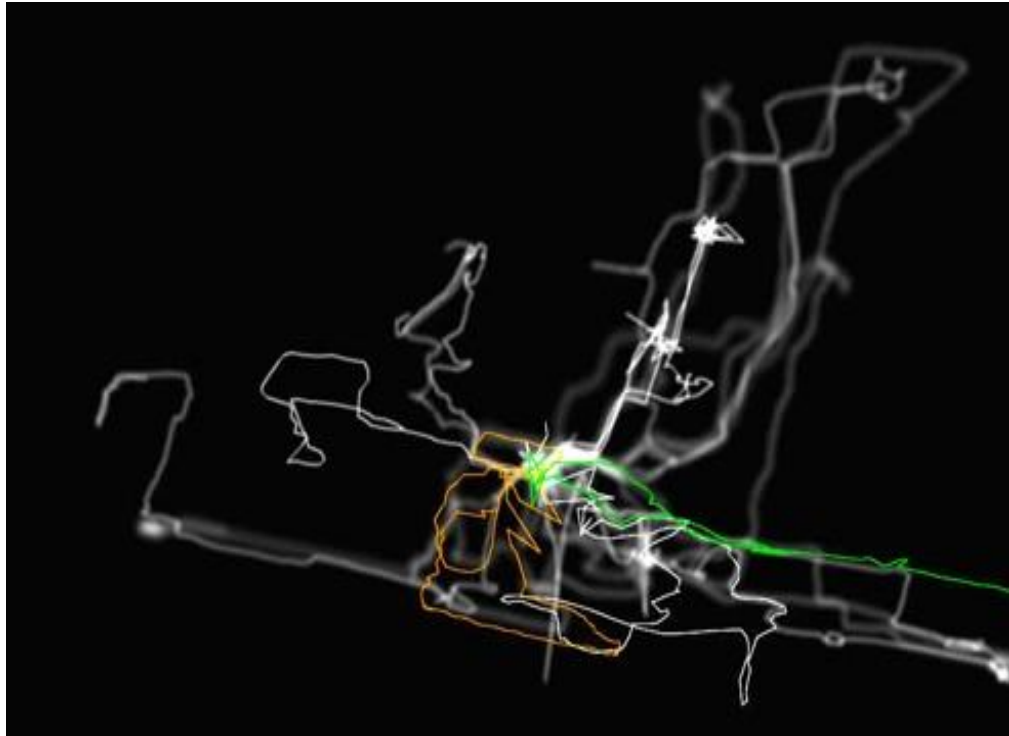


Figure 26. *Running Stitch*, Jen Hamilton and Jen Southern. 2006

Landlines is an example where the combination of mapping software, GPS technologies and user participation creates a social and spatial practice. The collaboratively created maps form a new reality, different from the one that standard maps offer. John Eberhardt, head of a publishing agency creating tourist maps in the Netherlands, makes an important statement:

Map reading is the earliest form of virtual reality. By means of constructing a model it is possible to change reality (for example the bicycle path). A map is a reality in itself, where you can actually find something new. On the other hand, map reading is an act of Utopia construction: every map and every user brings to it his or her own Utopia. A map for fishermen, hikers, car owners, geologists, whatever, also presents another dreamed-of world. By using a different map in the field, the landscape will present itself in a distinctively different way. (personal correspondence with Esther Polak)

Landlines creates a new reality constructed not by a machine but by the movements of a human being who is charting new paths relating to his or her own direction and lifestyle. Eberhardt also suggested that the 'ideal map' is constantly changing and it would be influenced by the movements of migrating birds, new building structures and vegetation (ibid.). Thus, through the Internet, locative media

could provide an alternative reality and lend different meaning to the environment developed by the living occupants of the planet and it would give a new insight of how we relate to, and connect with, each other.

Emotional Cities was created by the Swedish artist Erik Krikortz in 2007. The project consists of a few elements and all of them are required in order for the artwork to exist. The first point of entry for the user is the website www.emotionalcities.com where information about the mission and goals of the project can be found, together with a manual for using the website, and archive information from the beginning of the project consisting of images, short video films and press reviews. The main goal of the project is to make us reflect on our emotional everyday experiences and by doing so to keep us aware of our emotional state. Krikortz is asking a very simple question, “How are you today?”, and via the project website gives the option for each registered visitor to select from seven available answers which are graphically displayed on the website (Figure 27). The options are strong positive; moderate positive; weak positive; none; weak negative; moderate negative and strong negative.

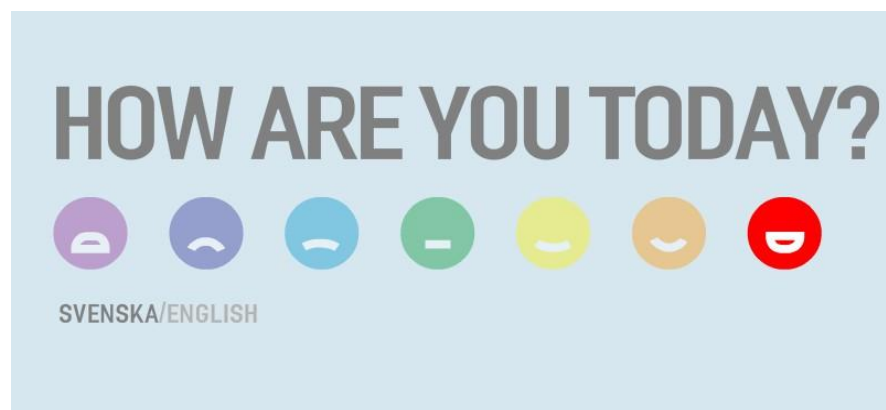


Figure 27. Screenshot from *Emotional Cities*, a project by Erik Krikortz. 2007

Once an emotion is selected the website visitor is taken to his or her own profile page, which provides information about their registered emotional state for the current week, month or year. More detailed options are available where statistics for different cities and countries are displayed and compared with each individual profile (Figure 34).

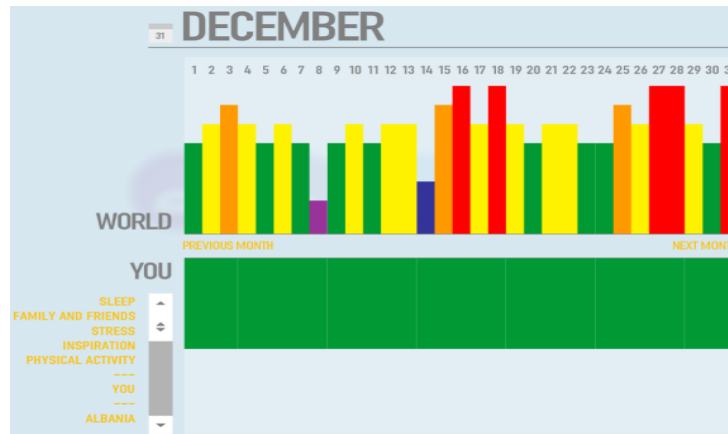


Figure 28. Screenshot from *Emotional Cities*, emotional state graph for December 2009

The participant is given the opportunity to answer why they are feeling a certain way by selecting five relating factors: sleep, family and friends, stress, inspiration and physical activity. The website interface is simple and easy to use, and this is achieved by using a clean design layout and page structure. Allowing each member to register their emotional state is not the only way that this work connects with its audience. In some places the average value of the emotional temperature of a city is projected on buildings in a shape of a light installation, allowing individuals and entire cities to follow their emotional state not only on the Internet but also in their physical environment (Figure 28).



Figure 29 . Outdoor projection from *Emotional Cities* by Erik Krikortz. Stockholm, 2009

Currently the site has nearly 6000 members with an average age of 35 years old, and it has run outdoor projections in Stockholm and Seoul. The artist points out that via his work “The city speaks to us through ourselves”. Krikortz takes the emotional pulse of the city or, as he himself puts it: “The result is a psychological diagnosis of society” (Krikortz, cited in Nilson, 2008: online).

This project emphasises interaction between the artwork and the audience and also focuses on the connection between the virtual and the “real” world by presenting a physical representation in a real place – the city — and by doing so it provides a connection between the city and its inhabitants. The work creates a sense of connection with others, although they might be miles away, and it is a fantastic example of how the power of technology, the Internet and social networking can be employed not only to help us reflect upon ourselves, but also to help us think about how the person next to us, or in the city next to us, is feeling.

Emotional Cities relates to a project by the German artist Martin Kippenberger, *Metro-Net* (1993). What links them is the connection between real and imaginary places, and the strong desire for closeness, for connectedness between individuals. Kippenberger imagined the Metro-Net system as a global link which should shrink the distance between continents and people and perhaps encourage them to travel with no purpose as opposed to the mundane everyday travel to work and back home. The artist imagined, proposed and designed a map for a global underground travel system and constructed metro entrances in different cities around the world. The fake entrances supposedly led to major cities on other continents. During his short-lived artistic career Kippenberger managed to build entrances in Greece, Canada, Germany, and United States (Figures 30 and 31).

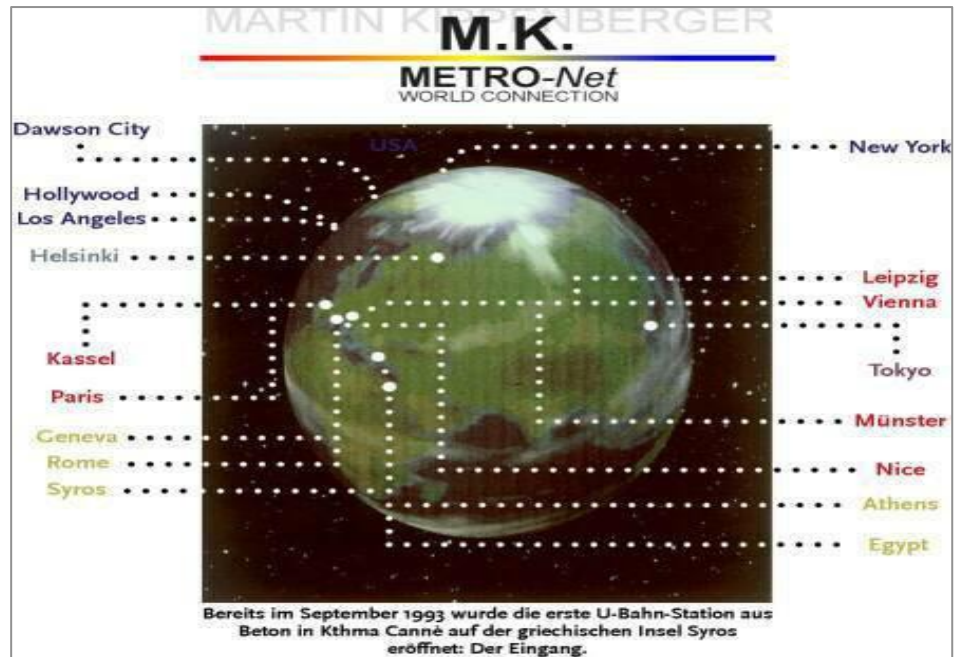


Figure 30. *MetroNet*, Martin Kippenberger. 1993



Figure 31. *MetroNet*, Martin Kippenberger. 1993

Kippenberger died in 1997, when although the Internet was becoming increasingly popular, no one at the time had realised its enormous potential with regards to connecting people which we now witness in the phenomenon of online

social networking. Only ten years later, after a huge evolution in technology and its accessibility, in 2007 Krikortz created *Emotional Cities* which used the Internet to connect individuals without the need to travel to the other side of the planet. The simple thought that at the precise moment while I was registering my emotions on the *Emotional Cities* website, someone else was feeling exactly the same is enough to create a feeling of connection and make one realise that no matter how sad or happy they are feeling there is somebody else out there who is just like them. This is what makes this project successful and it puts it in the list of examples of projects which combine creativity, technology and human interaction.

Constant, the artist who imagined and designed the New Babylon, thought of the city as a place where “...at any given moment in his creative activity, the New Babylonian is himself in direct contact with his peers” (Constant, in Wigley ed.1998:163) Constant imagined a process of collective creation, similarly to the one we notice in *Emotional Cities*:

Each one of his acts is public, each one acts on a milieu which is also that of the others and elicits spontaneous reactions. All action, then, loses its individual character. On the other hand, each reaction can provoke others in turn. In this way interventions form chain reactions that only come to an end when a situation that has become critical 'explodes' and is transformed into another situation. The process escapes one person's control, but it matters little knowing who set it off and by whom it will be inflected in turn. In this sense the critical moment (the climax) is an authentic collective creation. (ibid.)

Constant was also aware that without technology the processes of experimental collectivism would not be possible. Nearly forty years ago he realised the huge importance of audio-visual media in servicing the needs of the “fluctuating community, where contacts can only be maintained by intensive telecommunications” (ibid.:65). Could the potential for connectedness with others that the World Wide Web provides help recreate a glimpse of the contemporary New Babylon? After all, Constant believed that abstract space, space as psychic dimension, cannot be separated from the concrete space. He writes “Social space is truly the concrete space of meetings, of the contacts between beings. Spatiality is

social” (Constant, cited in Pinder, 2005:22). He described the New Babylon’s culture as a result of global activity of the whole population, with everyone engaged in a dynamic relationship with their surroundings, where “... the creative act is also a social act: as a direct intervention in the social world” (Constant, in Wigley ed.1998:163).

In the case of *Emotional Cities* we observe a significant connection where the social act of sharing feelings and emotions becomes a creative act of the group. Although *Emotional Cities* interacts with the physical environment by simple light projection, the project has great potential for further development and it is a pioneering work in the field of augmenting outdoor spaces through the power of online media. It can be used as a basis and inspiration for other creative interventions where the group act of sharing via online social networks has a direct impact on the urban environment.

3.4 Augmented Reality Public Art

The term *augmented reality* describes a combination of technologies that enable computer-generated content with video display in real time (Mullen, 2011). Mullen notes the distinction between *virtual reality*, involving complete, immersive 3D environments and *augmented reality*, which uses technologies to create annotated, or augmented, composites based on the real world (ibid.). The word “augment” derives from the Latin *augere* (to increase) and denotes the action of adding to something. In the case of digitally augmented reality, virtual objects are displayed through computer-based devices showing additional layers of digital information in order to change the view of the physical world in real time. The result of this process enhances our perception of reality through the combination of the real and virtual (computer-generated) worlds. Augmented reality can be experienced with the help of various hardware technologies such as computers, optical projection systems or mobile phones. In order for augmented reality to be

experienced, specific software programs, also called *applications*, need to be installed on the digital devices used. The application of augmented reality in the real world can be seen in various fields such as architecture in order to visualise building projects; tourism in providing real time information at a specific location; or art in creating additional objects and layers of information and thus enhancing the artistic experience in real time.

Augmented reality public art can also be referred to as mobile public art. The artist and scholar Martha Ladly (2009) writes about the participatory properties of mobile public art as a “growing phenomenon, attracting new artists who see the potential for engaging new audiences in both urban and remote public environments ” (2009:32). Ladly notes that

By its very definition, mobile art is ephemeral and its location and audience are usually on the move. Although they may be transmitted and consumed publicly, mobile artworks are often not actually “installed” in public space. Many artists in the public realm also use the Internet as a public forum and the computer database as media storage, so most mobile works have links to both real and virtual space. (ibid.)

Ladly comments that because mobile art projects are often distributed across a network of GPS enabled devices they are rarely instantiations fixed in time and place in the way we usually think of public art. According to her “while some mobile artworks are fixed or particular to a location, others are ‘location aware’: triggered or accessed locally by the audience from a particular location” (ibid.). Furthermore, with the introduction of GPS and mobile technology into the public realm, new possibilities for social interaction and ways to reclaim the public space as a site for shared experiences have been discovered. Ladly notes that “Mobile public art gave artists and audiences – who are active participants – their bodies back and expected them to be up to the physical challenges!” (2009:34). Such art, investigating the convergence of geographical place and data space, is clearly, “reversing the idea that digital art only existed in placeless virtual locations, usually accessed on computers via the Internet” (ibid.).

Martha Ladly notes a number of challenges and barriers to the creation of mobile public art such as: “costs of developing, programming, and engineering mobile artworks, and the costs and charges to participants for using mobile networks, particularly when data charges are incurred” (2009:35). According to Ladly, there are also issues regarding intellectual property and data sharing for authors, service providers, and participants. Nevertheless, Landly argues that “frameworks that encourage mobile experiences through collaborative artistic interchange offer artists and their audiences opportunities to develop new conversations in this complex, emerging, and vibrant field of public art” (ibid.).

Holmes (2003) notes that technologies that were originally created for the purposes of surveillance and control are now being re-appropriated and re-interpreted to include the individual as a specific level in the network architecture.

In relation to public art, augmented reality is used to alter our view over public spaces, to prompt interaction or to present a different spatial experience through creative means. For instance, the Virtual Public Art Project (2011), hosted online at www.virtualpublicartproject.com, presents artistic works which merge the real world physical environment with site-specific virtual sculptures that can be viewed on mobile phones when one is at the sculpture's real-world location (Figure 32).

A number of artists including Christopher Manzione, Christian Meinhardt and Matthew West have taken part in the project by designing virtual 3D artworks to be viewed at specific geographical locations via the medium of portable computer devices.



Figure 32. Augmented reality via a mobile phone, Virtual Public Art Project. 2010

As part of the inaugural exhibition of the Virtual Public Art Project called *Symmetry and Growth*, Christopher Manzione designed fourteen sculptures, to be viewed at prominent public locations in cities across North America, Europe, Australia and Asia. A sculpture called *Growth*, which is part of this exhibition, is an object which the artist created manually before replicating it in a three-dimensional environment (Figure 33). The artist writes on his website that his focus of exploration of spaces is where the distinction between natural and industrial blurs, and also addressing important questions relating to environmental pollution, re-use and recycling.

We have started to mask our intrusion into the natural world by manufacturing machine-made, fake nature: poured concrete made to look like rock walls, cell phone tower trees, and plastic everything for your front yard. I want to address what happens when these objects become useless and discarded. What changes when our surroundings that used to grow, rot, and die don't do so anymore and instead start to rust, need a new coat of paint, or don't change at all. (Manzione, 2010:online)



Figure 33. *Growth*, Christopher Manzione. 2010

The artist Matthew West calls for experiencing place through a virtual enclosure named *Veiled Presence* (Figure 40), an enclosure which allows people to break through a virtual shelter.



Figure 34. *Veiled Presence*, Matthew West. 2010

The work plays on the notion of site-specificity by calling for a different view of, and encounter with, the physical location through a mesh-like environment altered by augmented reality. The curators of the work write on their website that

To experience *Veiled Presence* is to illuminate the crucial role that human beings and their bodies play in the world, in A.R. one does not leave the body behind, but instead remains present in the world, experiencing the veil of the virtual upon the landscape of the real. The participant who experiences the vaulted dome structure may contemplate possible worlds and its use of future technologies. (Virtual Public Art Project:online)

What is observed through the examples discussed above is a focus on the type of public art as an object in the physical space or as a construction embedded

in the physical space, albeit experienced virtually. The same view is carried in other works such as *Mirrored City* by Christian Meinhardt and Vince Romaniello, who talk about augmented reality as “...the opportunity to use new technology to place the work in an outdoor space at a large scale” (Romaniello: online).

It becomes evident that the new ways of working, that might be explored through augmented reality, still carry the notions of art-in-public-spaces and art-as- public-places. Compared to public art which exists on virtual platforms, or to public art which exists through Internet sites, augmented reality public art appears to be limited in terms of interaction and engagement with its audience. Although virtual reality technology could be seen as more sophisticated in comparison to those used only on the Internet, it seems that the options for audience engagement are rather limited. This begs the question as to whether technology is really the answer when looking for solutions for resolving the colliding combination of *public* and *art*. It appears not to be. This is why I look at Web 2.0, which is not about technology, but about people.

3.5 Summary

This chapter was concerned with exploring the intersections between digital technologies and public art. I focused on projects which are based on the notion of participation facilitated by digital tools such as GPS technology, augmented reality and browser software. It set out to uncover if we can account for major transformations in the practice of public art and shift away from the traditional models as discussed in Chapter Two.

It becomes apparent that such models still exist in the digital public space as the *art in public spaces* seen in the *Flower Tower* of Eshi Otawara. Similarly, the *art as public spaces* model could be recognized in Matthew West’s *Veiled Presence*. Some options to augment the work are offered to virtual visitors, enabling them to take part in the creative process, but only to the extent allowed by the original

author. Public art projects that exist via websites expand these possibilities as the authors do not have full control over the content that populates their digital platforms, as seen in works such as *Map My London* or *Montreal Sound Map*. Other creative initiatives such as *Amsterdam Real Time* go even further and build on the digital elements of the artwork by participation that takes place in the physical space. A hybrid public art practice, one that lies between the realms of the digital and the physical world, does not necessarily extend beyond the traditional models of public art. Although these works extend the notion of participation in public art they still rely on a top-down approach to creativity, where the author initiates and controls the work to a great degree. For some of the projects, the object of art is still a focus or a place which viewers visit and use. In addition, the focus of such works appears to be on technology, not on people.

The question that Chapter Five addresses is what happens when an enhanced version of the Web – Web 2.0, the one that in its essence is participatory – is used in the practice of public art. Before I move on to this investigation, the ethos and philosophy of Web 2.0 must be explored. This is the focus of the next chapter.

Chapter Four

Web 2.0: A Habitation with a Name³¹

4.1 Introduction

This chapter concerns Web 2.0, its principles of organisation, structure and tools. I begin by offering a discussion of the term Web 2.0, together with a brief historical overview of the Internet and its Web 1.0 version. I discuss how creativity is supported by sharing, because as is shown in Chapter Five, the field which I call Public Art 2.0 is shaped by this concept. I investigate the different ways in which technology is used to connect people – from the story of the phone-phreakers, through to the *Community Memory* project and *The Well*. I also discuss the relationship between creativity, innovation and technology.

I also look at some of the implications and issues in relation to Web 2.0 such as data privacy, privatisation of the online public sphere and the implications crowdsourcing and of the growth of stack-type websites³².

I conclude by noting that the public platform of Web 2.0, which is based on interconnectedness and open lines of communication, is a fertile environment where creativity can thrive.

31 Here I refer to an excerpt from Shakespeare's *Midsummer Night's Dream*, V.i. 14-17:

... as imagination bodies forth
The forms of things unknown, the poet's pen
Turns them to shapes and gives the airy nothing
A local habitation and a name.

32 Stack refers to as an abstract data type and data structure based on the principle of Last In First Out. Stack also refers to as a list of software products, organized in the required installation order. A software stack can contain individual pieces of software as well as other software stacks. (IBM:online) In the case of this research, the focus is on stack-type websites, as platforms where information is contributed by users and shared amongst all.

4.2 Web 2.0

Web 2.0 is seen as an improved version of the World Wide Web. The Web is different from the Internet³³. The Internet is made up of information, text, hyperlinks and websites. It is simply an enormous network of computers; those at peoples' houses, in offices, the laptops used in parks and gardens, cell phones and other devices which are all connected to each other. Tim Berners-Lee, the inventor of the World Wide Web, discusses the difference between the Internet and the World Wide Web: "The Internet ('Net) is a network of networks. Basically it is made from computers and cables" (Berners-Lee:online). Similarly, Tim O'Reilly defines the Internet as a platform, the sum of all connected computers and devices (O'Reilly: online). The Internet is a network infrastructure, connecting millions of computers globally, forming a system where each individual computer can communicate with the others. The World Wide Web is a rather more abstract space of shared information, which is built on top of the Internet:

The Web is an abstract (imaginary) space of information. On the Net, you find computers - on the Web, you find document, sounds, videos,.... information. On the Net, the connections are cables between computers; on the Web, connections are hypertext links. The Web exists because of programs which communicate between computers on the Net. The Web could not be without the Net. (Berners-Lee:online)

The Internet provides a hardware foundation for exchanging information over computer networks. The Internet is a platform for running both Web and non-Web applications; sending email messages or Internet telephony are examples which operate independently of the World Wide Web (Shelly and Frydenberg, 2011:11).

33 The concept of the Internet is considered to have been conceived by Leonard Kleinrock in his paper entitled "Information Flow in Large Communication Nets", published on May 31, 1961. It is Kleinrock who created the initial idea of the ARPANET (Advanced Research Projects Agency Network) - the precursor to the Internet. The first two nodes of the ARPANET were established at UCLA and Stanford Research Institute in 1969 (Ryan, 2010).

Since its invention in the early 1990s (Berners-Lee:online), the Web had become a space where we communicate and share information which has drastically changed our lives. Today, Web applications are used for business, personal communication, science and creative practice. The dream of its the Internet's inventor, Tim Berners-Lee as a "common information space in which we communicate by sharing information" (Berners-Lee, 1998:online) has become a reality. Moreover, it has become a reflection of the ways in which we work, play and socialize, as its creator envisaged.

The World Wide Web, which in its first stages was known as Web 1.0, refers to a way of connecting computers and making technology more efficient for computers (Zambonini, in Governor et al., 2009) However, Berners-Lee disagrees with this understanding, stating that Web 1.0 was *all* about connecting people and, moreover

It was an interactive space, and I think Web 2.0 is of course a piece of jargon, nobody even knows what it means. If Web 2.0 for you is blogs and wikis, then that is people to people. But that was what the Web was supposed to be all along. And in fact, you know, this 'Web 2.0', it means using the standards which have been produced by all these people working on Web 1.0 (Berners-Lee, in Anderson, 2006: online).

The way the Internet was initially experienced was via a browser and it was Tim Berners-Lee who coded the first one as one single page. (Figure 35) The first web browser that was able to display not only text, but also images is considered to be Erwise (Figure 36). It was released in April 1992 by a group of Finnish students at the Helsinki University of Technology (Lilly: online).

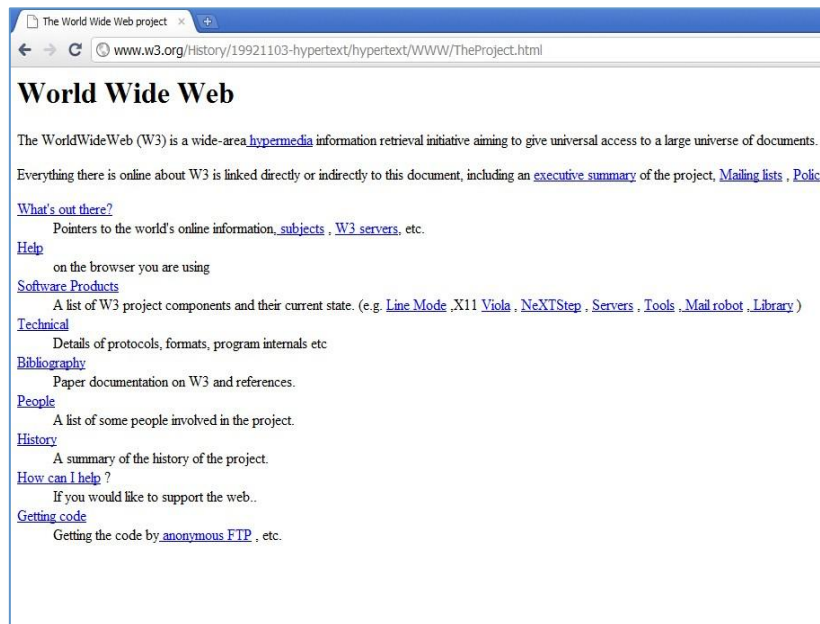


Figure 35. Screenshot of a web page in 1991, Tim Berners-Lee

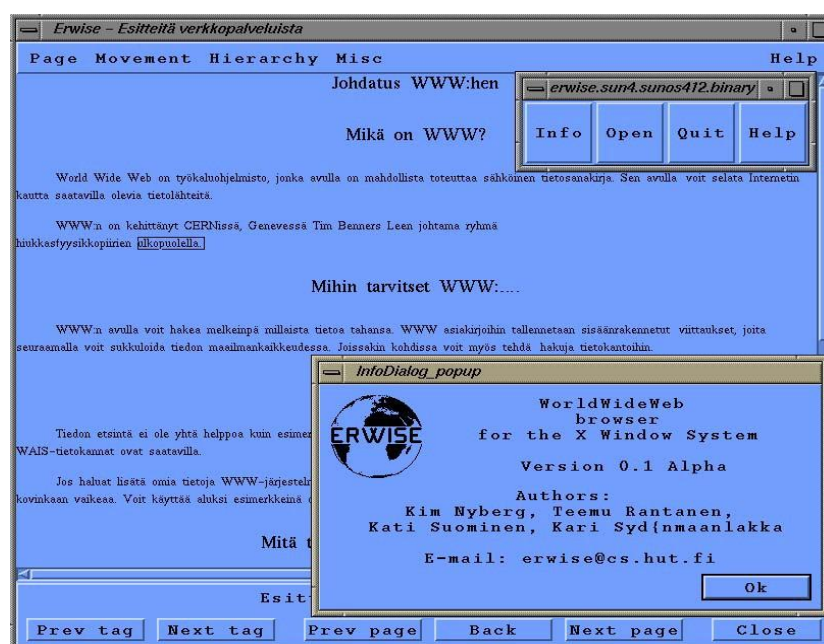


Figure 36. Screenshot of the first browser with a graphical user interface, Erwise. Nyberg et al. 1992

In 1994, Netscape Communications Corporation introduced Mozilla, a browser which provides the main features for web surfing which we know today through displaying texts and images (Evans and Schneider, 2008). Around the same time, Microsoft released Internet Explorer 1.0 and for the following two years the competition between Netscape and Microsoft resulted in the

development of more advanced versions of the browsers with advanced image and navigation features (Gupta, 2003).

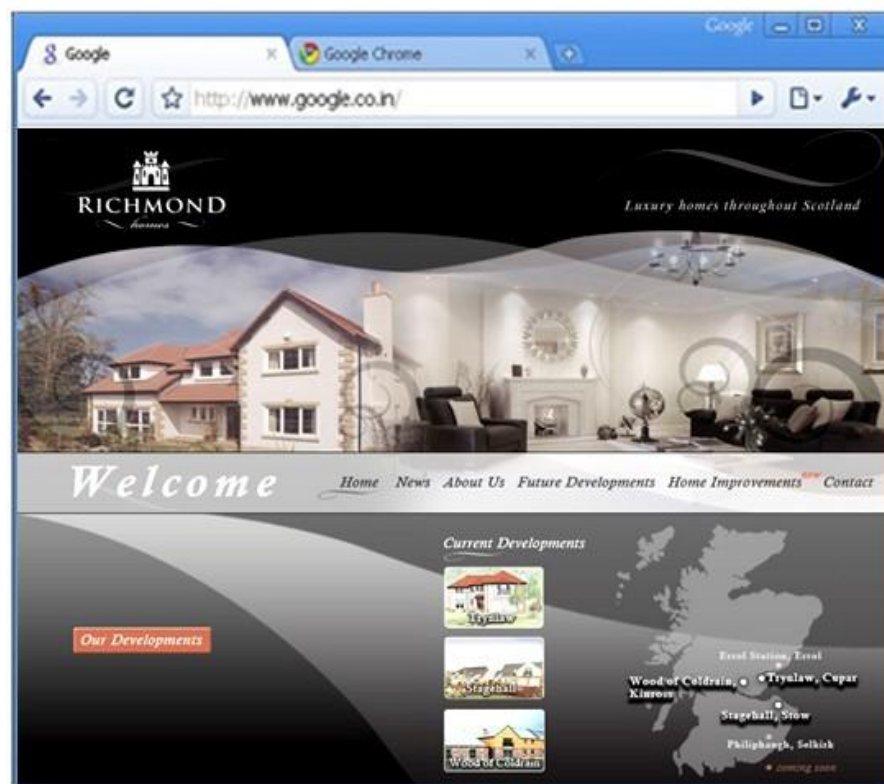
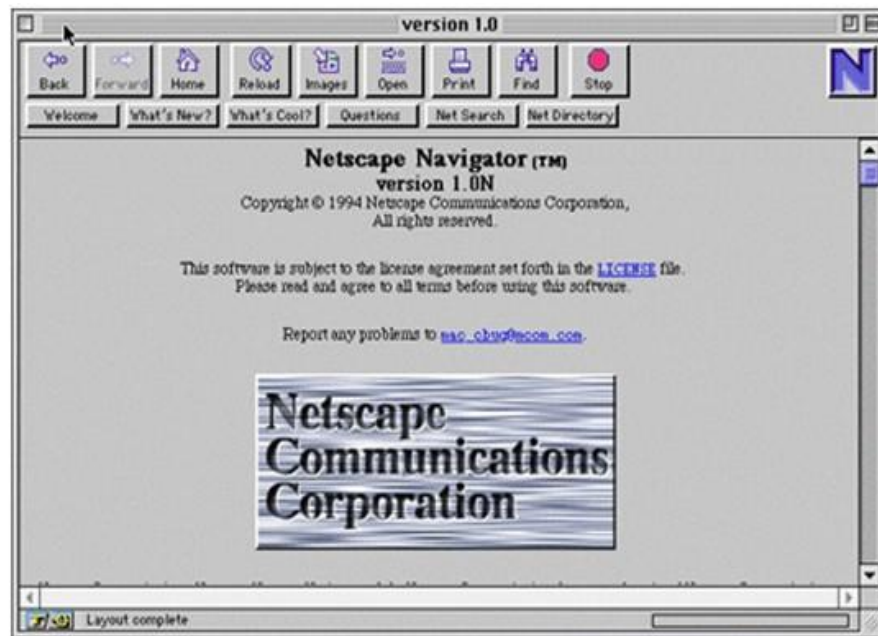


Figure 37. Basic Netscape browser view and a screenshot of a website designed by the author. 2010

The appearance of browsers supporting the display of images and coloured text has contributed to the development of more advanced ways of representing information on computer screens. Since the nineties the Internet browser market has become increasingly dynamic. Competition in the browser market has resulted in fast and reliable browser software, capable of displaying complex graphics (Figure 37) and, in recent years, of delivering dynamic browser content.

By the early years of the twenty-first century new browser applications started being developed and the notion of interactivity shifted from linking and clicking on already available content to creating and sharing content (Solomon and Schrum, 2007). Static pages where people could find information changed to virtual spaces where they could create and post information. The participatory property of the Web provides people with the option to share information collaboratively in real time. As stated by Solomon and Schrum, “[i]t’s a new Web, known as Web 2.0” (2007:8). Shelly and Frydenberg (2011:1) characterise the new Web as “interactive applications that allow users to participate in contributing, organising, and creating their content”, and Zambonini stresses that “Web 2.0 is about connecting people and making technology efficient for people” (Zambonini, in Governor et al., 2009:29).

Shelly and Frydenberg (2011) describe several developments which occurred around the same time as when Web 2.0 trends started to emerge. Firstly, advances in the technological infrastructure meant Internet connectivity could be available almost everywhere and the personal computer became an appliance found in every home, school or office. Secondly, the use of mobile phones was no longer limited to making calls, but also made it possible to access the World Wide Web, which in turn prompted the development of software applications for devices other than computers. Thirdly, society today encourages technological change and also expects new developments as a normal pattern in the digital world.

The term Web 2.0 is closely associated with Tim O'Reilly (Leadbeater, 2009), one of the most prominent publishers of computer technology books, because of the first Web 2.0 conference in 2004, which was organised by O'Reilly Media. However, the phrase was first coined by Darcy DiNucci, a consultant on digital information design in 1999. It is DiNucci who writes in the article *Fragmented Future*

The Web we know now, which loads into a browser window in essentially static screenfuls, is only an embryo of the Web to come. The first glimmerings of Web 2.0 are beginning to appear, and we are just starting to see how that embryo might develop. ... The Web will be understood not as screens full of text and graphics but as a transport mechanism, the ether through which interactivity happens. It will [...] appear on your computer screen, [...] on your TV set [...] your car dashboard [...] your cell phone [...] hand-held game machines [...] and maybe even your microwave. (DiNucci, 1999)

The nature of Web 2.0 moves away from the top-down creation of content on the Web towards more interactive and participatory engagement of users. Berners-Lee's vision of the Web connecting people could be seen to have been realised in the properties of Web 2.0, where the construction of information and knowledge derives from content created when users participate. Lev Manovich notes that from being a publishing medium in the 1990s, the Web has shifted towards being a communications medium of the twenty-first century (Manovich, 2009). Questioning if artists have suffered or benefited from the explosion of online content and the easy availability of media publishing platforms, Manovich describes the true challenge of social media³⁴ to art as lying in the very dynamic of Web 2.0 culture: its incessant innovation, energy and unpredictability (2009).³⁵

Shelly and Frydenberg (2011) explain that Web 2.0, by allowing users to participate by creating their content, also enables interaction with non-Web

34 The term social media is closely related to Web 2.0, as it refers to the activities, practices and behaviours between users who connect via the Internet to share information, knowledge and opinion via the conversational media tools of Web 2.0 (Safko and Break, 2009).

35 Lev Manovich questions whether professional art has become irrelevant in the world of social media, where hundreds of millions of people upload videos, music and photos on a daily basis, and if the democratization of media production and access puts too much pressure on professional artists (Manovich, 2009).

Internet applications which allow the uploading of files, the sending of emails or the making of voice and video calls from applications running within a Web browser. Solomon and Shrum (2007) note that the tools of Web 2.0 allow multiple users to participate in editing and publishing a document, rather than working alone and furthermore, both the software and the products created with it can be considered work in progress.

Franklin and Harmelen discuss Web 2.0 as an environment encompassing

...a variety of different meanings that include an increased emphasis on user generated content, data and content sharing and collaborative effort, together with the use of various kinds of social software, new ways of interacting with web-based applications, and the use of the web as a platform for generating, re-purposing and consuming content. (2007:4)

Lee Komito describes the “rubric of Web 2.0” as consisting of “user-generated content, dynamic web publishing and online social groups” (Komito, 2007:85). Similarly Tim O’Reilly refers to it as a perceived second generation of Web-based applications and services and a platform for user-generated content and Web-based communities (O’Reilly:online).

O’Reilly discusses the use of applications such as such as blogs, social networking sites, wikis, mash-ups, shared bookmarks and image sharing sites³⁶ as being tools for user experience:

When devices and programs are connected to the Internet, applications are no longer software artefacts, they are ongoing services. Therefore, don’t package up new features into monolithic releases, but instead add features on a regular basis as part of the normal user experience. (O’Reilly:online)

Furthermore, O’Reilly elaborates on the meaning of Web 2.0 as applications, supplying the users’ intelligence:

A true Web 2.0 application is one that gets better the more people use it. And it immediately acts on that information to improve the experience for everyone else. It’s for this reason that I argue that the real heart of Web 2.0

36 I discuss the tools of Web 2.0 later in this chapter.

is harnessing collective intelligence. And it's for that same reason that I argue that Web 2.0 represents not just a turning point for the computer industry but for the world as a whole. (O'Reilly:online)

O'Reilly describes Web 1.0 sites as static, and non-interactive in a sense that they do not provide visitors with options to contribute their own content. Furthermore, such sites are proprietary, as

Under the Web 1.0 philosophy, companies develop software applications that users can download, but they can't see how the application works or change it. A Web 2.0 application is an open source program, which means the source code for the program is freely available. Users can see how the application works and make modifications or even build new applications based on earlier programs. (Strickland:online)

Shelly and Frydenberg (2011) note that Web 2.0 is characterised by interactive applications that allow users to participate by contributing, organising and creating their content and note several popular Web 2.0 sites. The authors use as examples Flickr - an online space for uploading and storing digital photographs where users can classify their images with keywords, and Wikipedia - a collaborative online encyclopaedia that relies on contributors to write, review and update articles.

On the Web 2.0 platform the content is generated by people, and the only thing the sites provide is the platform and the option to upload and edit that content. In its essence, Web 2.0 is a framework inviting people to join in through the contributions that they make and share with others.

Unlike traditional media (such as television, for instance), the Internet today is not just a spectacle for passive consumption, but also a participatory activity. Tim O'Reilly notes that: "[t]he Web took the idea of participation to a new level, because it opened that participation not just to software developers but to all users of the system" (O'Reilly:online). The author also refers to it as an "architecture of participation", facilitating the co-production of information, and a space for interaction and social networking where

Web 2.0 applications provide even unskilled users with an opportunity to connect databases, synchronize various data streams into one or more applications, and publish and edit content online. (O'Reilly:online)

The rules of communication of Web 2.0 differ in comparison to traditional media such as newspapers or television. Here Marshall McLuhan's over-quoted "the medium is the message" (1964) comes to mind. In this media provoking statement, McLuhan suggests that an audience reaction to any message is significantly influenced by their perception and evaluation of the medium through which the message is being transmitted.

This is merely to say that the personal and social consequences of any medium – that is, of any extension of ourselves – result from a new scale that is introduced into our affairs by each extension of ourselves, or by any new technology. (McLuhan, 1964:7)

Therefore meaning comes not from the content, but from the medium delivering the content. In the context of the digital expansion today, McLuhan's ideas make a lot more sense now, in the twenty-first century, than in the 1960s when he first coined the phrase. This approach is well suited for the understanding of the rapid penetration of the new technology in our society and culture. In 1964 McLuhan said:

Rapidly, we approach the final phase of the extension of man – the technological simulation of consciousness, when the creative process of knowing will be collectively and corporately extended to the whole of human society, much as we have already extended our senses and our nerves by the various media. (McLuhan, 1964:19)

In the ethos of communication through the platforms of Web 2.0, this quote seems rather convincing. However, McLuhan's phrase could be interpreted in the light of the evolution of Web 2.0 development as "the environment is the message", where human consciousness transcends the technology. It is not the technology that becomes an extension of ourselves, but what is shared, collaborated and collectively created through that same technology. Web 2.0 is about how this knowledge is appropriated and re-used in order to create something new.

If we step back into the physical world we will see examples of architectural approaches that discuss the building as an extension of the human, or as “the third skin” of Friedensreich Hundertwasser, as discussed in Chapter Two. Hundertwasser’s approach to architecture was unique in using irregular shapes in his design, incorporating features from nature. His approach to building was the opposite to the sterile and monotonous ways of Modernism, as he believed that everyone should have the right to create individual structures or at least have a “window right”, where each person should be able to paint the exterior of their building within arm’s reach of their window. Hundertwasser saw the house as a vertical village, with each unit painted in a different colour and with its own exterior around the window frames. The common spaces inside were coated with renewable paint and at the disposal of the inhabitants for graffiti and tagging (Restany, 2001). This attitude towards architecture is unique in its understanding of individual creativity and the contribution that anyone can make towards their physical environment and everyday life. But there is something else in this architectural approach that relates it to the principles of shared creativity – this attitude is about a space for many, but one that is organised individually and with options for the people to interact with it creatively, albeit by painting around their windows or creating graffiti on the walls of the internal communal areas. The “third skin” that Hundertwasser was referring to is not only for protection from the elements of nature; it is also about being part of the natural environment, and about creating your own personal space within that space. It is about creating an opportunity for architecture of participation in the physical space.

Web 2.0 is a platform which grows and improves as more people get involved in it. The content which shapes Web 2.0 is created by its users, not by a small number of developers. The focus of Web 2.0 is on engaging more people to take part in expanding the platform and to use it for communication, sharing and collaborative creation. In its essence Web 2.0 presents a way of approaching the methods of how something is initiated, built and created — the ways of working together, through the participation of multiple users sharing ideas and debate.

Although this notion may be new for the world of the Internet, it did not start there. I will return to the properties of Web 2.0 later in this chapter. In the next section I focus on creativity, supported by the process of sharing. As we will see in Chapters Five and Six, the field which I call Public Art 2.0 is shaped by this concept.

4.3 Sharing and Creativity

If we step back from the digital world of the Internet and look at the discourse surrounding creativity “offline”, we notice that the term has been closely linked with trying to connect different ideas together. Creativity is seen as a process of exploration, risk-taking, innovative and creative thinking. For example, speaking of what encouraged him to be creative, Leonardo Da Vinci wrote how his attempt to connect the unconnected helped him get inspired (Michalko, 2001). Oech (1986) suggests that in order to foster creativity we need to take on the roles of explorer, artist, judge and warrior. This would mean that when an idea is put in place we should try and expand on it, see what other related concepts are available, open up our minds and imaginations in order to come up with a better concept. At the same time, a critical eye is necessary to filter thoughts that are not focused in the direction that we are aiming towards, and furthermore we need to be able to defend the ideas that we have in mind.

In taking a more holistic approach, the anthropologists Tim Ingold and Elizabeth Hallam argue that creativity coincides with the notion of “doing” of the person (2007:202). They refer to the theologian H.N.Wieman, who distinguishes two senses of creativity, or two meanings of this word: “One is a characteristic doing of the human person. The other is what personality undergoes but can not do” (Wieman, cited in Ingold and Hallam, 2007:8). Thus, according to Wieman a human being is creative in the first sense

...when he constructs something according to a new design which has already come within reach of his imagination.... The second kind of creativity is that progressively creates personality in community. (Wieman, *ibid.*)

Thus, creativity can be seen as a process, rather than a product (Ingold and Hallam, 2007). This understanding comes close to the one of the ethnographer Edward Bruner who notes that “people construct culture as they go along and as they respond to life’s contingencies” (1993:326). Ingold and Hallman observe that, in this process

...people are compelled to improvise, not because they are operating on the inside of an established body of convention, but because no system of codes, rules and norms can anticipate every possible circumstance. (Ingold and Hallam, 2007:2)

This, in turn opens a space for improvisation and as Bruner notes, “improvisation is a cultural imperative” (1993:322). The anthropologist James Leach also notes that

...one uses one’s own internal creativity to remake one’s sense of worth in the world. The mechanism seems to be through producing and developing things, which in turn ‘develop the self. (Leech, cited in Ingold and Hallam, 2007:108)

Another anthropologist, John Liep, looks at the term “innovation” as a synonym for creativity, associating the latter with the production of novelty (Liep 2001). This is a contrasting view to that of Ingold and Hallman, who argue that “to read creativity as innovation is, if you will, to read it backwards, in terms of its results, instead of forwards, in terms of the movements that give rise to them” (2007:2-3). Referring to Jackson (1996), they propose a reading of the term creativity as improvisation³⁷, rather than innovation — an improvisational creativity of a world that is “crescent, rather than created” (Ingold and Hallam, 2007:3), and a world that is “always in the making”(Jackson 1996, in Ingold and Hallam, 2007:3), rather than one that is already made.

37 Ingold and Hallam (2007) note four points about improvisation: firstly, it is generative, in the sense that it gives rise to forms of culture as experienced by those who live by them; secondly, it is relational – continuously responding to the performance of others; thirdly, it is temporal in the sense that it cannot be reduced to an instant, but it embodies a certain duration; and finally – improvisation is the way we work, not only in our ordinary life, but also in our studied reflections on these lives of arts, literature and science.

Studies on creativity suggest that it is more likely to develop in people who possess traits such as risk taking, spontaneity, courage and independence of judgement (Sterberg & Lubart, 1999). On the other hand, creativity relates to “innovative ideas, tinkering, and appropriation constituted in collaborative and individual efforts of a plurality of users” (Schäfer, 2011:72).

The sociologist Richard Sennett discusses the ideas of cooperation and how it occurs in contemporary life as “cooperation at the apex of power produces a structural problem for all coalitions: the loss of connection of the apex to its base” (Sennett, 2012:46). Sennett notes that in order for cooperation to flourish communication has to follow two different paths — dialogic and dialectic, with the first one being a verbal play of opposites that gradually builds up to a synthesis and the second being about mutual exchange. He writes that

The subjunctive mood is most at home in the dialogical domain, that world of talk that makes an open social space, where discussion can take an unforeseen direction. The dialogic conversation...prosper through empathy, the sentiment of curiosity about who other people are in themselves. (Sennett, 2012:23)

Sennett (2012) notes that we have to consider community as a process of coming into the world and a method through which people resolve the value of face-to-face relations and the limits of those relations.

A prominent figure in the added value of shared information is Stuart Brand. In 1968 he launched his homemade publication The Whole Earth Catalog (WEC). The Catalog offered a selection of traditional items, such as stoves and tipis, as well as technological items such as computers. Each section of the publication presented book reviews and commentary on tools and materials. In 1974 the Catalog became a monthly journal and in 1994 its 384 page version, The Millenium Whole Earth Catalog, was published under the direction of Howard Rheingold (Benton, 2011:93). The WEC³⁸ offered a type of interactive participation through the reviews that

38 Stuart Brand also recognised the potential of information technology as a way of connecting people and he co-established the first online community project – the WELL, which I discuss this later in this chapter.

readers were invited to submit. It also provided a network of experts who shared tools and ideas. Benton notes that

[t]he WEC was surely one of the first manifestations of a society connected by a network, or in this case a catalogue. Interaction and self-determination were the hallmarks of this new philosophy of life. (2011:96)

The statement of purpose of the WEC states:

We are gods and we might as well get good at it. So far, remotely done power and glory – as via government, big business, formal education, church – has succeeded to the point where gross defects obscure actual gains. In response to this dilemma and to these gains a realm of intimate, personal power is developing power of individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested. Tools that aid this process are sought and promoted by the Whole Earth Catalog. (www.wholeearth.com:online)

This do-it-yourself approach (DIY) is strongly embedded in the ethos of the Whole Earth Catalog. Professor George McKay talks about this active approach of doing things by yourself:

While we were great at sitting around talking problems through, today activists altogether prefer doing things. In fact, few talk of `demonstrations any more, but of `actions and `blockadestheir activism has a new name – DiY culture... Coming from an older generation and, worse, being seen as an ex-activist, I could only do wrong as I embarked on academic research into DiY culture. (McKay, 1998:20-1)

McKay also defines DIY culture as a “youth-centered and directed cluster of interest and practices, around green radicalism, direct action politics” (1998:2). He refers to Cosmo, a DIY activist, who states that:

In the eighties, a lot of people who were hacked off with the way we were living, or were just plain bored, got off their arses and did something about it...DiY culture was born when people got together and realised that the only way forward was to do things for themselves...Ingenuity and imagination are the key ingredients...people who decided it was time to take their destinies into their own hands. (Cosmo, cited in McKay, 1996:184)

Stuart Brand’s vision, expressed through his Whole Earth Catalog, to provide human beings with ideas for optimising their life added value to the flow of sharing

information between human beings. The ethos of the Whole Earth Catalog is expressed through massive information gathering entities such as Google or Yahoo, and via virtual communities growing up around information sharing such as Facebook or Twitter.

The key difference between the two entities — the Web and the Whole Earth Catalog — is in the infrastructure. The Catalog was printed; it had to be issued and disseminated in the physical world. Compared to the environment of the Web the speed of this dissemination was extremely slow. What the Internet offers today is a more than massively increased speed — it is an environment of knowledge sharing and ideas appearing as a result of this process. The technology of the Web today has taken a further step as the infrastructure appears around the idea; this differs from the physical world where the infrastructure is built in order for the idea to come to fruition. One of the most prominent thinkers of our time, Ray Kurzweil (2006), supports this notion by saying that if one wishes to invent something the biggest mistake that they can make is to build it around the technology which already exists. What is crucial is to think of what it is that you want to achieve, describe how it could possibly be made and then grow the technology achieve it.

I quickly realized that timing is the critical factor in the success of inventions. Most technology projects fail not because the technology doesn't work, but because the timing is wrong — not all of the enabling factors are at play where they are needed. (Kurzweil, in Olson, 2006:online)

Kurzweil notes that people do not start a project when the hardware and the technological capability doesn't exist to support it, but emphasises that they should. This is evident today in the millions of applications for mobile phones which allow people to do all sort of things — from locating where our friends are, to putting together music, video clips or creating images. It is also evident in platforms for sharing and combining data, which also allow us to mix elements of the data to create something new. Such examples can be seen in YouTube, SoundCloud, Flickr, Google Maps. This is the most important characteristic of the environment of Web 2.0 — it is fostering creativity through sharing.

In his book *Making is Connecting* (2011), David Gauntlett discusses how creativity and community intersect in the twenty-first century, connecting art, Web 2.0 and community formation. Gauntlett talks about making as connecting from three key perspectives: firstly, in order to create something new you need to connect certain objects or ideas; secondly, in order to create something you would usually connect with other people; and thirdly, through creating we increase our engagement with others when we share the product of our creation. Gauntlett borrows a quote from one of the most prominent thinkers of the nineteenth century, the artist, designer and writer, William Morris: “I do not want art for a few, any more than education for a few, or freedom for a few” (Morris, cited in Gauntlett, 2011:40). Gauntlett refers to the ways Morris explains the benefits of creative work. Back in 1884 Morris talks about the “hope of rest” and “hope of product”, i.e. the pleasure of making something worthwhile and about “the pleasure in the work itself”, a way of taking joy from the act of working, creating and sharing (Morris, cited in Gauntlett, 2011:41).

David Gauntlett proposes a new understanding of creativity as being a process engaging the human mind and the material and digital world in making something novel in that context, as well as a process evoking a feeling of joy. The author notes that people like to make and share things, engage with others and connect with the world around them. Discussing the human drive to make and share, he notes:

They enjoy making and sharing things without the need for external rewards such as money or celebrity; although low level recognition and reputation — being able to impress the people around you — may be a motivating force. But they just do it anyway.....people often spend time creating things because they want to feel alive in the world, as participants rather than viewers, and to be active and recognised within a community of interesting people. (Gauntlett, 2011:222)

It is precisely the drive to make and share that Gauntlett recognises as the motivating force which can thrive in the environment of the Internet. As he puts it,

The process of making is enjoyed for its own sake, of course: there is pleasure in seeing a project from start to finish, and the process provides

space for thought and reflection, and helps to cultivate a sense of the self as an active, creative agent. But there is also a desire to connect and communicate with others, and – especially online – to be an active participant in dialogues and communities. (ibid.)

Gauntlett explains that making and sharing activities, online and offline, can be seen as a cloud of creative links which can bind people together. It is through making and sharing that he views people as creative agents, producing something new, whilst at the same time transforming their sense of self. In this case, according to Gauntlett, creativity is viewed as social glue, binding people together during the act of sharing the outcomes of the creative process.

4.4 Sharing, Creativity and Technology

Our desire to connect with one another is natural. Unsurprisingly developments in technology have provided us with various means of communication — from the invention of the telephone to the virtual interaction that the Internet provides today. We are progressing technologically in a constantly accelerating way. Technological advances have contributed to the evolution of the networks providing communication and at the same time enhanced the way information is shared between people.

Although the ethos of sharing is strongly embedded in the principles of Web 2.0, sharing through technology was possible long before the platform of the Web reached its 2.0 version. If we step back in time, we will see that the first social technological interactions were born on the telephone in the sixties. During that time a rogue use of the telephone network, also known as *phone phreaking*, started to emerge (Wang, 2006). The phone phreakers were “technophiles and information addicts trapped into a telecom monopoly long before Skype” (Pirtle, 2010:9). The phone phreakers would hack their way into corporate telephone mailboxes using audio tones to manipulate the phone system. The messages left by these techno-

enthusiasts could be considered the first blogs³⁹, not made of words and read on a computer screen, but as recordings on telephone mailboxes. Phone-phreaking was essentially a way of connecting with other techno-enthusiasts by recording social greetings and useful tips for fellow phreakers. These types of audio broadcasts continued to exist until the early 1990s and also contained information on how to conduct “bridges” — audio conference call lines — and on hacked calling card codes:

Greetings to European callers. Call Black Obelisk's board. Don't be a lamer or a leech, don't hang up and forget to add codes..... Just be careful and have a good time phreaking and hacking and whatnot. End of Message. (Telephone Conferences: Phreaky Boys Collection:online)

The phone phreakers were information enthusiasts, playfully and humorously using technology to test its own capabilities and at the same time, to share information and establish connection with others. The American computer engineer and programmer Steve Wozniak talks about the forming of underground groups of “geeks” and “phone phreaks” exploiting the phone system simply for the sake of exploring its flaws and through this exploration “a whole new subculture was born” (Wozniak & Smith, 2006:113).

One of the most prominent hackers of that time, Emmanuel Goldstein (2009), wrote in his book *The Best of 2600, Collector's Edition: A Hacker Odyssey* that the innocence and adventure of the phone phreaking enthusiasts was seen as evil and threatening to people who lived only in the real world. This enthusiasm was completely misunderstood by many, but for people like Goldstein and his fellow techno-addicts this meant a lot more than simply hacking into a phone line or answering machine. They experimented with the way phones worked and interconnected. The phreaking messages were a way of connecting individuals with similar interests, sharing information and establishing a social connection with one another. At the same time, the way that the information exchanges were done was

³⁹ The term blog is used to describe a system allowing a single user or a group of authors to write and publicly display time ordered articles, also referred as posts on the Internet (Harmelen, 2007).

even more important than the message itself. The focus was not simply on connecting, but onto facilitating usefulness for a large group of people. In an interview from 2004 Goldstein talks about the reasons behind this techno enthusiasm:

To seek knowledge, discover something new... Anyone who's an adventurer or explorer of some sort, or any good investigative journalist, knows the feeling of wanting to do something nobody has ever done before or find the answer despite being told that you can't. (Goldstein, 2004:online)

With telephones these techno-enthusiasts did experiments that you were not meant to do and therefore “posed a threat to technology by reaching out and touching it rather than simply using it without asking any questions” (Goldstein, 2008:7). What prompted these types of people to engage in this unauthorised fun? Wallace Wang (2006) discusses the dark side of computing as a way of tackling challenges mind stimulating exercise, which is “about proving that other ways of doing things can also be right” (Wang, 2006:6). Furthermore, the emerging non-corporeal relationships between the phone phreakers formed another type of connection, one facilitated by shared interests rather than social characteristics. Barry Wellman points out that computer-mediated communication is based more on shared interests and less on shared social characteristics (Wellman, 1996). Although this argument relates to computer networks as social networks, it is also relevant for the phone phreakers. Their random encounters could be considered one of the first significant types of social connection based on shared pursuits and established virtually via phone lines across the world.

Writing in 2008, Emmanuel Goldstein discusses the types of people who “like to play with things and figure out how they work” (Goldstein, 2009:209). The author points out that before the technological development in the middle of the twentieth century there was not much for these people to play around with and more importantly, there was no way for them to connect their resources unless they occupied the same physical space and relied on face-to-face communication. The idea of sharing experiences on the Internet today seems natural and extremely

popular using the social networking platforms of Web 2.0. Through the liberating qualities of virtuality the boundaries of the body do not exist. The displacement of our physical self opens up a type of interaction that transcends space, time and identities. The virtual vehicles of the Web — all the means of communication that it provides from email, chat rooms, social networking sites to audio and video calling — dissolve geographical boundaries and offer rapid ways of connecting with one another.

The main lesson that can be learned from the phone phreaking experiments is to do with the openness of a system for creative interaction by those who use it most. Although these experiments were illegal, they point towards something very important — when there is a system in place it is those who are actively engaging with it, with curiosity and disruption, who are most likely to improve it⁴⁰.

The phone phreakers could be perceived as the first hackers, not in a malicious sense, but rather in the sense of exploring the details of a system. Similarly, a hacker is capable of "creatively overcoming or circumventing limitations" (Gulati, 2013:online). Although hacking is commonly perceived as an illegal action, some authors explore this activity further and define different types of hacking depending on the type of entry used to gain access to a secure network. For example, a hacker as someone who enjoys learning the details of computer systems and how to stretch their capabilities, compared to most computer users who would normally learn the minimum system capabilities in order to use it (Steele, 1984). Initially the word "hacking" referred to system penetration for purely practical non-malicious purposes and it was originally used to denote computer security professionals. Terms such as "cracker" and "intruder" were used to describe individuals who broke into computer systems for revenge or profit until

40 The lessons learned from the phone phreakers can be used for the discourse on public art — could it be that a system that is open to everyone to mess with, play and re-discover be the key in resolving some of the disputes surrounding this contested area? Public art should be perceived as an area that anyone can participate in, not just a small number of people. A structure, a platform, or set of policies should be established so people are able to contribute to the practice, alter it, have a say in it. This is one solution as to how the practice can become truly public, whilst at the same time being open to further developments contributed by all. I explore this further in Chapters Five and Six.

the media popularised hacking as an illegal and malicious activity (Samuel, 2004). Worthy of note is the difference between hacktivism and cyberterrorism, where the latter is a separate action crossing over into violence against actual human beings or damage to physical property (Samuel, 2004). Goldstein (2009) explains that most hacking is done by individuals who simply find things by being curious, messing around and making discoveries.

The process of sharing is imperative as to every shared bit of information may add something new and the possibilities of further discoveries grow. It is precisely in this “messy middle”, where one creation leads to another and where the combination of knowledge, resourcefulness and imagination come together, creativity emerges. Underscoring that it is the users of the platform are those who add value, the technology writer Paul Andersen summarises:

At a more sophisticated level, the architecture of participation occurs when, through normal use of an application or service, the service itself gets better. To the user, this appears to be a side effect of using the service, but in fact, the system has been designed to take the user interactions and utilise them to improve itself...(Andersen, 2007:19)

The notion of joint contribution via computer-based communication dates from the early 1970s. The world’s first computer-based social network is recognised as the Community Memory terminal at Leopold’s Records established in 1973 in Berkeley, California (Figure 38). It was the computer scientist, and a hacker at the time, Lee Felsenstein, together with Efrem Lipkin and Mark Szpakowski, who thought of experimenting with how people would react to using a computer to exchange information. They placed a computer near the paper bulletin board in the shop of Leopold Records and the idea was that each visitor could come and enter their message on the bulletin board of the computer, instead of leaving it on the nearby wall (Levy, 2010:129). Not long it was set up the computer started filling up with various messages, from musicians arranging concerts with their peers to publishing poetry. Felsenstein discusses this phenomenon, noting that,

We thought that there would be considerable resistance to computers invading what was, as we thought of it, the domain of the counterculture.

We were wrong. People would walk up the stairs and we had a few seconds in which to tell them, 'would you like to use our electronic bulletin board, we're using a computer. And with the word computer their eyes would lighten, brighten up and they'd say: 'wow, can I use it'? (Felsenstein, in Cellan-Jones: online)



Figure 38. The first Community Memory terminal at Leopold's Records in 1973

Not long after the establishment of the first terminal in Leopold Records the *Community Memory* project was running a number of terminals in Berkeley, California. This project marked the beginning of technology being used as a tool for the exchange of information in a community of individuals. It reflects the idea of non-hierarchical organisation of channels of communication and it expresses the values its founders placed on free speech and convivial technology. Because the terminals were placed in public spaces, they aided in preserving the social and cultural memories of the local community. It could be considered that this is an early electronic version of Web 2.0 in the sense that it provided open means of communication, networking and organisation of content into specific areas so it could easily be found by people using the terminal.

David Gauntlett (2011) notes that the *Community Memory* project was inspired by the prominent twentieth century thinker and philosopher Ivan Illich. According to Gauntlett the project was probably the first attempt to create a “tool for conviviality”, in response to the Tools for Conviviality that Illich wrote about

back in 1973. Conviviality for Illich relates to meaningful and friendly communication and engagement between people. Illich used the term conviviality to designate the opposite of industrial productivity and intended it as a “creative intercourse among persons, and the intercourse of persons with their environment” (Illich, cited in Gauntlett, 2011: 167). The *Community Memory* project was the first major initiative aiming to establish an important meaningful way of communication with others via the powers of digital technology. This initiative opened the gate to cyberspace. The legacy of the project is embedded in the ethos of Web 2.0 as a platform for connection, dialogue and shared personal expression.

In a similar fashion, the electronic version of the Whole Earth Catalog, which I discussed earlier, was started in the form of the WELL (or the Whole Earth 'Lectronic Link) by Stewart Brand and Larry Brilliant in 1985. The idea of the WELL was to be a “destination for conversation and discussion” for the writers and readers of the Whole Earth Review, one of the magazines issued in conjunction with the Whole Earth Catalog (The WELL: online). Nearly a decade before the Internet was available to the general public the WELL was a type of electronic bulletin board and a virtual meeting place for people with common interests. It became the inspiration for one of its earlier members, the writer and critic Howard Rheingold, to write his book *The Virtual Community* (1993), based on his experience of the WELL. Rheingold describes it as follows:

The virtual village of a few hundred people I stumbled upon in 1985 grew to eight thousand by 1993. It became clear to me during the first months of that history that I was participating in the self-design of a new kind of culture....The WELL felt like an authentic community to me from the start because it was grounded in my everyday physical world. (Rheingold, 2000:xvi)

The WELL is a social tool, which simultaneously provides useful information and connects people with similar interests, as it was organised via its bulletin boards, each dedicated to a different topic. The ideas of *Community Memory* to connect people virtually were developed further through the ideas of the WELL,

with this connection growing beyond the local terminal towards connecting individuals in various locations.

Howard Rheingold discusses the notion of computer-mediated communications and the rise of virtual communities as

...social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace. (Rheingold, 2000:10)

He explains that users in these communities would do similar things within the communities to what they would do in real life, the only difference being that they leave their bodies behind:

Because we cannot see one another in cyberspace, gender, age, national origin, and physical appearance are not apparent unless a person wants to make such characteristics public. People whose physical handicaps make it difficult to form new friendships find that virtual communities treat them as they always wanted to be treated - as thinkers and transmitters of ideas and feeling beings, not carnal vessels with a certain appearance and way of walking and talking (or not walking and not talking). (2000:11).

A key element of the concept of the WELL, and the Internet, especially in its Web 2.0 version, is reciprocity. Rheingold describes it as a “kind of gift economy in which people do things for one another out of a spirit of building something new”, where shared knowledge is a valuable currency (Rheingold, 1993:49). In his essay *The High-Tech Gift Economy*, Richard Barbrook notes that the gift economy is a starting point of social relations which are independent of the economy and commercial market (Barbrook, 1998). He argues that this notion occurs almost everywhere in cyberspace:

Net users will always obtain much more than will ever be contributed in return. By giving away something which is well-made, they will gain recognition from those who download their work. For most people, the gift economy is simply the best method of collaborating together in cyberspace. (Barbrook, 1998)

Barbrook's ideas connect with the interpretations of David Gauntlett (2011), where creativity is perceived as a social process, connecting people and increasing engagement with other people as part of this action. It is that extra something, the little sparkle and spirit, the valuable things that people add to the mix, as Rheingold describes it, that is behind the spirit of the modern version of the WELL – Web 2.0. Such technologies, focused on connecting like-minded people in the process of sharing knowledge are cultural pools for exchanging information which can then be edited and re-used again. As unorthodox knowledge economies they challenge creative thinking in individuals and thus play an important role in the course of establishing a social process based on sharing and cooperation. Howard Rheingold (2012) calls them cooperation-enhancing technologies. In his book *Net Smart - How to Thrive Online*, he notes that online social networks can be powerful amplifiers of collective action, precisely because of the specific ways they extend the power of human sociality (2012). Rheingold notes that today, the digitisation of data and the formation of human communication networks via the Internet erase barriers and multiply possibilities for one of our most powerful capabilities — our sociability.

A similar line of thought is followed by the media scholar Henry Jenkins (2006), who discusses technology as a transmitter of social and cultural processes. Jenkins writes about a model of media which works on two levels; the first is a technology that enables communication, and the second is a set of associated social and cultural practices which have grown up around that technology. The moment when technology becomes less of a tool for communication and more a way of sharing common interests is the instant when our relationship with it changes. Jenkins notes that at this stage technology is about providing for a process rather than an endpoint. He discusses the re-emergence of grassroots creativity, as everyday people take advantage of the new technologies that enable them to archive, annotate and re-distribute media content. This is the point where the passive audience, through sharing and exchange, are transformed into active creators, rather than consumers of culture.

The ideas of collaborative work through technology are embedded into the ethos of DIWO (Do It With Others), a term coined by Ruth Catlow and Marc Garrett in 2007. DIWO “extends the DIY ethos of some early net art and tactical media, said to be motivated by curiosity, activism and precision, towards a more collaborative approach” (Catlow and Garrett, online). DIWO proposed a contemporary way of collaborating and exploring the advantages of living in the age of the Internet, “a network of enabled art practice, drawing on everyday experience of many connected, open and distributed creative beings” (ibid.). Catlow and Garrett note that

In this approach, peers connect and collaborate, creating their own structures, using either digital networks or shared physical environments, making an art that is both made and distributed across a network. They engage with social issues whilst reshaping art and wider culture through shared critical approaches and shared perspectives. (Catlow and Garrett, online)

The notion of sharing through technology is a major force in the mission of the Open Source Initiative (1998). The definition of open source grants rights to a software license which allows people to use it for free. These are: “the right to make copies of the program, and distribute those copies; the right to have access to the software source code, before you can change it and the right to make improvements to the program” (Perens, in DiBona and Ockman, 1999:171). In 1984 Richard Stallman, a researcher at the Massachusetts Institute of Technology, began a project the goal of which was to make it so that no one would have to pay for software. For Stallman, knowledge that constitutes a software program, a source code, should be free (Perens, in DiBona and Ockman, 1999:172). The Open Source initiative claims that

The basic idea behind Open Source is very simple. When programmers on the Internet can read, redistribute, and modify the source for a piece of software, it evolves. People improve it, people adapt it, people fix bugs. And this can happen at a speed that, if one is used to the slow pace of conventional software development, seems astonishing. We in the Open-Source community have learned that this rapid evolutionary process produces better software than the traditional closed model, in which only a

very few programmers can see source and everybody else must blindly use an opaque block of bits. (Raymond:online)

Open source relies on transparency, where the code is available to be studied and understood. It can be changed and redistributed with improvements. Deek and McHugh note that

The open source movement is a worldwide attempt to promote an open style of software development more aligned with the accepted intellectual style of science than the proprietary models of invention that have been characteristics of modern business. The idea — or vision — is to keep the scientific advances created by software development openly available for everyone to understand and improve upon. (2008:1)

The technology consultant Dan Woods describes open source development as software created by community of people who are dedicated in working together collaboratively (Woods, 2005). The Open Source Initiative states that:

When programmers can read, redistribute, and modify the source code for a piece of software, the software evolves. People improve it, people adapt it, and people fix bugs. And this can happen at a speed, that, if one is used to the slow pace of conventional software development, seem astonishing (Open Source Initiative, online).

Referring to the Debian Project's⁴¹ definition, open source requires free distribution and re-distribution, where "the program must include source code and must allow distribution in source code...the licence must allow modifications and derived work, must allow them to be distributed under the same terms as the licence of the original software" (opensource.org). The main principles in developing open source software are freedom; non-discrimination; pragmatism; and meritocracy. Any open source software can be freely given away as well as modified, with no discrimination against a person or a group of people who are able to do so and users who may wish to access both open source software and proprietary software. Furthermore, the fourth principle, meritocracy, notes that the developers of open source are given the opportunity to succeed or fail based on

⁴¹ Debian is a computer operating system composed of software packages released as free and open source software. The Debian Project is an association of individuals who have made common cause to create a free operating system. This operating system created by the Debian Project is called Debian GNU/Linux. (Debian.org)

how good they are as coders (ibid.). Open source software development and its key principles play an important role in the participation-collaboration pattern in Web 2.0, supporting the belief that knowledge and growth evolve best when data, methods and ideas are shared freely and each participant can build on the work of other collaborators.⁴²

The scientist and social entrepreneur Richard Jefferson (2005) discusses the role of the Internet in revolutionising the process of sharing knowledge:

The Internet is revolutionising how knowledge can be shared and how it can coalesce in shared projects. It is not just about sharing knowledge but about creating new ideas through collaboration. Creativity comes from individual flashes of brilliance that then attract hundreds of other people to make contributions. We know that innovations that involve users and developers from the outset are far more likely to succeed than those that do not. (Jefferson, cited in Leadbeater, 2009:199)

Referring to Nicolas Bourriaud's statement that "encounters are more important than the individuals who compose them" (2002:43)⁴³, could be related to the ethos of Web 2.0 again, but this time through the encounters that the Web of Relations provides for its participants. On the Web 2.0 platform creativity and sharing are closely connected.

In his book *We the Media: Grassroots Journalism By the People, For the People*, the technology writer Dan Gillmor (2006) notes that because of the developments of technology and its communication toolkits, anyone can be a journalist at no cost and with a global reach. Once merely a consumer of news, any member of the former audience is now a producer, a citizen journalist and a newsmaker. Similarly, Henry Jenkins (2006) argues that the emergence of the Internet has generated a new participatory culture, where this ability to share

⁴² The web platform Sourceforge.net, for instance, is a resource for open source software development and distribution. It provides tools for software development, connecting more than 46 million consumers with these open source projects and serves more than 2,000,000 downloads a day (Sourceforge.net).

⁴³ In Chapter Two I discuss artworks that are seen as a vehicle of relation to others, linking them with the ideas of "Relational Art" as defined by Nicolas Bourriaud, in which the author argues that "...encounters are more important than the individuals who compose them" (Bourriaud, 2002:43).

media has helped to motivate media production, resulting in an explosion of grassroots expression (Jenkins, 2006).

“You are what you share” is the way of understanding the creative processes in the digital world explained by the British author Charles Leadbeater (2009). In his book *We-Think: Mass innovation not mass production* (2009), he explores the phenomenon of collaborative creativity supported by the Web 2.0 platform. Leadbeater notes that in the physical world, in the economy of things we are identified by what we own — land, house or a car. In the economy of the Web, however, we are who we are connected with, we are what information we share with them, we are the photos that we put on the Internet and the comments that we write in response to information being shared by others. Leadbeater underscores that

In reality, creativity has always been a highly collaborative, cumulative and social activity in which people with different skills, points of view and insight share and develop ideas together. At root, most creativity is collaborative; it is not usually the product of a lone individual's flash of insight. (Leadbeater, 2009:7)

The Internet, and Web 2.0 in particular, provides us with a new way of explaining collaborative creativity. As explained by Leadbeater (2009), this is very important for creativity, because the more ideas are shared, the more they breed, mutate and multiply, and this process is ultimately the source of creativity and innovation (2009:6). The author interprets the culture of Web 2.0 through one simple principle, which he calls *The Principle of With*:

The Web invites us to think and act with people rather than for them. The web is an invitation to connect with other people with whom we can share, exchange and create new knowledge and ideas. The principle that we should ‘think’ with stands in stark contrast to the kind of outlook, organisation and culture spawned by the mass production and the mass consumption of the twentieth century... Driven by creative collaboration and shared conversation the principle of *With* is central for innovation. (Leadbeater, 2009:240-242)

In his book *The Wisdom of Crowds* (2005), the American writer James Surowiecki maintains a similar position, that collective insight is superior to the

wisdom of the individual. The author pinpoints key areas leading to making better decisions — independence, decentralisation and diversity — areas which can closely be related to the characteristics of Web 2.0. Surowiecki also notes three advantages to what he calls disorganised decisions: cognition (thinking and information processing), cooperation (optimisation of actions), and cooperation (forming networks of trust with no central control).

The idea of an activity or a task that can be done by many non-experts by attracting a large number of people is referred to as “crowdsourcing”. The term crowdsourcing was coined by Jeff Howe in 2006. Howe writes

Simply defined, Crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call. This can take the form of peer-production (when the job is performed collaboratively), but is also often Undertaken by sole individuals. The crucial prerequisite is the use of the open call format and the wide network of potential labourers. (Howe, 2006)

He also notes that crowdsourcing is the application of Open Source principles to areas beyond software (ibid.). Howe offers a taxonomy of crowdsourcing, defining four categories. The first one is collective intelligence, or crowd wisdom where a crowd gathers to share their knowledge. The second, most common type of crowdsourcing is crowd creation where people co-create a product or a service. Crowd voting is the third option where the judgement of a group is used to organise vast quantities of information. Howe defines the fourth category as crowd funding, through which people can participate in micro-lending small amounts of money to help a person or an initiative that they support.

The American writer Clay Shirky, in his book *Here comes everybody: The power of organizing without organizations* (2008), accounts for the growth of group conversation, collaboration and group action through the platform of Web 2.0. Shirky notes that

You can think of group undertaking as a kind of ladder of activities, activities that are enabled or improved by social tools. The rungs on the ladder, in order of difficulty, are sharing, cooperation, and collective action.

Sharing is one of the three activities that are enhanced through social tools. Sharing creates the fewest demands on the participants. (Shirky, 2008:49)

Shirky refers to the social tools of Web 2.0 – those that allow participatory action - such as blogs, wikis, media-sharing and/or social networking platforms⁴⁴. It is thought that the reader turned contributor produces and shares content. The openness of Web 2.0 and democratisation of its tools is giving way to grassroots creativity. In his book, *Cognitive Surplus: Creativity and Generosity in a Connected Age* (2010), Clay Shirky discusses how the digital technology is harnessing the surplus we have to create new things, in contrast to sit-there-and-consume media such as television. Shirky argues that it is technology that is changing us from passive consumers to participants in creative production:

The technology will continue to improve, and the population will continue to grow, but change in the direction of more participation has already happened. What matters most now is our imaginations. The opportunity before us, individually and collectively, is enormous; what we do with it will be determined largely by how well we are able to images and reward public creativity, participation and sharing. (Shirky, 2010: 212)

However, the most important thing that Shirky notes is that we, collectively, are not just the source of the surplus,

... we are also the people who design its use, by our participation and by the things we expect of one another as we wrestle together with our new connectedness. (2010:29)

The value of togetherness engendered by the Internet has also been discussed by the American author, activist and independent commons scholar David Bollier. In his book *Viral Spiral* (2008) Bollier writes that “thanks for the Internet, the commons is now a distinct sector of economic production and social experience” (2008:295). He notes that the commoners begun to take charge of their lives, organising themselves through the Internet.

Ordinary people went online, if only to escape the incessant blare of television and radio, the intrusive ads and the narrow spectrum of expression. People started to discover their own voices . . . and their own capabilities . . . and one another. (Bollier, 2008:1)

44 I discuss Web 2.0 tools later in this chapter.

He calls these people “self-styled commoners” who build their own platforms, creating tools and content and a digital republic of their own:

Commoners realize that this other way of being, outside hierarchical institutions, in the open space where viral spirals of innovation are free to materialize, is an important source of their insurgent power. ...The commoners differ from most of their corporate brethren in their enthusiasm for sharing. They prefer to freely distribute their writing, music, and videos. (2008:4-8)

Commons is described as a set of assets which are shared and they are gifts to the members of a community (Barnes, 2006). Barnes refers to commons as refers to commons as gifts that are received, rather than something that is earned.

A shared gift is one we receive as members of a community, as opposed to individually. Examples of such gifts include air, water, ecosystems, languages, music, holidays, money, law, mathematics, parks, the Internet, and much more. These diverse gifts are like a river with three tributaries: nature, community, and culture. (Barnes, 2006:5)

In the digital world, commons is referred to as involving distribution of joint ownership of technology and digital information. Open source software and Wikipedia could be seen as examples of digital commons. The digital media scholar, Mayo Fuster Morell, defines it as:

...an information and knowledge resources that are collectively created and owned or shared between or among a community and that tend to be non-excludible, that is, be (generally freely) available to third parties. Thus, they are oriented to favor use and reuse, rather than to exchange as a commodity. Additionally, the community of people building them can intervene in the governing of their interaction processes and of their shared resources. (Morell, 2011:5)

The curator and writer Christiane Paul (2006) writes that the meaning of commons refers to land or a public area that is open to common use and notes that the idea of the digital or networked commons obviously requires a reconsideration of traditional definitions:

...the public space here is not a shared territory but a non-locality consisting of global communication systems that, while subject to protocols and regulations, largely exist outside of a single nation's or state's jurisdiction; the “commoners” also cannot be defined strictly in terms of

physical location but often are communities of interest that share ideas and knowledge and are dispersed around the world. ... The concept of the (networked) commons is also inextricably interconnected with the notion of the public domain, which — as a social and cultural space — can be understood as a shared site of ideas in the broadest sense. (2006:online)

The digital culture theorist Felix Stalder writes that “The digital commons comprises informational resources created and shared within voluntary communities of varying size and interests” (2010:313-324). The author notes that the management of these resources is oriented towards use within the community, rather than exchange in the market and thus “separation between producers and consumers is minimal in the digital commons” (ibid.). This type of commons, according to Stalder, represents a third model of social production, which is not dependent on the state nor oriented towards the market, even though it may partially overlap with both.

The digital commons represents a cluster of practical visions to steer it in a more democratic and equitable direction by advancing processes of decentralization, lowering obstacles to participation and reducing positions of power created by monopolies over intellectual property. (ibid.)

It is because of the digital commons that new paradigms for the production and dissemination of cultural works have appeared. According to Stalder, these paradigms are articulated by three linked social movements: *free software*, *free culture* and *access to knowledge*. The free software movement focuses on software code, the free culture movement focuses on cultural goods and the access to knowledge movement centres around knowledge-intensive goods, such as scholarly publications or medicines.

All three share an understanding that in a digital context cultural works and knowledge goods are fundamentally different from physical goods, since they can be easily and cheaply copied, shared and transformed. Because sharing means multiplying rather than dividing, they are naturally abundant. Thus, there is no ethical justification to prevent anyone from enjoying the benefits of using them. (ibid.)

David Bollier notes that before the Internet, the collaborative dimensions of creativity were not considered in much depth.

An “author” was self-evidently an individual endowed with unusual creative skills. As the World Wide Web and digital technologies have proliferated, however, copyright’s traditional notions of “authorship” and “originality” have come to seem terribly crude and limited. The individual creator still matters and deserves protection, of course. But when dozens of people contribute to a single entry of Wikipedia, or thousands contribute to an open-source software program, how then shall we determine who is the “author”? (Bollier, 2008:online).

Similarly, Sally Brown of Leeds Metropolitan University notes that there are now “Googlegenerationists, Wikipediasts, who don’t necessarily recognise the concepts of authorship/ownerships” (Brown, cited in Keen, 2007:25). Andrew Keen writes about the boom in re-used information that came about because of the Web 2.0. For example, he refers to “remixing” and “mashing up” of software and music. He argues that this is actually “theft” with disturbing intellectual consequences (2007:24-25), noting that:

...[the] great author is being challenged by the dream of a collective hyperlinked community of authors who endlessly annotate and revise it. (ibid.)

According to Keen, copyright and authorship “lose all meaning to those posting their mash-ups and remixings on the Web” (2007:24). He disagrees with the views of Silicon Valley visionary and cyberpunk author William Gibson, whom he quotes as follows:

Our culture no longer bothers to use words like appropriation or borrowing to describe those very activities. Today’s audience isn’t listening at all — it’s participating. Indeed, audience is as antique a term as record, the one archaically passive, the other archaically physical. The record, not the remix, is the anomaly today. The remix is the very nature of the digital. (Gibson, 2005, cited in Keen, 2007:24)

Similar views are shared by Jessica Litman, a professor of Law and Legislation. In her paper *The Public Domain* (1990) she argues that to shrink the public domain would lead to weakening the creative process and that authors depend on “raw material from the commons”. She writes:

...the very act of authorship in any medium is more akin to translation and recombination than it is to creating Aphrodite from the foam of the sea.

Composers recombine sounds they have heard before; playwrights base their characters on bits and pieces drawn from real human beings and other playwrights' characters; novelists draw their plots from lives and other plots within their experience; software writers use the logic they find in other software; lawyers transform old arguments to fit new facts; cinematographers, actors, choreographers, architects, and sculptors all engage in the process of adapting, transforming, and recombining what is already "out there" in some other form. This is not parasitism: it is the essence of authorship. (Litman, 1990).

The social media consultant and writer and James Carson writes that fragmentation of authority has occurred because the arsenal of Web 2.0 tools that allow people to create, remix and respond to other people's content (2013:online). Whilst the barriers of entry for authorship have been greatly reduced, the remix culture is on the increase. Carson notes something very important that occurs as part of this process:

What is quite remarkable about such mashups is that they are of little personal gain to the person doing the mashing. Indeed, many mashups are done by anonymous creators – good for hiding away from potential copyright notices. The original author's intent is remixed by the anonymous, at no other gain than to produce a humorous and sharable piece of content (ibid.).

The media scholar Jay David Bolter notes in his book *Writing Space: Computers, Hypertext, and the Remediation of Print* (2001) that "the values of stability, monumentality, and authority are themselves not entirely stable; they have always been interpreted in terms of the contemporary technology of handwriting or printing" (Bolter, 2001:16).

In her book *Cyberliteracy: Navigating the Internet with Awareness*, the computer communications scholar Professor Laura J. Gurak (2003) discusses the fluid notion of authorship on the Web by looking at some of the key characteristics of the digital platform: anonymity, interactivity, speed, and reach. She notes that anonymity allows both readers and authors to experiment with different identities and thus encourages open discussion and participation. The increase in collaborative writing in Web 2.0, in wikis, for example has cause doubts the accuracy of information presented there. However, in a study entitled *Audience*,

Authorship, and Artifact: The Emergent Semiotics of Web 2.0, the professors of Informatics Mark Warschauer and Douglas Grimes point out that Wikipedia is only slightly less accurate than articles in the Encyclopedia Britannica (2007).

This is the type of commons that Felix Stalder talks about, the model of social production which uses a process of decentralisation, lowering the obstacles for participation and reducing the positions of power (2010:313-324). In the case of the study results pointed to by Warschauer and Grimes, we observe that such participation is actually valuable.

Jaron Lanier does not seem to agree with this view as in his book *You Are Not a Gadget* (2010) he writes that the tragedy of the commons and journalistic Stockholm syndrome are killing Web 2.0.

The ethereal, digital replacement technology for the printing press happens to have come of age in a time when the unfortunate ideology I'm criticizing dominates technological culture. Authorship – the very idea of the individual point of view – is not a priority of the new ideology. (2010:47)

He argues that the digital world flattens individual expression into a “global mush” and continues:

It is true that by using these tools, individuals can author books or blogs or whatever, but people are encouraged by the economics of free content, crowd dynamics, and lord aggregators to serve up fragments instead of considered whole expressions of arguments. The efforts of authors are appreciated in a manner that erases the boundaries between them. (ibid.)

These views relate to the interpretations of the biologist Garrett Hardin (1968) and the concept that he popularized as a “tragedy of the commons”. According to Hardin, the commons will always be overused by people because it is in their self interest to do it. Thus the commons are fated to be destroyed by overuse.

In contrast, the Stanford law professor, Creative Commons founder and author of *Free Culture* (2004), Lawrence Lessig argues that the openness that the Internet provides enables creativity and innovation. Furthermore, he notes that the

barriers for openness should be reduced even more and the laws of copyright that exist today should be reconsidered. In his book, *The Future of Ideas: The Fate of the Commons in a Connected World* (2001), Lessig writes:

Free content is crucial to building and supporting new content. The free content among the 'wired' is just a particular example of a more general point. Commons may be rare. They may evoke tragedies. But commons also produce something of value. They are a resource for decentralized innovation. They create the opportunity for individuals to draw upon resources without connections, permission, or access granted by others. (2001:85).

Lessig refers to the inventor of the World Wide Web, Tim Berners-Lee:

If the Web was to be a universal resource, it had to be able to grow in an unlimited way. Technically, if there was any centralized point of control, it would rapidly become a bottleneck that restricted the Web's growth, and the Web would never scale up. Its being "out of control" was very important. (Berners-Lee, cited in Lessig, 2001:37)

Speaking of the connections between the networks commons and art in public space, Christiane Paul (2006) notes that the networked commons has certainly redefined notions of what public art is and can be, especially when it comes to the notion of space, which becomes a distributed non-locality.

One can argue that a networked environment increases the public's agency in several respects — for example through enhanced distribution, filtering, and archiving mechanisms that give importance to an "individual's voice;" through the fact that intervention is not necessarily bound to a geographic space anymore; and through a largely decentralized rather than hierarchical structure. (Paul, 2006:online)

Referring back to the lessons of the 19th century artist, designer, and writer William Morris, who did not approve of "art for a few, nor education for a few", perhaps it is safe to say that he would have supported and endorsed the platform of Web 2.0. It is a platform that provides reasonably equal opportunities for anyone to share creative artefacts such as images, videos and texts which they have created themselves. Web 2.0 has become a significant tool for the exchange of information between people, but furthermore the most important property of the Web is the

liberating qualities provided by the virtuality of the system. Once these are in place people are braver, they are willing to share more, to experiment without fear of failing. This provides an invisible connection between those with common interests. It is through sharing and discussion where cross-pollination of ideas may occur.

4.5 Web 2: Community in the Making

The inventor Alexander Graham Bell said that great discoveries and improvements invariably involve the cooperation of many minds: “I may be given credit for having blazed the trail, but when I look at the subsequent developments I feel the credit is due to the others rather than to myself” (Bell, quoted in Rogers, 2007:9). According to Csikszentmihalyi (1996) creativity happens not inside a person’s head, but in the interaction between a person’s thoughts and a socio-cultural context. Schon (1983) notes that for a creative process to occur an open-ended and complex situation needs to occur. Such situations provide opportunities for reflection and learning, focusing on the back-talks⁴⁵ of situations (ibid.).

In Chapter One, I discussed the notion of disruptive innovation (Christensen, 1997; Gauntlett, 2013). The disruptive potential of the Internet allows ordinary people to be creative and thus to disrupt the patterns of those who are professionally active in the field. Gauntlett calls them “online enthusiasts who are doing similar work, usually performs and shared for free” (2013, forthcoming). Such sharing was possible prior to the developments of Web 2.0 through peer-to-peer systems.

A peer-to-peer (P2P) network is a type of network where each individual computer is a supplier and consumer of information at the same time. The writer and editor at O’Reilly Media, Andy Oram (2001) explains the peer-to-peer system:

45 Schön (1983) uses the “back-talk” in relation to a reflective design practitioner. The designer shapes the situation by creating or modifying design representations, and the situation “talks back” to the designer, revealing unexpected results. The designer then reflects these results by listening to the situation’s back-talk, and then plans the next course of action.

Files are stored on users' individual systems, and each download creates a peer-to-peer Internet connection between the source and destination systems. (2001:393)

This type of network is the opposite of the centralised user-server model, where many people connect to one large computer (server) in order to gather information. The peer-to-peer system was what Tim Berners-Lee envisaged when he first came up with the concept of the Internet. Minar and Hedlund (2001) write that when the Internet was originally conceived in the late 1960s it was actually a peer-to-peer system.

The goal of the original ARPANET was to share computing resources around the U.S. The challenge for this effort was to integrate different kinds of existing networks as well as future technologies with one common network architecture that would allow every host to be an equal player. (Minar and Hedlund, 2001:4)

The authors note that around year 2000 the centralised networked model of the Internet has changed dramatically from being a passive to an active system.

Through the music-sharing application called Napster, and the larger movement dubbed "peer-to-peer", the millions of users connecting to the Internet have started using their ever more powerful home computers for more than just browsing the Web and trading email. Instead, machines in the home and on the desktop are connecting to each other directly, forming groups and collaborating to become user-created search engines, virtual supercomputers and filesystems. (Minar and Hedlund, 2001:4)

Andy Oram explains that this type of model has a substantial disruptive potential, "that is, ideas whose impacts can fundamentally change the roles and relationships of people and institutions"(2001:393) and that

.... peer-to-peer has been surrounded by a good amount of fear. ...Peer-to-peer like all technologies, embodies certain assumptions about people and future directions of technology. It so happens that peer-to-peer is moving the compass of information use in a direction that directly contradicts the carefully mapped out plans drawn by some large corporate and government players. (2001:393-395)

The theorist and writer Michel Bauwens (2013) notes that peer-to-peer is the ideology of the new cognitive working class as it responds to the needs of the new structure of cognitive labour. According to Bauwens, peer-to-peer and engagement

with peer production engages network users in online collaboration and knowledge exchange and leads to an “eventual creation of common value though such free aggregation of effort” (Bauwens, 2013:208).

For cognitive work to progress, it needs participation of all those who can contribute, and the knowledge needs to be freely shared and available to all who will need the same material in the future. It is no accident that peer production was born among the developers of software code, who are uniquely dependent of access to shareable code to progress in their work. (Bauwens, 2013:207)

Bauwens notes that peer production allows for broader participation, passionate engagement and universal distribution of benefits. Its nature of production, however, attracts netarchical capital⁴⁶. The term *netarchical capitalism* was coined by Bauwens to describe the emergence of a capitalist class which is no longer dependent on the ownership of intellectual property but rather on the development and control of participatory platforms (Bauwens, 2010:online).

Bauwens notes that this hyper production is “conditioned by the possibility of value extraction to the benefit of the holders of capital” (2013:208).

Peer production is both immanent and transcendent vis-à-vis capitalism, because it has features that strongly decommodify both labour and immaterial value and institute a field of action based on peer-to-peer dynamics and a peer-to-peer value system. Peer production functions within the cycle of accumulation of capital but also within the new cycle of the creation and accumulation of the commons. Netarchical capital uses peer production for its own accumulation of capital; peer producers naturally strive for the continued existence and protection of their commons. (Bauwens, 2013:208)

Bauwens also writes that out of self-interest, “sections of the ownership class convert themselves to the position of netarchical capitalists”, so they can enable and empower the sharing communities and “entertain benefit-sharing agreements with the commons-orientated production communities” (2009:209). At the same

46 Bauwens writes that “we have entered a new phase of capitalism based on the accumulation of knowledge assets, rather than the capital involved in the physical production tools. ... a new class has arisen which controls the vectors of information, i.e. the means through which information and creative products have to pass, for them to realize their exchange and value” (2010:online).

time, according to the author, the digital platforms that enable sharing and they are also allies of the peer producers and sharers. Bauwens writes that

The social web may well be a transitional stage. It is the result of the relative weakness of the sharing communities, but as the stronger commons-orientated communities are multiplying, they may very well create new distributed and open architectures that could eventually displace proprietary platforms. (2009:210)

In their paper, *Distributed Authorship and Creative Communities*, Simon Biggs and Penny Travlou (2012) ask if creativity may be regarded as a form of social interaction and a set of discursive relations, rather than an outcome. According to the authors, creativity can be a performative activity, which is understood as a process of interaction. In contrast to the notion that creativity is a product of the individual artists, from the perspective of the authors creativity is considered a process released when engaged in by a group of individuals, rather than a single author. Thus, creativity is perceived as an activity of exchange and a collective becoming. Mynatt et al. see community as

... a particular kind of social production, one that grows out of both enduring features of small-scale social groups, as well as a shifting landscape of social relations, design efforts, geographies, and technologies. (Mynatt et al., 1998:13-156)

Mynatt et al. (1998) extract three key features of community. Firstly, a community is a form of social group that is based on a small-scale set of relationships such as spatial, relational, technological and institutional. Secondly, a community is based on multi-layered relationships that are significant and persistent for members, becoming a mutual source of orientation and definition of what's appropriate and what's not. In this sense they begin to establish the terms of social responsibility and expectations within the community. Thirdly, communities are always in development. They are dynamic and need to reproduce itself or adapt to survive.

Fischer & Ostwald (2005) distinguish between two main types of communities: *Communities of Practice* and *Communities of Interest*. *Communities of Practice* consist of practitioners who work as a community in a certain area, doing

similar work. Within such communities learning takes the form of peripheral participation, where new members move towards the centre of the community as they become more knowledgeable. The initial roles of the newcomers change as their skills grow and they become more active within the group, taking more responsibilities. The second type of communities are characterised as *Communities of Interest*, which bring together different members from the *Communities of Practice*. Such communities of interest are defined by their collective concern with the resolution of a particular problem. Communities do not have to be strictly either communities of interest or communities of practice. They can integrate aspects of both forms and can shift over time as the nature of the problems concerned changes.

Fischer & Ostwald (2005) offer a particularly useful classification of the two groups by examining the differences between a number of factors. The authors define these factors respectively as: the nature of problems (different tasks in the same domain or common task across multiple domains); knowledge development (refinement of one knowledge system or learning through integration of multiple knowledge systems); major objectives (codified knowledge or shared understanding); weaknesses (group think or lack of mutual awareness); strengths (shared ontologies or diversity, social creativity and new insights); types of participation (beginners and experts or stakeholders forming different domains), and learning (peripheral participation or informed participation). The potential for creativity is strongly expressed in *Communities of Interest* because of the different backgrounds and perspectives of the members, which can lead to new insights (Bennis and Biederman, 1997). *Communities of Interest* are more temporary than *Communities of Practice* as they come together in the context of a specific project and normally dissolve after the project has ended.

Similarly, Vossen and Hageman (2007) discuss communities of interests⁴⁷, and in *Hanging Out, Messing Around, and Geeking Out*, investigating youth online

⁴⁷ Online social formations can take different shapes in terms of the type of connection between the participants. Vossen and Hageman (2007) identify four types of communities in relation

communication, Ito et al. identify two key genres of participation via the social networking tools of Web 2.0: friendship driven and interest-driven. In contrast to friendship driven practices, interest driven activities are described as “the domain of the geeks, freaks, musicians, artists, and dorks” (Vossen and Hageman, 2007:59), those who are creative, smart and different, and existing on the margins of the network. Ito et al. (2010) illustrate that participants find different networks of peers and develop friendships through interest-driven engagements, where the interests come first and the friendships second. The authors explain that in these cases the networks are formed not on the basis of real life social relations, but are focused on expanding an individual’s social circle based on interests.

An online community is a group of people who interact in a virtual environment, supported by technology and guided by specific purpose (Preece, 2005). Rosen et al. (2003) note that, ranging from simple text-based newsgroups to intricate immersive virtual reality multi-user environments, these communities are held together by conversation. “Through these communities this social fabric is being wrapped around the world and connecting humans with humans in much the same way a village does” (ibid.). By 2001, 84% of all Internet users indicated that they had contacted an online community and 79% identified at least one group with which they maintained regular online contact (Rainie & Packel, 2001). Such communication occurs through email, bulletin boards, online chat systems which provide instant communication in real time and more recently Web 2.0 tools and applications such as blogs, wikis, media sharing and social networking platforms. Leimeister et al note that

A virtual community consists of people who interact together socially on a technical platform. The community is built on a common interest, a common problem, or a common task of its members that is pursued on the basis of implicit and explicit codes of behaviour. The technical platform

to the links occurring between users – communities of transactions, facilitating selling, buying or auctioning; communities of interests, focused around a specific topic; communities of relations, centered around life experiences; and communities of fantasy, based on imaginary environments and game playing.

enables and supports the community's interaction and helps to build trust and a common feeling among the members. (2004:10)

The process of creation is interactive and occurs as a result of the relationship between the individual and the society and between the individual and the technological environment. I have already described the first formation of groups based on interest with the establishment of the WELL with the help of technology. Prominent scholars such as Howard Rheingold (1993) and Roxanne Hiltz (1985) use the term *online community* to describe the feeling of support and empathy between people in online spaces. Rheingold talks about the gift culture occurring in these spaces as “a marriage of altruism and self-interest” (Rheingold, 1993:58), through giving advice, help or pointers. However, Amy Bruckman (2006:463) argues that, “much ink has been spilled trying to work out which online communities are really communities” and a community should be understood as a concept with fuzzy boundaries that is perhaps better defined by its membership. Such understanding is possible by examining the differences and similarities of each member and comparing them with the characteristics of others within the community.⁴⁸

David Gauntlett writes about online networks in terms of bridging capital as they bring diverse people together without geographical limitations, and about bonding capital, in “creating a strong ‘in-group’ spirit as they share both knowledge and emotions” (2011:151). Writing about the ways the Internet facilitates such capital, Gauntlett refers to Robert Putnam:

Communication is a fundamental prerequisite for social and emotional connections. Telecommunication in general and the Internet in particular substantially enhance our ability to communicate; thus it seems reasonable to assume that their net effect will be to enhance community, perhaps even dramatically. Social capital is about network, the Net is the network to end all networks (Putnam, cited in Gauntlett, 2011:151).

48 Virtual Ethnography has been used as a methodology to study online communities in attempt to understand how people connect, what they do online, what are their motivations or participating in such groups and why some of them rather observe than actively participate in and contribute to the group (Hine, 2000).

Gauntlett notes that making and sharing activities both offline and online can be seen as “a cloud of creative links which can bind people together” (Gauntlett, 2011:224). Gauntlett summarises this through the notion of “making is connecting” where

...people spend time creating online content because they want to feel active and *recognized* within a community of interesting people, and because they wish to express or display aspects of themselves and their interests (Gauntlett, 2011:101).

This is possible via the tools of Web 2.0 such as media sharing sites, blogs, wikis and social networking platforms. There is also the actual structure of the platform of Web 2.0 providing options for interconnectedness and participation. The structure and tools of Web 2.0 are the focus of the next section.

4.6 The “Window Right”⁴⁹ of Web 2.0

A core characteristic of Web 2.0 that provides interconnectedness is its ability to serve as a *platform* which can be accessed through various devices, such as a personal computer, a laptop, a gaming console, a personal digital assistant (PDA) or a mobile phone. Access to the Web is not dependent on a specific software package, but accessible through various applications. O’Reilly discussed the term “web as a platform” at the first Web 2.0 conference in 2004, comparing the products of Netscape and Google, major computer services companies (O’Reilly, 2005:online). Whilst Netscape was attempting to lock down access to the Internet through a dominant software application which had to be purchased, by contrast Google delivered a free application, but one providing various services. By doing so Google avoided scheduled releases of the software and focused on continuous improvement of the services. O’Reilly writes:

49 Here I refer back to the Austrian artist and architect Friedensreich Hundertwasser, who believed that everyone should have the right to create individual structures or at least have a “window right”, where each person should be able to paint the exterior of their building within arm’s reach of their window. See Section 4.1 of this chapter.

Like many important concepts, Web 2.0 doesn't have a hard boundary, but rather, a gravitational core. You can visualize Web 2.0 as a set of principles and practices that tie together a veritable solar system of sites that demonstrate some or all of those principles, at a varying distance from that core. (2005:online)

A key principle of the architecture of Web 2.0 is a characteristic known as *Software as a Service*. The main feature of this component is that the software applications enabling user interaction or involvement is not dependent on any one device as they are part of the World Wide Web and are accessed by users via a web browser (Choudhary, 2007). What makes this component attractive is the fact that as the application is available through the Internet it can easily be updated with new features without users needing to reinstall new versions all the time. Moreover, the application is only configured in one location on the Web, therefore development testing is much faster. The other main benefit of this particular characteristic of Web 2.0 is the functionality provided to users to collaborate on a project together, by adding, commenting and sharing information. Solomon and Shrum (2007) note that this is an important property as it signifies the transition from isolation to interconnectedness, not just for developers of software but for end users. From the Web 1.0 top-down systems, where the creators are not able to effect changes and input from the users directly through the browser to a framework allowing access by multiple users, enabling collaboration, commenting and sharing information, Software as a Service is a key plinth of Web 2.0.

Another important principle of Web 2.0 is the decentralisation of power, where services via the Web of Relations are self-moderated, rather than being administrator dependent. The computer programmer and writer Paul Graham (2005) identifies democracy as a main element of Web 2.0. Using Wikipedia, the free online encyclopaedia, as an example, Graham explains that although experts have given the project middling reviews, the crucial point that they miss is that it is good enough and it is free. The technical platform which Wikipedia offers enables users to create and edit content and participate collaboratively in the formation of knowledge. Graham continues, "On the web, articles you have to pay for might as

well not exist. Even if you were willing to pay to read them yourself, you can't link to them. They're not part of the conversation" (Graham, 2005:online). The media scholar Mirko Tobias Schäfer defines Wikipedia as a socio-technical ecosystem where

...aside from the participation at the level of creating or changing Wikipedia articles, users participate in maintaining, and often guarding articles, creating policies for article writing, and social interaction on Wikipedia as well as creating tools to improve and promote these policies. (Schäfer, 2008:284)

In essence, Wikipedia is an example of a self-regulating online system for information, where the power of regulation lies with its creators. As Paul Graham points out, "[t]he most dramatic example of Web 2.0 democracy is not in the selection of ideas, but their production" (Graham, 2005:online). This highlights another important characteristic of Web 2.0 – its participatory nature.⁵⁰ The Internet has evolved into a "read — write Web," offering new opportunities for online interaction, collaboration, and learning (Richardson, 2006).

Calling for open, non-restrictive software architecture, O'Reilly notes that the key to competitive advantage in Internet applications is the extent to which users add their own data to that already provided. An *architecture of participation* means that users are allowed to extend the platform, which according to O'Reilly means "low barriers to experimentation mean that the system is hacker friendly for maximum innovation". He refers to those who play with the platform, the hackers, as "lead users", who if allowed to experiment with the system will contribute to its future development (O'Reilly:online).

Governor et al. note a number of properties of Web 2.0 facilitating participation, amongst which are the *constant beta pattern* and the *participation-collaboration pattern* (Governor et al., 2009:114-136). Constant Beta Pattern is

⁵⁰ It was the media scholar Henry Jenkins who first introduced the term participatory culture in 1991 (1991, Jenkins et al., 2006) to differentiate user participation in online cultural production from consumer culture, where audiences consume corporate media texts without shaping, altering and distributing them.

essentially the releasing of software through the platform of the Internet in the earlier stages of the design and development cycle, allowing users to directly interact with it and assist in providing direction towards finishing the product (ibid.). Participation-collaboration patterns appear when a group of people with common interests share and append information on a specific topic, “and lets a wider group of people collaborate and contribute to a work, so that it reflects a wider set of experiences and opinions” (Governor et al., 2009:137). This is a key aspect in the characteristics of Web 2.0, describing the functionality of the collaboration between users of application as according to O’Reilly, “the value of software is proportional to the scale and dynamism of the data it helps to manage” (O’Reilly, 2005:online). The core advantage of this pattern is the options to modify content and work collaboratively on different ideas or projects. There are numerous examples existing on the Web where this pattern occurs; a prime one would be Wikipedia⁵¹, with others such as blogs, where the users contribute material relevant to the discussion. An example of the *participation-collaboration pattern* occurring is Mixmatchmusic.com, where open source track are available for other musicians to use by adding new sounds and creating musical mixes. A similar approach is used on sites such as Brightcove.com, where the same approach is used for mixing video and creating new video content. O’Reilly discusses the aspects of the *participation-collaboration pattern*, where the input of many users results in complex works, also described by O’Reilly as “harnessing collective intelligence”⁵², where the users of successful Internet applications supply their intelligence (O’Reilly, 2006). The author uses one of the most popular search engines, Google.com, as an example:

Google gets smarter every time someone makes a link on the web. Google gets smarter every time someone makes a search... And immediately acts on that information to improve the experience for everyone else (O’Reilly, 2006).

51 A wiki can be defined as a “collaborative web space where anyone can add content and anyone can edit content that has already been published” (Richardson, 2006)

52 Jenkins describes Collective Intelligence as the ability to pool knowledge and compare notes with others toward a common goal (Jenkins, 2006).

The writer Kevin Kelly, also a former publisher of the Whole Earth Catalog, writes about the Web 2.0 era, as one in which people have realised that it is not the software that enables the existence of the World Wide Web, rather than the services that are delivered through it:

People have come to realize that it's not the software that enables the Web that matters so much as the services that are delivered over the Web....The net has replaced the PC as the platform that matters, just as the PC replaced the mainframe and minicomputer...and the key to success in this stage of the Web's evolution is leveraging collective intelligence (Kelly, cited in Solomon and Shrum, 2007:13).

The *participation-collaboration pattern* can appear in open source development, where programmers contribute to the code of evolving software projects (Governor et al., 2009). This pattern recognises that an open process may deliver better results, compared to a limited number of people presenting information and sharing knowledge.

The open source approach, discussed earlier in this chapter, is used in building the applications of Web 2.0. They are created as network of cooperating services, where one interfaces with the other and re-uses the data services of others (O'Reilly, 2005:online). The principle of cooperation, rather than impediment is crucial for enabling the network to exist and continue to grow. Cooperation is an essential attribute for Web 2.0 applications also known as tools (Solomon and Schrum, 2007).

The most commonly recognised representative tools of Web 2.0 come under the following categories: blogs, social networking sites, media sharing services and folksonomies. Web 2.0 tools are also referred to as Web 2.0 software, applications or services hosted on a server and accessible across the Web (O'Reilly 2005, Bawden et al. 2007, Campesato and Nilson 2010). The tools of Web 2.0 enable people to congregate around common interests allowing the Web to shift from being a place for document discovery and/or self-expression to a place for social interaction and collaboration. According to Franklin and van Harmelen (2007), Web 2.1 encompasses a variety of different properties, facilitating "emphasis on user generated content, data and content sharing and collaborative effort, together with

the use of various kinds of social software” (Franklin and van Harmelen, 2007:4). New ways of interacting are delivered through the Web as a platform for re-purposing and consuming content.

A blog, originally known as a weblog, is a system allowing a single user or a group of authors to write and publicly display time ordered articles, also referred as posts. Normally, in a blog readers can add comments to the posts of the original author (Harmelen, 2007). Although the blog could be seen as a website accessible via browser software, the key difference between a website and a blog is in the timely matter of the way the posts are arranged; the focus is therefore on posts, and not on pages (Alexander, 2006, in Solomon and Shrum 2007). The blog is a combination of content blocks, which “can be saved, summarised, addressed, copied, quoted and built into new projects” (ibid.). The blog can be seen as a set of personal commentaries on issues that the author deems important, where readers can easily participate in the discussion though which they share knowledge and reflect on the topic (Solomon and Shrum, 2007). Thus, the blog can be seen as a tool promoting open dialogue and discussion between the author, the blogger, and the commenters, the public.

Slashdot.org, started in 1997 by Rob Malda in order to publish “news for nerds, stuff that matters” (Vossen and Hagemann, 2007:50) is often considered to be the first blog. Charles Leadbeater (2009:33) notes that it was the writer Jorn Barger who used the term “weblog” in 1997 to describe these virtual travels across the Internet:

My intent for weblogs in 1997 was to make the web as a whole more transparent, via a sort of "mesh network," where each weblog amplifies just those signals (or links) its author likes best. (Barger:online)

Davies and Merchant (2009) discuss the options for connectivity which a blog may provide though the options for commenting as the commenter leaving a digital footprint on the blog, which frequently leads to reciprocal blog reading (Davies and Merchant, 2009:29). The authors explain that

As a particular network grows, bloggers increase not only their readership and online presence but also their knowledge, or even social standing, in a particular area, thus it is easy to see how through these features the format of blogs contributes to social networking. (2009:29)

O'Reilly notes that if Web 2.0 is harnessing collective intelligence⁵³, then the network of interconnected weblogs, the blogosphere, would be equal to

...constant mental chatter in the forebrain, the voice we hear in all of our heads. It may not reflect the deep structure of the brain, which is often unconscious, but is instead the equivalent of conscious thought. And as a reflection of conscious thought and attention, the blogosphere has begun to have a powerful effect. (O'Reilly, 2007:27)

Furthermore, the blog's infrastructure turns it into a media element that enables two-way conversations as the blog preferences could be set to allow comments under each blog post, thus enabling feedback from visitors to the site. Lev Manovich affirms the influence of Web 2.0 in media communication by stating that "content, cultural production, and cultural consumption – are themselves being redefined by Web 2.0 practices" (2008:75). The author used blogging as an example of a new kind of communication, where content, opinion, and conversation cannot be separated. George A. Barnett discusses the blog as a "key genre for public facing online discourse" (2011:79). The author points out the importance of blogs as interconnected medium, containing not only links to previous posts within the blog, but also to other sites and weblogs, forming networks by linking to one another (ibid.)⁵⁴. O'Reilly describes the powerful effect of the blogosphere as a reflection of conscious thought and attention, pointing out that the blogging community is highly self-referential: "bloggers paying attention to other bloggers magnifies their visibility and power" (2007:26).

In *We, the Media*, the newspaper columnist and blogger Dan Gillmor (2004) notes that because of the developments of Internet technology and its

53 O'Reilly argues that a true Web 2.0 application is one that gets better as more people use it (O'Reilly, 2005:online).

54 To illustrate this point further an example could be given with blogpulse.com — a search engine for blogs, mapping the blogosphere and tracking blog activities on key issues, people and news. For more information visit <http://www.blogpulse.com/about.html>.

communication toolkits, anyone can be a journalist at no cost and at a global reach. Once merely a consumer of news, any member of the former audience is now a producer, a citizen journalist and a newsmaker (Gillmor, 2004:7-13). Quoting Dan Gillmor's words "We, the Media" O'Reilly (2007) notes that the world of Web 2.0 is one of active participation, with the formerly passive audience deciding what is important. In his book *The New Influencers, a Marketer's Guide to the New Social Media*, Paul Gillin (2009) interprets blogging as community journalism, where the blog is a tool facilitating content sharing and conversation. Commenting and responding to comments is a core part of the blogging protocol, vital to the interactive nature of the weblog, creating new relationships that spark more blogging (Gillin, 2009:24 -25).

Rebecca Bennett notes that to create a blog means to exercise global power, as it is more difficult to conduct a dialogue offline on the same scale afforded by the Internet. Thus, the blog is a way of claiming a slice of the global discourse, a contemporary form of communication and a statement of constant presence in the informational territory (Bennett, cited in Brabazon ed., 2008:153-160).

The properties of Web 2.0 facilitate interactive information sharing not only as a passive viewing but also by allowing users to contribute to textual and visual content. For instance, YouTube is a popular video-sharing platform, allowing video uploading, viewing and sharing between users. Similarly, Flickr is a photo sharing website, which allows people to submit and share their photos online. Flickr was launched in 2004 and by the end of 2010 the site was hosting more than 5 billion images, equating to its members uploading more than 3000 images per minute. This makes it one of the largest and best organised photo libraries online (browsermedia.co.uk). In the *About Us* section of the Flickr website, its creators state: "We want to help people make their photos available to the people who matter to them" (Flickr.com), which could be related to the one of the key characteristics of Web 2.0, as described by Patrick Crane as "maintaining and keeping alive human relationships that matter to you" (2008:122). In this sense one of the core messages at the O'Reilly Web 2.0 conference in 2004 – "Don't build

applications, build contexts for interaction” (O’Reilly, cited in Shuen, 2008:9) – is being realised through the interactive properties of the platform.

A media sharing website is defined as a class of online social network, in which “users form a dynamically changing infrastructure to upload, exchange, distribute, and share images, videos, audio, games, and other media” (Zhao et al., 2011:277). A media sharing platform provides a range of functions for its users to group, tag, share and search resources and according to Kear (2010) many media sharing sites have facilities for building communities around these resources. In this respect they have much in common with social networking sites. This contributes to community formation based on shared interest or topics (Vossen and Hagemman, 2007). For instance, a group can be formed around certain styles of photography or music and members of these groups gain reputation by posing high quality material and receiving comments and ratings from other users (Kear, 2011). Media sharing websites as an inseparable part of Web 2.0, due to their focus on community. This property is closely related to the organisation of meta-data, or the tags relating to uploaded content, also called folksonomy or collaborative tagging (Scott et al. 2006).

Kang et al. (2009) define tagging as the practice and method of collaboratively creating and managing tags⁵⁵ to annotate and categorise content. This feature is particularly evident in Flickr, one of the most popular media sharing platforms, where when an image is uploaded the platform provides an option for associating a set of keywords (tags) with this image. By doing so Flickr is able to group the keywords together for ease of future search by other users. Therefore tagging could be perceived as part of the media sharing activity. The platform uses the tags information to create tag clouds – “a diagram of keyword links with the size of each word representing the number of photos that use that tag” (Baldauf et al. 2010:236). The term folksonomy was coined by the information architect Tomas

⁵⁵ Tags or meta tags are labels, given to a digital object (Davies and Merchant, 2009), referring to information that is not visible to users on a website as it is found in the source code of each web page, placed into areas of the page where it can be found by search engines and help them index and rank the site.

Vander Wal and he described the practice as the informational value of the platform being increased by its participants:

One of the things that's nice to see is that people are actually spending time tagging and doing it in a social environment, and following the power curve and the net effect. The more people getting involved in it, the greater the value...(Wal, cited in Shuen, 2008:12)

Collaborative tagging, as part of the media sharing process, is an essential element of sharing information which can then be reused by others. Giving a meaning to an image and placing it in a specific category could be a way of communicating an individual point of view or attaching a personal meaning to the media. This could be seen as an enhancement of the sharing process and increasing the value of information on the Web. Furht (2010) discusses an emerging property of user generated content on social media sites⁵⁶ as one which generates a rich dialogue of communication centred around media object, e.g. YouTube, Flickr etc. The author notes that comments by one user on a piece of media uploaded by another reveal a rich dialogue structure between users. Using the term rich media patterns, Furht (2010) explains that dialogue and conversation is enabled through repeated visits to the social networking site. It is when people return to a video or photograph that have already been viewed and post further comments in response to the communication activity, rather than simply viewing the media element again. Thus, Furht concludes that the reason for repeated visits is to do with communicating with the other users, rather than to satisfy the need to view a video or a photograph once again.

Online social networking systems allow people to connect with each other through specific software available via the platform of the Internet; thus a social networking site is one that provides opportunities for individuals to interact

⁵⁶ The term social media is associated with social networking, however the difference should be noted. Social media is the phrase that combines all web-based and mobile technologies that we use to communicate via the Internet, where social network is a group of individuals, held together by pre-established relationships. Such networks or virtual communities are groups of people, who interact online through blogs, instant messages, email audio or video calls (Safko, 2010).

virtually. This interaction could be “loosely framed (as in Facebook) or focused on a particular ‘social object’ (such as videos in YouTube)” (Davies and Merchant, 2009:128). Ellison (2007) define social networking sites as web-based services which allows users to construct a public profile, define a list of contacts with whom they are connected whilst at the same time viewing the list of connections made by others within their network.

Key elements of a social networking site are: the option for a user to describe him/herself; to record friends and navigate their friends’ networks (Harmelen, 2008: online); and to share information about themselves and designate contacts with whom they share interests (Shelly and Frydenberg, 20011:169). Similarly, Levene (2006) notes that social networks differ from simple hypertext links by the property of creating links between people and groups that share common interests. Crane explains that characteristic by saying that he considers the social networking properties of Web 2.0 to be a new technology that solves an old problem – “maintaining and keeping alive human relationships that matter to you” (2008:122).

Shelly and Frydenberg (2011) summarise the common features of social networking applications as status messages, displaying current location or activities; profiles, containing personal information, photos, location, gender and age; and the ability to designate friendships or contacts through the application and, by doing so, expand the network. These features of social networking are easily identifiable in some of the most popular social networking platforms today such as LinkedIn, Twitter, MySpace and Facebook. LinkedIn is a network for professional social networking, whereas MySpace is a social network mostly used by musicians and other artists to promote themselves online by uploading video and audio files. Another popular platform is Twitter — a hybrid of a social network and a blog, where each post is limited to 140 characters. “Twitter began by inviting people to answer the question “What are you doing?”, but it has grown into a tool for individuals and organisations to share information and ideas, URLs to blog posts or

other interesting online resources and calls to action with the people in their network” (Shelly and Frydenberg, 2007: 170).

In his book, *Where Good Ideas Come From*, the American writer Steven Johnson (2010), talks about the Web as a fertile environment comparing it to natural habitats such as coral reefs. Johnson refers to the Darwin Paradox based on the observations of the scientist on the ecosystems of the coral reefs which he discovered by chance in the middle of the ocean. The paradox was that the waters where these incredibly rich habitats exist are nutritionally very pure, and yet around the reefs Darwin discovered flourishing ecosystems. What would occur to Darwin later was that the tiny organisms of this habitat had built the reef themselves (Jonson, 2010: 4-7).

Steven Johnson refers to the research of the Berkley physiologist Charlan Nemeth, who has investigated the relationship between noise, dissent and creativity in group environments. Nemeth’s research reveals a paradoxical truth about innovation – good ideas are more likely to emerge in environments that contain certain amount of noise and error and noise free environments are too sterile and predictable in their output, and therefore not places where creativity can thrive (Johnson, 2010: 142). The messiness of Web 2.0 is exactly such a type of space — the platform is open for everyone to contribute anything they wish, from what they had for breakfast to amazing scientific discoveries that could change the world. It is the architecture of Web 2.0 that allows such mental chatter to appear there and be shared with all. It is the decentralised way of organisation of the space, open for ‘hacking’ and ‘messaging around with” that is responsible for the inventiveness and imagination to thrive. Steve Johnson begins his book with an excerpt from Shakespeare’s *A Midsummer Night’s Dream* (Shakespeare, cited in Jonson, 2010):

... as imagination bodies forth
The forms of things unknown, the poet’s pen
Turns them to shapes and give the airy nothing
A local habitation and a name.

When Tim Berners-Lee conceived and developed his ideas for the Web he had a specific intention — for it to be a common place for information, where people could communicate and share. Although the term Web 2.0 appeared much later than his original invention, Berners-Lee's 1980s vision of the Internet was always one of an environment which would gather knowledge through human interaction and collaboration (1998:online). So the "airy nothing" that Berners-Lee envisaged was really meant to be shaped by the users, by their thoughts, their knowledge and ideas. Then the vision of the Web, as Berners-Lee imagined it, would have come to realisation. And indeed, through Web 2.0 it has. Web 2.0 supports the same notion that Steven Johnson writes about — the one of connecting ideas instead of protecting them, "as good ideas may not want to be free, but they want to connect, fuse and recombine...They want to reinvent themselves by crossing conceptual borders" (2010:22). So the key is to have a fertile environment where good ideas and creativity can thrive.

A contrasting opinion is maintained by Andrew Keen in his book *The Cult of the Amateur: How Today's Internet Is Killing Our Culture*, (2007), where he disputes the idea of the read-write Web as creating a culture of imitators, rather than original creators. Keen argues that

...on the Internet most of the content being shared— no matter how many times it has been linked, cross-linked, annotated, and copied— was composed or written by someone from the sweat of their creative brow and the disciplined use of their talent. (Keen, 2007:144)

Keen received much criticism when one of his main reviewers, Lawrence Lessig, noted that "[w]hat Keen misses is the value to a culture that comes from developing the capacity to create - independent of the quality created". (Lessig: online).

Further discussion on the critique of the characteristics and outcomes of the Web 2.0 phenomenon is presented in the following section.

4.7. Web 2.0: A Critical Perspective

Open and accessible social interaction in the physical world today is challenged by marginalization of space and everyday activities, often perceived as routine and negative, alienating people from one another and creating an obstacle to interaction. In the virtual space, however, these issues appear to be non-existent, in fact quite the opposite: Web 2.0 presents its users with various opportunities for interaction, dialogue and open lines of communication. There is much to be learned from the ethos of Web 2.0 in relation to issues in the contemporary public space. Perhaps the fact that the Web started moving in the direction of openness, participation, sharing, and the free exchange of information and ideas is because the street does not offer these much needed ingredients any longer. A vastly different approach to, and understanding of, Web 2.0 is offered by Geert Lovink, who suggests that:

[...]the forgettable Web 2.0 saga has run its course. The participatory crowds suddenly find themselves in a situation full of tension and conflict - an unwelcome state of affairs for the pragmatist class who oversaw the internet's formation from the beginning... A bubble has burst again, but this time in the form of the collapsing libertarian consensus model. Internet regulators who favored business and barred state intervention are moving into defense mode. Now that society has overruled their freewheeling ethic, the notion of the internet as an exceptional, unregulated sphere evaporates. (Lovink, 2011:1)

Lovink (2011) comments, that social networks are socially useless, as they do not have a common cause. He also sees new media tools (such as Twitter for instance) as useless as they lack depth of analysis. Another issue highlighted by Lovink is the security of information provided by contributors to the Web 2.0 platform – since information is given voluntarily, it can be used by corporations for commercial purposes. Similarly, concerns about the control over the channels of communication of Web 2.0 are expressed by Sherry Turkle (2011), who also comments that our desire for intimacy and community, expressed through our use of the Internet is actually isolating us from each other. Lovink supports this view: “We see social media further accelerating the McLifestyle, while at the same time

presenting itself as a channel to relieve the tension piling up in our comfort prisons” (2011:44).

Another position that criticises the social aspects of Web 2.0 is held by the media scholar Anders Albrechtslund, who argues that online social networking is anchored in surveillance practices. He introduces the notion of participatory surveillance where people who contribute to social media sites are essentially performing surveillance on themselves by putting detailed personal information on public websites where it can be viewed by corporations and governments (2008:online). Albrechtslund writes that

Government interest in online social networking is easy to understand. To profile potential criminals and terrorists, it is necessary to combine a wide range of information about people. This information includes social relations, such as shared activities and circles of friends, as well as personal data about political views, religious beliefs, sexual orientation, and preferences regarding everyday life activities. It is exactly this sort of information which can be found when studying online social networking. Most social networking sites ask their users to provide these sorts of details; in part this information appears in casual digital conversations within given social networking communication platforms. (ibid.)

This brings up issues in relation to the use of personal data that is provided by the user of a web platform. It is often the case that “most social networking sites ask their users to provide these sorts of details” (ibid.) and registration on such sites is not possible if personal data is not initially supplied. However, Albrechtslund notes that despite issues with regards to social networking sites’ privacy settings, “most of the explanations are focused on shortcomings on the part of the user. As the above example illustrates, these alleged user shortcomings range from ignorance to indifference and dependency on others” (ibid.).

Danah Boyd brings another perspective to this debate in criticising employers who hire or fire people based on their online social networking activity. She notes that if people with an online history are disregarded as potential employees then we “miss out on the best minds of my generation. Bright people push the edge, but

what constitutes the edge is time-dependent. It's no longer about miniskirts or rock and roll; it's about having a complex digital presence" (Boyd, 2007b).

Nevertheless, the misuse of private data gathered from social networking platform remains an issue. The law scholar Adam Sitze writes that "The fact that military intelligence "collects it all"—aiming at the integrated storage of the totality of Internet communications and activities—marks the terminal crisis of Web 2.0" (2013:online). Sitze discusses the Snowden affair, where in 2013 the American computer professional leaked classified information from the National Security agency to the mainstream media. Sitze writes that

...what Snowden changed wasn't our absolute knowledge, but something different: the character of public opinion regarding the place and function of the Internet in everyday life. After Snowden's disclosures, it's no longer credible to use the lexicon of Web 2.0 without now adding a decisive footnote to each piece of its jargon: *as permanently archived, tracked, and interpreted by military intelligence.* (ibid.)

Criticising the positive potential of de-centralised social networking, Sitze observes that as much as people want to believe in the openness, transparency and participatory properties of Web 2.0, the revelations of Edward Snowden require the opposite conclusion. Therefore, according to Sitze, Web 2.0 is the exact opposite of the digital commons, where "the non-exclusive online sharing that takes place on the "commons" is monitored by a military agency that does not itself share information and knowledge online, and to which only spies have full access (ibid.).

Daniel McFadden, the winner of the Nobel Prize in Economics in 2000, argues that the digital commons will follow the same path as that of Hardin's town commons (1968)⁵⁷. In an article entitled *The Tragedy of the Commons*, McFadden writes that "the commons that is likely to have the greatest impact on our lives in the new century is the digital commons" (2001: online). He notes that the digital commons have the same issues as those of town or park commons, i.e. being used

57 I discuss Hardin's concept of the tragedy of the commons (1968) earlier in this chapter, where he notes that the commons will always be overused by people and that they are fated to be destroyed by overuse.

by too many visitors. He argues that “information is costly to generate and organize, but its value to individual consumers is too dispersed” (ibid.) and that it is provided in an inadequate and disorganised manner. This, according to McFadden, results in the Internet overflowing with low quality information. In order to resolve these issues McFadden calls for “management of the digital commons”.

Issues of control and surveillance of digital information became particularly pertinent following the WikiLeaks affair where Julian Assange, an Australian Internet activist, and his associates established the WikiLeaks website (2007). The goal of the site was "to bring important news and information to the public. We provide an innovative, secure and anonymous way for sources to leak information to our journalists" (wikileaks.org). One of their most important aims was to publish original source materials and make them available to readers and historians around the world. The initial aim of the WikiLeaks platform was to “...look very much like Wikipedia. Anybody can post to it, anybody can edit it...Leakers can post documents anonymously and untraceably” (ibid.). The founders hoped for an open discussion and collaborative publications where people could read and write articles on leaks and reveal the political relevance of various documents. The WikiLeaks affair became particularly intense when in 2010 the organisation released nearly 80,000 documents about the war in Afghanistan and hundreds of diplomatic cables from US embassies around the world (Hood, 2011). Pointing out issues of data collection and loss of privacy, the New York based writer Blake Eskin notes that

Today, massive amounts of data can be collected, stored, and mined. We still harbor the illusion that many of our conversations are private or ephemeral, but the company that now owns my very first ISP could have fifteen years of my e-mail on its servers; my instant messages are all logged; my voice-mail messages are now audio files that can be forwarded and archived; my photographs and even my word-processing documents are moving into the cloud. (2010:online)

Similarly, the entrepreneurial legal studies scholar Yochai Benkler (2011) makes a case for the WikiLeaks affair as an event that embodies the struggle of the Internet as a platform for free distribution of information versus major corporations

such as Apple, Amazon, eBay, Mastercard which used their online resources to support the government and act against WikiLeaks. Benkler notes that harsh treatment of WikiLeaks contributors by the U.S. Government is a threat to the free press. He quotes a Pentagon Report, which discussed the organisational structure of the WikiLeaks platform as dangerous, because

Anyone can post information to the Wikileaks.org Web site, and there is no editorial review or oversight to verify the accuracy of any information posted to the Web site. Persons accessing the Web site can form their own opinions regarding the accuracy of the information posted, and they are allowed to post comments. (Pentagon Report, *supra* note 18, at 2, quoted by Benker, 2011:online)

The media and communications professor Dwayne Winseck discusses Wikileaks and the emergence of next generation Internet controls, noting that there are three intertwined tendencies that are leading to a more controlled and regulable Internet.

First, the concentration of ownership and control over critical internet resources is increasing: incumbent cable and telecom firms dominate internet access, while a few internet giants do the same with respect to search (Google), social media platforms (Facebook, Twitter), over-the-top services (Apple, Netflix), webhosting and data storage sites (Amazon) and payment services (Visa, Master Card, Paypal), among others. (2012:online)

Winsek notes that more concentrated media are more easily regulable than many users who are operating in a more heterogeneous environment. The second tendency described by Winsek is to cut off users who repeatedly run afoul of copyright laws and he gives examples using court cases initiated by the entertainment industry in Australia, UK, NZ, US, Taiwan, South Korea and France. The third tendency driving the shift to a more controlled and regulable Internet is the one that integrates the Internet into national security and military doctrines, with thirty or so countries doing this, most notably the US, Russia and China. Winsek quotes the U.S. Department of Defence which defines cyberspace as the fifth frontier of warfare, after land, sea, air and space (*ibid.*). According to Winsek, such trends are intensifying and they are

...already bending the relatively open internet, with its decentralized architecture pushing control to the ends of the network and into users' hands, into a more closed and controlled model. Such trends are not new, but they are becoming more intense and firmly entrenched in authoritarian countries and liberal capitalist democracies alike. (ibid.)

This analysis points out that such tendencies are the exact opposite of what Web 2.0 and the Internet were intended to be when envisaged by its creators⁵⁸. To some extent such trends obstruct the current evolution of the Web and drive it back to its initial stages of Web 1.0.

The Social Media Theorist Nathan Jurgenson (2010) discusses Web 1.0 as a top-down system, where creators were not able to accommodate changes and input from users submitted directly through the browser. Jurgenson points out that

While the Internet today is increasingly a place where users are able to produce content, it was not always this way. Web 1.0 was an attempt to reposition online traditional business and organizational models. ...In contrast to Web 1.0, which is defined as being largely centrally conceived and controlled, Web 2.0 accords far less power to the creators of these systems and much more to their users; Web 2.0 sites, or at least the material on them, are, to a large extent, user-generated. In addition to the Web 1.0 experience of reading, browsing, and consuming online content, Web 2.0 also allows for writing and producing this content. It also permits the greatly increased ability to network with others in a very social sense. (Jurgenson, 2010:162)

According to Jurgenson (2010), ambitious venture capitalists sought control over many Internet technologies and thus Web 1.0 lost many of its libertarian ideas as corporations begun to create Internet products and limited the ways in which individuals could use them. Jurgenson argues that there has been an explosion of user-generated content, which created a virtual world of general abundance. According to him, social networking sites are changing the relations of production and consumption online, and consequently

...of prosumption and the prosumer (briefly, prosumption involves both production and consumption rather than focusing on either one or the

58 Here I refer to Tim Berners-Lee who envisaged the Internet as a common information space in which people communicate and share information freely (Berners-Lee, 1998: online). See Section One of this chapter.

other)... there has been an explosion of user-generated content, creating a virtual world of general abundance. We maintain that efficiency thinking — getting the most output from a given input or using the least input to generate a given output — only makes sense to the degree that scarcity exists. (Jurgenson, 2009:online).

According to Jurgenson, Web 2.0 is an abundant system that requires a post-scarcity focus on effectiveness rather than efficiency. The example is given of Wikipedia, where many authors input information into an entry that is never finished, thus making it inefficient in terms of content production. At the same time, Jurgenson acknowledges that this can be an effective way of building a source of knowledge (ibid.).

A platform of “prosumption”, according to Jurgenson, is Facebook, whose profit model is built upon the ownership of its users’ labour. Thus, he summarises that:

...prosumption generally, and especially on Web 2.0, is the mechanism by which we become unpaid workers (“crowd sourcing”), producing valuable information for the benefit of businesses. This is the almost endlessly efficient business model of Web 2.0 capitalism. (ibid.)

Jurgenson poses important questions in relation to the ownership of data which is shared online on such digital platforms.

Given the successes of non-profit/open source software and applications (e.g., Linux, Firefox, etc.), shouldn’t we be calling for a non-profit/open source social networking platform (i.e., an open source Facebook-like platform) where businesses do not own the highly personal data about ourselves and our socializing? (ibid.)

At the same time, Jurgenson argues that there are positive aspects of interaction via social networking sites in that they actually increase offline interaction. He refers to the popular network society theorist Manuel Castel, who notes that

Nobody who is on social networks everyday (and this is true for some 700 million of the 1,200 million social network users) is still the same person. It’s an online/offline interaction, not an esoteric virtual world. (Castel, cited in Jurgenson, 2011: online)

Jurgenson proposes an alternative view that explains our reality as both technological and organic, i.e. being both digital and physical at the same time. In contrast to the views of authors such as Sherry Turkle (2011), Andrew Keen (2007) and Jaron Lanier (2010)⁵⁹, Jurgenson argues that the virtual and the physical are closely related. Instead, he coins the term *digital dualism* which describes the belief that the online and the offline are separate and distinct realities (2011:online).

...some have a bias to see the digital and the physical as separate; what I am calling digital dualism. Digital dualists believe that the digital world is “virtual” and the physical world “real.” This bias motivates many of the critiques of sites like Facebook and the rest of the social web and I fundamentally think this digital dualism is a fallacy. Instead, I want to argue that the digital and physical are increasingly meshed...(Jurgenson, 2011: online)

In a blog post from 2009, entitled *Towards Theorizing An Augmented Reality*, Jurgenson argues that “digital and material realities dialectically co-construct each other.” The author offers the term *augmented reality*, where the digital and physical are increasingly interconnected, as an opposing perspective to that of digital dualism. He outlines four categories:

- a) Strong digital dualism: the digital and the physical are different worlds, have different properties, and do not interact.
- b) Mild digital dualism: the digital and physical are different worlds, have different properties, and do interact.
- c) Mild augmented reality: The digital and physical are part of one reality, have different properties, and interact.
- d) Strong augmented reality: The digital and physical are part of one reality and have the same properties. (Jurgenson, 2012:online)

Jurgenson notes that strong digital dualism and strong augmented reality are purely theoretical concepts. At the same time he admits that “sometimes mild dualism and mild augmentation look very similar” (ibid.).

The big difference here is the basic dualist presupposition that one goes “on” and “off” line in some zero-sum fashion. ...the augmented perspective rejects this unfortunate spatial vocabulary we’ve created and

59 These authors argue that technology (and social media in particular) have a negative influence on society as it prevents people from interacting face-to-face.

understands materiality as always interpenetrated by information of all varieties, of which 'digital' is only one. (ibid.)

The technology writer Nicolas Carr explores the term digital dualism in a blog article entitled *Digital Dualism Denialism* (Carr, 2013:online). He notes that the observation that "our reality is both technological and organic, both digital and physical" (Jurgenson, 2011:online) is banal.

It is the "meshing" of the offline and the online, the physical and the digital, that is the fundamental subject and the fundamental concern of pretty much every critical examination of the Net...If the two states actually existed in isolation, most of the criticism of digital media would be rendered irrelevant. (Carr, 2013:online)

Carr explains that the online and offline are not isolated, that they shape us in ways that can be differentiated and this

....should be a spur to thinking more deeply about people's actual experience of the online and the offline and, equally important, how they sense that experience. What's lost? What's gained? An augmentation, it's worth remembering, is both part of and separate from that which it is added to. (ibid.)

Thus, the author concludes that digital dualism denialism actually prevents opening new frontiers of critical thought as "to deny the separateness is as wrongheaded as to deny the togetherness" (ibid.).

Earlier in this chapter I engaged with the concept of crowdsourcing as an activity based on togetherness. In crowdsourcing a large number of people share their knowledge and create a product, service or answer specific questions (Howe, 2006). Crowdsourcing works on the basis of peer production and often websites based on this concept offer crowd voting where the judgement of individual users is used to organise large quantities of information.

Daren C. Brabham (2013) describes a series of issues relating to crowdsourcing, with contributors being described as amateurs who are crowding out professionals. He refers to research that describes contributors as overly enthusiastic and uninformed. Brabham acknowledges that crowdsourcing blurs the boundaries between professionalism and amateurism and notes that issues of

copyright and intellectual property are frequent concerns (2013:74). In addition, he points towards ethical issues, noting that crowdsourcing is "an easy path to fast, cheap, high quality labour... {and} crowdsourcing organisations benefit from the work of crowds without offering the kinds of monetary rewards that are the norm in traditional work arrangements" (2013:85). Similarly, the software engineer and writer Joel Spolsky argues that question-and-answer web portals, as well as search engines, are sometimes failing to provide high-quality and reliable information due to the over-populated data environment. Spolsky notes that there are certain reasons why search engines are failing with various queries, such as multiple answers to a specific question or answers which are actually wrong distributed across the web (2009:online).

It needs to be acknowledged that crowds offer their services voluntarily and crowdsourcing is not always an efficient model for gathering information or providing relevant advice or quality services. A number of web platforms employ a similar model for providing information and these so-called stack-type websites base their structure on support from communities of experts as well as non-professionals. Building reputation within the community is the motivation behind contributing to these platforms and they focus on participation (Halavais, Kwon & Havener, 2014). Such websites focus on "learner's networked participation: who they talk to, how often they interact, group project membership, and shared discussion content" and their structure is based on building social influence, network exposure (ibid.:online).

4.8 Summary

This chapter was concerned with exploring Web 2.0, its principles of organisation, structure and tools. Some of the questions addressed related to the links between creativity, innovation and technology. In the light of this research I discussed creativity supported by sharing, because, as shown in Chapter Five, the field which I call Public Art 2.0 is shaped by this concept. Issues relating to Web 2.0

such as loss of privacy, privatisation of the online public space and the implications of crowdsourcing were also discussed.

Despite much debate on the contrasting characteristics of the social web, it could be argued that its 2.0 version is a platform which encourages multiple collaborators, compared to the top down structure of Web 1.0. During the early days of the Web, the code of web pages was proprietary, whereas the Web 2.0 platform offers an open source development model which makes it possible for code to be re-appropriated, re-used and re-created. Through this process the power of accumulated knowledge feeds into the process of creativity supported by Web 2.0. Web 2.0 is a space for information, which exists through the Internet. The main property of Web 2.0 is that this information is created by the people who participate in the system. Compared to the early versions of the Internet, which consisted of websites built by a small number of people that could be read, but not amended by their visitors, the platform of Web 2.0 provides the opportunity for anyone to build upon it.

Howard Rheingold calls such technologies *cooperation-enhancing*, as they challenge the creative thinking by establishing social process based on sharing and cooperation, thus amplifying collective action (2012:20). The principles of participation and co-creation embedded in the platform of Web 2.0 could be seen as a valuable means for encouraging creativity and engagement in the public space. Referring to David Gauntlett who discusses the connection between creativity and Web 2.0, the value of Web 2.0 is in providing a platform for sharing and creating through sharing with others:

Everyday creativity refers to the process which brings together at least one active human mind, and the material or digital world, in the activity of making something which is novel in that context, and is a process which evokes a feeling of joy. (2011:76)

An antidote to Guy Debord's *Society of the Spectacle*⁶⁰, the read-write environment of Web 2.0 could be seen to provide the skeleton of a space for collaboration. David Gauntlett (2013) talks about the "spirit of the maker" as an individual who wants to express and communicate what is theirs and share it with the world.

If the public space can be seen as a representation of the society which constructed it, then the space of Web 2.0 could be considered to be a virtual representation of publicness. In this way, the notion of the public sphere, as a free space where all citizens are equal and they can come together in sharing information and debate (Habermas, 1996), could be seen as being realised in the platform of Web 2.0. The focus on the next chapter is to explore the effects of this digital environment on the practice of public art.

60 *The Society of the Spectacle* (1967) is a book by the French philosopher Guy Debord. He writes the spectacle is not a collection of images, rather, it is a social relationship between people that is mediated by images.

Chapter Five

Shaping the Field: Case Studies

5.1 Introduction

In this chapter, I focus on examining how the virtual platform of Web 2.0 contributes to the creation of public art in the physical space through the investigation of two case studies: the Big Art Mob (2006) and the Bubble Project (2002). This chapter brings the two main areas of my research, public art and Web 2.0, together. Through the examination of the case studies, this chapter offers my original contribution to knowledge presented through my argument that Web 2.0 prompts us to re-consider the ways in which public art is produced and that through Web 2.0 a different set of criteria and methods can be established in order to re-examine the practice of public art. I call the space where public art and Web 2.0 intersect and where public art borrows from the philosophy, tools and lessons from Web 2.0 Public Art 2.0.

In a chapter of the book *The Practice of Public Art* (2008), Suzanne Lacy revisits the term “new genre public art”:

When the term *new genre public art* was first coined, it seemed to capture the profession’s imagination. Other terms are also now in common usage, many used interchangeably: dialogic art, civic art, community-based art, engaged art, relational aesthetics, and art as community development... What was, in the early 1990, a network based on friendships, similar values, and a knowledge of each other’s practice, can today more plausibly be called a “field”, or at least intersecting forms of practice (Lacy, in Cartiere and Willis, 2008:19).

Lacy also notes that artists now engage with projects that are specific, local, and immediate and that “combine global scope and digital communication” (ibid.). In relation to Suzanne Lacy’s re-examination of the term “new genre public art” as intersecting forms of practice which lay the foundation for connections and networks between disciplines, artists, audiences, I examine how Web 2.0 has intersected with the practice of art in the public realm.

In Chapter Two I discussed an alternative understanding of the meaning of term “site” in public art and its contemporary forms, where it is responding to social conditions, rather than physical ones. I argue that the virtual platform of Web 2.0 extends the interpretation of the term “site” in public art further by facilitating dialogue between those who occupy it, both in the virtual and in the physical space. I argue that Web 2.0 offers an alternative approach to art in the public interest (Kwon, 2004:60) due to the bottom-up approach for public participation that the platform provides.

My choice of these particular case studies is based on a number of criteria: both initiatives, the Big Art Mob and the Bubble Project, rely primarily on the properties of the Web 2.0 platform to be successful. In contrast to other public art projects, which exist on the Internet (as shown in Chapter Four, *Public Art in the Digital Space*), the use of Web 2.0 tools is essential for the Big Art Mob and the Bubble Project. The site of the Big Art Mob uses a customisable platform for sharing content that has been specifically adjusted for the purposes of the initiative. The Bubble Project uses applications that are available as part of the platform of Web 2.0. In both cases the initiatives rely primarily on audience participation using Web 2.0 tools. Both works are based on audience participation that is facilitated by the tools of Web 2.0 — in the case of the Big Art Mob the whole concept of the platform has been developed as a hybrid of media sharing and social networking websites. The Bubble Project continued to exist even after the original author withdrew from the work due to the audience participation facilitated by Web 2.0 tools. In both cases the properties for sharing, discussion, collaboration and group formation exist online, but also occur in the physical space as part of creative initiatives. Via the platform of Web 2.0, the Big Art Mob and the Bubble Project challenge the notion of “publicness” by being open to anyone and by providing the opportunity for anyone to be not only a spectator but also a creator and contributor in the physical space.

To outline the chapter: I begin by presenting the concepts behind each project, together with the organisation of their websites. I discuss how both the Big

Art Mob and the Bubble Project employ the tools of Web 2.0 in order to achieve their goals. I also elaborate on how both works exhibit patterns and characteristics which are typical of Web 2.0. I then present the methodology of the empirical study. At the end, I present the results of the qualitative interviews with participants from both projects.

5.2 Shaping the Field of Public Art 2.0: The Bubble Project and the Big Art Mob

The idea of the Bubble Project was conceived by the New York based artist and designer Ji Lee. It was his original idea to put empty speech bubbles over public advertising posters. The white space of the bubbles was designed to invite anyone to fill them in with comments (Figure 47). According to Ji Lee (2006), the Bubble Project,

...reflects the social atmosphere of the city at the given moment.
...The first one that made an impact on me was from a sticker that I had placed after 9/11 on an ad that showed a skyline of New York City with the World Trade Center in the background. I placed a speech bubble coming from one of the windows of the Towers. I then came back a few hours later to see that someone had written inside of it. (Ji Lee, in Schiller, 2006:online)

After a certain time, the artist photographed the comments and posted them on the project's website, www.thebubbleproject.com. The website also offers the public the opportunity to download their own stickers and place them anywhere they wish. The method for participation as described on the project's website involves downloading a PDF⁶¹ of various sizes of speech bubbles, which can then be printed, cut out following the outline of the bubble and glued onto posters, billboards and printed advertisements in the public space. The manifesto of the project reads:

61 PDF or Portable Document Format created by Adobe Systems in 1992, as a way of representing documents in a digital environment. For more information visit http://www.adobe.com/content/dam/Adobe/en/devnet/acrobat/pdfs/pdf_reference_1-7.pdf

Our communal spaces are being overrun with ads. Train stations, streets and busses now scream one message after another at us. Once considered 'public' these spaces are increasingly being seized by corporations to propagate their messages. We, the public, are both target and victim of this media attack. The Bubble Project instantly transforms these annoying corporate monologues into open public dialogues. They encourage anyone to fill them in with any expression free from censorship. (The Bubble Project Website)



Figure 39. Empty bubbles over a public billboard, the Bubble Project. 2002

The bubbles become a space which people passing by can fill in with their own thoughts and comments, allowing anyone to change from being a passive observer to a creative contributor to their public space. This enables any potential participants to take ownership not only of the work, but also of the public space in which they live. The Bubble Project presents an excellent opportunity to change the message of advertisements and to add something to their public realm. In the words of Ji Lee "...the act of speaking up, people's voice in the public realm is what

counts” (Lee:online). In a talk at the cross-disciplinary conference Behance in 2009, Ji Lee talks about the power of creative endeavours:

Instead of creating a project for myself, and just showing off, creating a project for other people to participate and collaborate instantly gains a sense of scale, and a sense of depth, and a sense of reach (Lee: online).

The project’s popularity has increased since its creation via the Internet and the website now contains a number of groups from across the world, groups which have formed around the original idea. The Bubble Project website relies primarily on information fed from Web 2.0 platforms such as Facebook and Flickr. The main content area of the home page uses an embedded Flickr slideshow of random images. The left-hand side menu consists of the following sections: Manifesto, Pictures, Videos, Post Your Pics and Videos, Download Bubbles and Contact. Below these items is a list of the Bubble Project websites of other countries with an option for new cities to be added (Figure 40).



Figure 40. A screenshot of the Home first page of the Bubble Project website.

This organisation allows the visitors quick access to the different geographical groups forming around the initiative (via Facebook groups based on location), and to Internet groups as part of media sharing platforms such as Flickr (Figures 49 and 50).

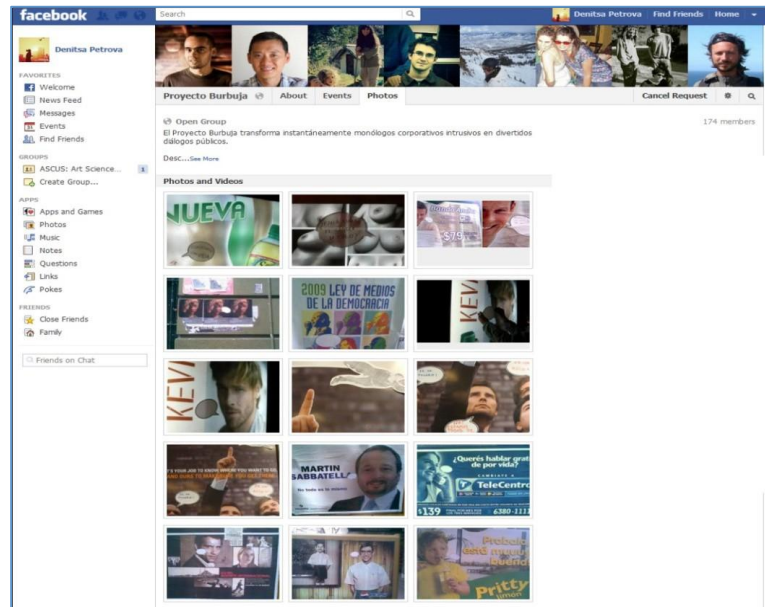


Figure 41. A screenshot of the Facebook page of the Bubble Project Group – Argentina

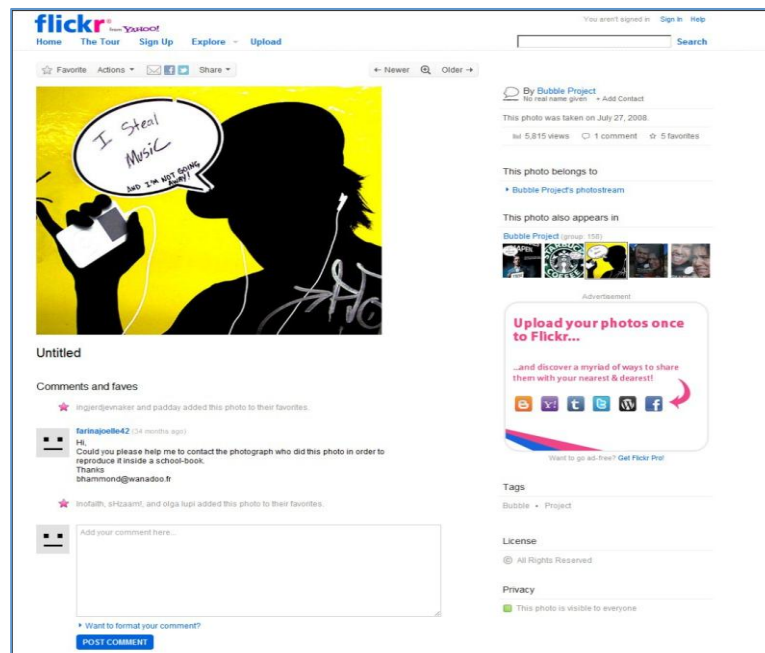


Figure 42. A screenshot of the Bubble Project's photo stream on Flickr

The digital platform of the Big Art Mob⁶² also allows high levels of public participation. Its main goal is to map public art, originally in the UK and now worldwide. The website of the project calls this

The Big Art Mob is a collective effort to create the UK's first comprehensive survey of Public Art. It's based entirely on photos from the camera phones of art-lovers. It aims to record for posterity the wealth of artworks in public places nationwide and serve as the focus of a dynamic national conversation. (The Big Art Mob, online).

By using the word "survey", the initiative is hoping that this will not only be a collection of images of public artworks, but also an investigation into, and an evaluation of, what the general public considers to be a worthy contribution to the process of turning outdoor spaces into valuable places. Moreover, the project aims to create a conversation between members of the public via established online mechanisms for online dialogue, but most of all to get people to connect via the works that they have attached to the virtual map of the UK and other countries. The content available on the platform of the Big Art Mob is licensed under the Creative Commons License⁶³, which allows people to copy, distribute and transmit content.

The website is built on a Moblog, a mobile blogging community platform, which can be customised and configured to support specific project needs. The Moblog platform allows people to contribute content in three different ways: via picture message which can be sent directly to a specified mobile number, via picture message which can be emailed and via a simple web browser form. Big Art Mob contributors can send content (images) using their mobile phones, add tags, search for artworks at specific locations and comment on the submissions of other contributors. The platform allows users to communicate with each other via the works uploaded and via the options for discussing them, which creates a sense of community and ownership of the site. Any registered user can comment on any uploaded image, start a discussion and also create and maintain their own profile,

62 The project was created for the UK Television Channel 4 in 2006 and originally was part of the television show "Big Art Project", which followed artists involved in public art.

63 Creative Commons is a "nonprofit organization that enables the sharing and use of creativity and knowledge through free legal tools...Creative Commons licenses are not an alternative to copyright. They work alongside copyright and enable you to modify your copyright terms to best suit your needs" (<http://creativecommons.org>).

in which they record their location, interests and addresses of related websites. The end result is a growing number of various types of works, mapped on an embedded Google map, together with comments, suggestions and a dedicated section for pieces which people dislike and want removed from their surroundings. The producer of the project, Adam Gee, notes:

People will be taking out their phones and interpreting what constitutes public art in making that decision. In doing so, they are engaging with that work (Gee, 2007, Theguardian.com)

The website of the Big Art Mob would not function successfully as a project without the public's involvement. This key feature provides anyone who has contributed with a sense of ownership over the site. It is also a way of enhancing the public's perception of the physical space via the process which involves members of the public in mapping artworks in streets, public buildings, parks and open spaces. One of the founders of MoblogUK, Alfie Dennen, discusses the element of user participation in the project:

The broad scope of this project shows that mobile blogging is consumer ready. With the market conditions of lowered costs in sending unique content from handsets to the web, and consumers readiness to use the higher end functions on their handsets, this project is a great example of how brands, broadcasters and businesses can use mobile blogging in a meaningful way (Dennen: online).

The Big Art Mob is an example of use of locative media mixed with social networking elements, aiming "to record for posterity the wealth of artworks in public places nationwide and serve as the focus of a dynamic national conversation". (The Big Art Mob, 2010)

Figure 43 represents how the site looks when the Home page is loaded. The presence of a map signifies the main goal of the project - mapping, locating and documenting public art. The site maintains a left-hand side menu containing links to What's New, Explore the Artwork, Community, Login, Sign Up, and Help (Figure 44). The central white panel containing the collection of the images can be closed so that the view of the site is essentially a map as shown in Figure 43.

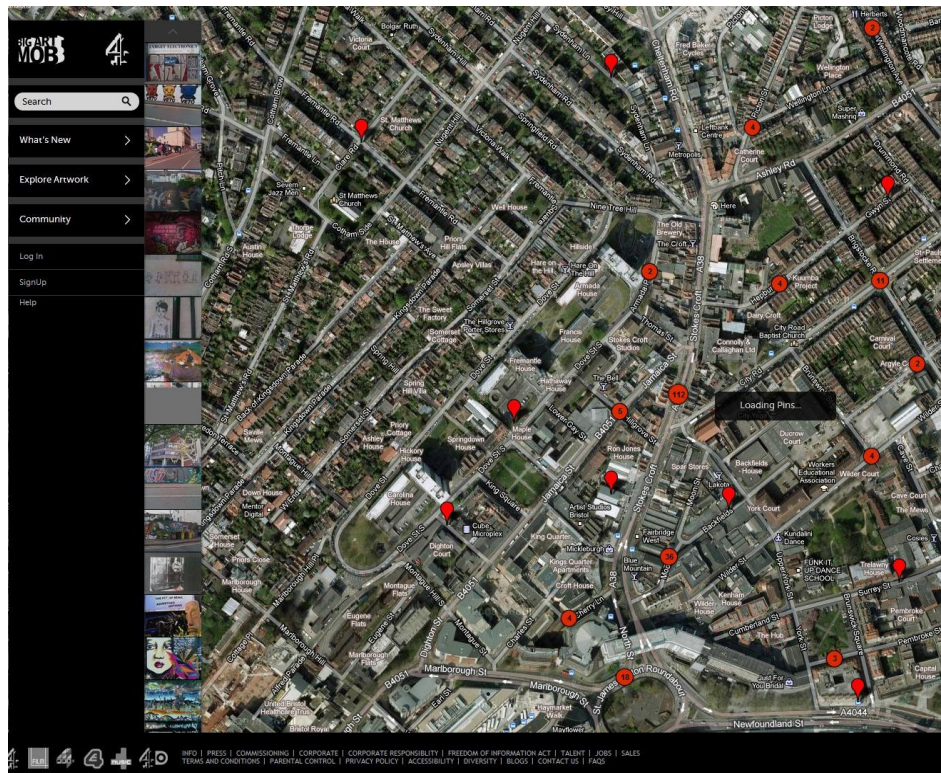


Figure 43. Screenshot of the Home first page of the Big Art Mob website

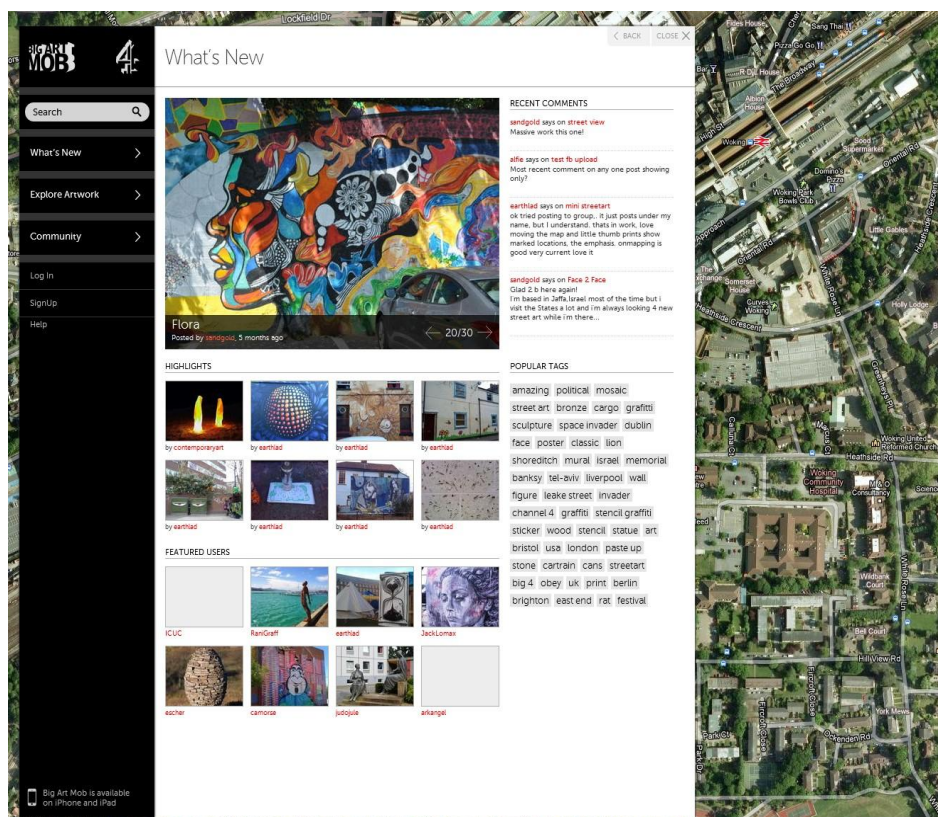


Figure 44. Screenshot of the first section of the left-hand side menu – What's New

On the right-hand side of the What's New section are two key features — one for comments added by members and one for tags added to the artworks. Figure 45 shows how the combination of the mapping software and the custom built online platform of the project provides the option to explore the artworks first, from the list of thumbnails on the site, and second, using the map view though the red pointers embedded in the Google map.

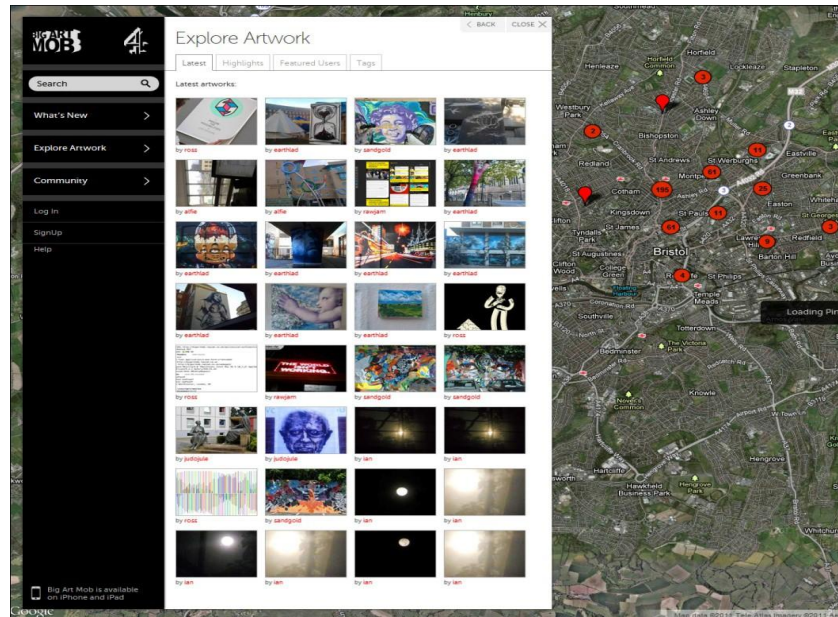


Figure 45. The Big Art Mob website – *Explore Artwork* section

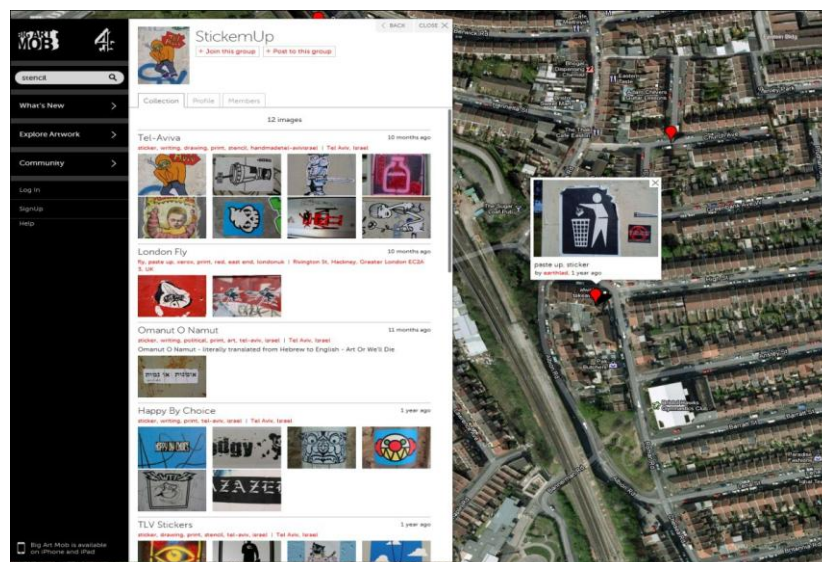


Figure 46. A screenshot of the page of groups formed around types of public art

The site offers options to browse the collection of artworks via various groups created by members of the project. These online groups can be created by members and they are open for anyone to visit, join or leave. The communities are based on the types of work that their members are uploading. As Figure 46 shows, a group called *StickemUp* has formed around street art, which is created using stickers and collages. Whilst the works can be viewed via the thumbnails, they can also be accessed on the basis of geographical location by clicking on the pointers embedded in the map. For instance, a group can be formed around a certain style of photography or music and members of these groups gain reputation by posting high quality material and receiving comments and ratings from other users (Kear, 2011). This particular property is strongly evident in the case of the Big Art Mob where, for instance, online groups are formed in terms of the type of work documented or its location. Through the websites of the projects it becomes evident that communities form online based on specific interests. In the case of the Big Art Mob we observe groups forming around types of public art such as graffiti, murals, art integrated with architecture and art activism. In the Bubble Project, communities are forming based on location through Facebook groups, as well as those based on interest through the photo stream groups of Flickr.

Both works rely on audience participation in the collection and discussion of content — one of the key properties of the Web 2.0 platform, the participation-collaboration pattern, is clearly noticeable here. Within the platform of Web 2.0 the participation-collaboration pattern appears when people with a common interest share information related to that interest and contribute to the creation of a relevant project. For both the Big Art Mob and the Bubble Project, the organisation of their online presence provides an environment where people can share, comment and collaborate in order to create something. But is there evidence that through the two projects such collaborative patterns occur beyond the realms of the Web in the physical space?

The platforms of both sites are decentralised⁶⁴ and self-moderated. Anyone can join, upload work and comment on it, connect with other members and be part of interest-based groups. The decentralisation of power allows the participants of both projects to create and edit content, and thus participate collaboratively in the formation of knowledge. Does the element of democracy, one of the key principles of Web 2.0, extend beyond the realms of the virtual representation of both initiatives? The works are gathered, shared and discussed online, but are there any ideas emerging from the decentralisation of these processes that extend beyond the borders of the digital space?

Both the Big Art Mob and the Bubble Project rely primarily on Web 2.0 tools in order to achieve their goals of mapping, documenting, discussing and creating art in the public realm. The social networking components appear to be based mostly on the interests of the members of the projects in participating in the documentation or creation of art in the public realm. The formation of community in both projects could be classified as Community 2.0, i.e. as virtual communities that utilize Web 2.0 technologies to create and develop contacts (Safko, 2010:24). However, such formations extend beyond the realms of the virtual in the case of the Bubble Project; this is evidence of Web 2.0 technology penetrating the physical space through public art.⁶⁵

In Chapter Two, *Public Art*, I discuss a number of projects that rely on audience participation, similar to the Big Art Mob and the Bubble Project. However, there are subtle but important differences – both the Big Art Mob and the Bubble Project formed around Web 2.0 and its tools that already exist through the Web 2.0 platform. Specifically, in the case of the Bubble Project the work did not really grow until people started forming Facebook groups and posting their images from various locations. The participants embraced the work as theirs through the tools of Web

64 It is important to note that both projects exist through digital platforms that are developed by private organisations. The Bubble Project exists through Facebook and Flickr and the Big Art Mob is supported by the UK television Channel 4. Thus, full de-centralisation is not possible in a sense that these private organisations may cease to exist or discontinue their support.

65 Evidence for this is available later in this chapter in the Summary of Findings and Interpretation.

2.10, as will become clear from the interpretation of the case studies. In the case of the Big Art Mob, participation mainly centred around the collection of public art via the digital platform of the project. The key difference here, compared to the works discussed in Chapter Two, is that Web 2.0 is responsible for the formation of communities based on specific interests online. And furthermore, as becomes evident from the participant interviews, the Big Art Mob initiative is also responsible for creative collaborations occurring in the physical space using public art.

Another extension from the digital to the physical space is offered in the blogging options for each initiative. Davies and Merchant (2009) discuss the blog, reciprocal blog reading and commenting as providing the option – both for the blogger and the commenter – to leave a personal digital footprint. This property is closely associated with the goals of the Big Art Mob as an initiative which makes it possible for the public to leave their mark in the process of documenting and discussing public art online. In the case of the Bubble Project, this footprint is extended to the physical space by the messages that the project spreads.

A reciprocal participation pattern occurs when the participants spreading the empty bubbles in the physical space provide an opportunity for other members of the public to add their messages. This re-affirms the property of the initiative as a type of communication where content, opinion, and conversation cannot be separated (Manovich, 2008) and therefore associates it with blogging in the virtual space.

The blogging tool appears throughout both the Big Art Mob and the Bubble Project as a way of initiating discussion between members of the projects. In the case of the Bubble Project, Gillmor's (2008) notion of "We, the Media" is evident as the project would not be successful without the contributions from the users documenting and uploading public artworks. The new kind of online communication where content, opinion, and conversation cannot be separated (Manovich, 2008) is imperative when establishing discussion relating to an art practice which exists in the public realm, as seen in the Big Art Mob. Similarly, in the case of the Bubble

Project, blogging elements appear when participants are sharing their experience of distributing the work and their opinion of images of the project which have already been presented online. The same blogging pattern is evident in the way in which the Bubble Project is organised as a space which needs to be revisited, but this time in the physical world. First, the bubbles are placed in the public realm and then messages are added to the empty bubbles by members of the public. The reason for repeated visits is not related to viewing the elements of work, but to reading the comments posted by others.

Media sharing and tagging also extend beyond the digital environments of both projects. The Bubble Project provides a number of options for sharing media, images and videos; however, these occur outside the initiative's main website. The image sharing is made available via Flickr; first, a Flickr slideshow is integrated with the site, and second, Flickr presents a photo pool of images, uploaded by the members of the Bubble Project group as part of the platform. In the case of the Big Art Mob, the media sharing tools are embedded in the platform in the form of the facility for members to upload images from a computer or directly from their mobile phones. Compared to the image sharing options of the Bubble Project, what the Big Art Mob offers is limited in terms of options for sharing. It would be beneficial if the platform provides options to download images of different resolutions with associated tags for others to use. Collaborative tagging is widely used in both the Big Art Mob and the Bubble Project, enhancing the process of information sharing not only through images but also via the associated information attached to them.

The method of collaborative tagging occurs in two ways across both initiatives. Firstly, on the Internet, by annotating and categorising image content, and secondly, in the physical space by leaving a personal mark on the street. The latter is particularly evident in the case of the Bubble Project where the empty paper bubbles are an invitation for someone to fill them in. The Bubble Project is a way of media sharing through a critique of public space, but also a call for connectedness through action.

Both the Big Art Mob and the Bubble Project exhibit properties that are closely related to the main characteristics of Web 2.0. Individual authorship is not essential in either initiative, and this signifies a decentralisation of power. Both projects are in a perpetual beta stage, with the potential to grow via the tools of Web 2.0 both online and in the physical space. The perpetual beta stage is one of the key principles of Web 2.0, signifying the openness of the system to anyone who wishes to contribute to its development, as noted by Tim O'Reilly:

Users must be treated as co-developers, in a reflection of open source development practices (even if the software in question is unlikely to be released under an open source license.) The open source dictum, 'release early and release often', in fact has morphed into an even more radical position, 'the perpetual beta', in which the product is developed in the open, with new features slipstreamed in on a monthly, weekly, or even daily basis (O'Reilly, 2005:online).

The Big Art Mob and the Bubble Project are being constantly updated by new members joining the groups online and offline. Thus the participation-collaboration pattern occurs in both initiatives. In the case of the Big Art Mob it occurs online as participants map public artworks in the UK together. In the case of the Bubble Project it occurs in the physical space, where participants collaborate in re-examining the street and its properties. Both the Big Art Mob and the Bubble Project rely on audience participation in order to document, discuss or create art for the public realm. The Bubble Project is an example of how the properties of the Web of Relations are employed in order to achieve high levels of audience engagement.

In Chapter Two I discuss the four stages of art practice as outlined by Mark Hutchinson. He calls the fourth stage of public art "agency", a practice which in a process of self transformation:

The fourth stage of public art, too, is transformative practice, which includes transforming the possibilities of what public art might be. Art would be an art that changes what art is. ...this forth dimension is public art that potentially transforms itself; transforms its publics; allows itself to be

transformed by its publics; and allows these relationships and definitions to be transformed, too. (Hutchinson: online)

What I add to Hutchinson's interpretation is that Web 2.0 is the catalyst for this process (as is evident from the discussion in this chapter). The Big Art Mob and the Bubble Project demonstrate this properly clearly. For example, the Bubble Project reveals how the actual creative process shifts from the hands of the original creator to those of its audience. Furthermore, the work is changed by the audience into something new firstly online and secondly in the physical space. In the words of Hutchinson, "...What art might be, and become, is open ended. In a radically open system, what radical art is, is open to radical transformation in practice" (ibid.).

The Bubble Project and the Big Art Mob extend the possibilities of such practice through the properties of Web 2.0. Through such initiatives we enter the realms of Public Art 2.0. Activist artworks, discussed in Chapter Two, such as those tackling issues in the public space or prompting re-claiming of streets and urban locations, could be further implemented and expanded using through the toolkit of Web 2.0, following the examples of the Big Art Mob and the Bubble Project.

For both the Big Art Mob and the Bubble Project, Web 2.0 is not a technology, but a platform of attitude, whose tools facilitate a socially open process of creation. Such tools, which provide the opportunity for meaningful encounters between people, could be related to the philosophy of the twentieth century thinker Ivan Illich and his tools for conviviality as creative interaction between people and of people and their environment (1973). Illich notes that convivial tools present the opportunity for each of us to enrich our environment, to interact with it creatively and to leave his or her mark (ibid.). Christiane Paul (2006) writes about social software and "artware" as alternative models for media systems and tools that are "not just art" but proposals for the restructuring or critique of existing media systems" (2006:online). Such properties are seen within the tools of Web 2.0 and when applied to creative initiatives involving public space, these tools have more to do with involving the participants in the process of engaging and re-creating the public space. These tools able to shrink the distance between artwork

and audience and facilitate the process of engagement as a “vehicle of relation to the other” (Rendell, 2006:149). Through the Big Art Mob and the Bubble Project, the virtual tools of Web 2.0 are the convivial instruments for re-shaping the physical world through creative initiatives. And most importantly, relationships are established through this process, not only online but in the physical environment. This is how Public Art 2.0 begins to take shape.

5.3 Methodology of Empirical Study

Qualitative research is known as a process of analytical induction from data, leading to the formulation of explanatory hypotheses (Brannen, 1992). Silverman (2011) describes qualitative researchers as using multiple methods in order to collect rich, descriptive and contextually situated data in order to gain an understanding of human experience or relationship within a system or culture. According to Brannen (1992) analytical induction from the qualitative data may lead to the formulation of simple explanatory hypotheses, or, using systematic approaches such as grounded theory, the development of complex theories.

Gerry W. Ryan (2005) notes that defining qualitative research should start with distinguishing between qualitative analysis of data and the analysis of qualitative data. Ryan notes the key qualitative and quantitative distinctions by recognising four different possibilities between data and analysis. First, qualitative analysis of qualitative data relates to interpretative text studies, such as transcriptions from interviews, focusing on identifying key themes, looking for hidden subtexts and using the power of good rhetoric to uncover deeper meanings. Second, qualitative analysis of quantitative data represents searching for meaning in the results of qualitative data, by finding regularities, clustering and interpretations of meaning and significance of statistical tests. The third possibility is quantitative analysis of qualitative data, where words, images, sounds or objects are turned into numbers, in order to produce emerging categories; and the fourth option is statistical and mathematical analysis of numeric data (Ryan, 2005).

In order to choose from the available methods I started with the goals and objectives of my study. My objective was to explore possible connections between public art and Web 2.0 and how they might be related to each other. My aim was to conduct an exploration into a possible phenomenon and test out my interpretations.

Ian Day notes that the code of qualitative analysis lies in describing a phenomenon, classifying it and seeing how our concepts interconnect (Dey, 2003). Corbin and Strauss (2008) talk about the science aspect of qualitative research where validating is used not as testing a hypothesis in a qualitative sense, but as a way of checking out interpretations with participants and against data as the research moves along. Small (2005) points out, there is a distinction between case study logic and sample logic, where case study logic is critical when asking *how* and *why* questions, instead of *how many*. Following this perspective I have combined my interpretations of the relationship between Web 2.0 and public art with related literature and used the data from the interviews.

Marshal and Rossman (1995) identify four methods of qualitative research: participation in the setting; direct observation; document review, and in-depth interviewing. Participation, also known as participant observation, involves engagement in the setting of the study in order for the researcher to “hear, see, and begin to experience reality as participants do” (1995:79). Direct observation involves the noting and recording of behaviours and artefacts in the setting of the study and document review is a way of supplementing the other methods of qualitative research by gathering and analysing documents produced in the course of events in the setting without disturbing it (ibid.:85-86). The interviewing as a method is as described by Kahn and Cannell, “a conversation with a purpose” (1957, cited in Marshal and Rossman, 1995), where the researcher aims to uncover the participant’s perspective on a certain topic.

From the types of qualitative research available, I chose to employ qualitative interviewing. I was looking to encourage a conversation and a discussion rather

than to be a passive observer of the setting. An interview would be possible without direct, face-to-face communication, which would have been difficult to achieve as the participants were spread across various cities in the world. The choice of the interview method provided me with various options for conducting it via digital communication methods such as email, instant messaging, audio or video telephony. I chose to conduct the interviews via email, giving the chance to the contributor to take part in the research in their own time and private setting and limiting one of the weaknesses of the interview as a research method where the participant might be uncomfortable sharing information face-to-face.

Mann and Stewart (2000:18) describe a number of benefits in using computer-mediated communication⁶⁶ to conduct qualitative research, such as: wide geographical access where interviews with contributors who are geographically distant is possible; hard to reach populations where interviews are difficult to arrange on a face-to-face basis due to disability, work settings or health issues; and resistance accounts where participants wish to stay anonymous. In my research, extended access to participants in terms of geographical access was limited, and in a couple of instances the contributors highlighted that they wished to stay anonymous and therefore only written questions sent to an email address of their choice would be acceptable. Mann and Stewart (2000:66) describe two main types of online interviewing – standardized interviews in the form of email and web-based survey; and non-standardized forms of one-to-one interviewing. In structured interviews, also referred as surveys, the participants are asked a set of questions with limited response categories, and the non-standardized forms offer a wider interview continuum and the participants have more opportunities to answer questions on their own terms (2006:75). I chose the non-standardized method as I was looking to gain information which may go beyond the question asked and therefore, I selected more open-ended questions. Since I was looking to make the set of questions as close as possible to a normal conversation I was hoping that the

⁶⁶ Computer mediated communication is defined as the use of computers in a text-based communication process (Mann and Stewart, 2000:2); communication achieved through or with a help of a computer (Tulow et al., 2004: 15); communication that take place between human beings via the instrumentality of computers (Herring, 1996:1).`

participants would provide more than yes or no answers. This was evident in most of the interviews, where I received more information than the question originally posed.

Flick (1998:106) notes that non-standardized interviews have the advantage of offering “purposive topical steering”, which for me was possible during the instant messaging conversation with one of the participants. I was seeking further clarification to the answers given by the interviewee and in some cases asking for elaboration. At the same time, I was able to keep the focus of the interview in the direction which I was interested in and avoid the disadvantage of this particular type of interviewing where the participant may talk about issues which are of most interest to themselves (Flick, 1998). This, however, was only possible in one interview as the rest of the participants wished to communicate via email. Compared to the email interviews, the Skype conversation which I had with the participant provided me with a lot more useful information.

In total, I interviewed twelve participants — six from the Big Art Mob and six from the Bubble Project. Five from the Big Art Mob participants were artists and one described himself as a “collector of street art”. Two of the participants from the Bubble Project were engaged directly with creative activity — one as an artist and one a designer and art director; two described themselves as political activists, and one of them added that he sees himself as a co-creator of a global campaign; one noted that he is a member of the public; and one that he is a student. I approached forty-eight users in total from both the Big Art Mob and the Bubble Project. I then heard back from seventeen people willing to take part. Four of the participants who initially agreed to participate in the interview did not get back to me with answers, and one of them did email me to say that they had changed their mind and would not take part in research. In total I conducted twelve interviews, where eleven were done via email, and one was conducted via instant messaging on Skype as per the preference of the participant. I used what has been described by the anthropologist Setha Low as “snowballing technique”, in which a contributor would refer me to another person who would be appropriate to talk to (Low 1997: 62). Two of the

participants were referrals from other participants who had already agreed to take part in the research. Consent forms were sent to all participants who agreed to be interviewed. Since all interviews were anonymous I gave the contributors numbers instead of using their real names.

According to Marshall and Rossman, data collection and analysis in qualitative studies “go hand in hand to promote the emergence of substantive theory in empirical data” and explain that the guiding hypothesis should be used in order to analyse the information, together with the related literature examined earlier (1995:112). The authors point out that in qualitative investigations, the researcher is guided by initial concepts, but they can be shifted or discarded as the data are collected and analysed (1995). Quoting Schatzman and Strauss (1973) the authors note that qualitative data is exceedingly complex and not easily converted to standard measurable units. Schatzman and Strauss explain that

...Probably the most fundamental operation in the analysis of the collected data is that of discovering *classes* of things, persons and events and the *properties*⁶⁷ which characterise them (1973:pp108-110, quoted in Marshall and Rossman, 1995:112).

Marshall and Rossman define four modes of analytic procedures for data: generating categories, themes and patterns; testing the emergent hypotheses against the data; searching for alternative explanations of the data; and writing the report (1995:113). Using this model I have taken a series of steps to analyse the information which I received from the interviews.

In the interviews, I posed a set of questions that reflected the scope of my research. In particular, I asked the interviewees the following questions:

- ☐ How did you hear about the project?
- ☐ How would you describe it?

⁶⁷ Emphasis in the original quote.

- ☐ Where would you position yourself within the following categories: artist, researcher, architect, designer, member of the general public, other? (The participant could choose more than one category)
- ☐ For how long have you been a member of the project?
- ☐ Are you a registered member of other communities online such as art/creativity related groups within Facebook, Flickr, other?
- ☐ Do you exhibit your own work online, as part of the project website?
- ☐ Do you exhibit your work elsewhere on the Internet?
- ☐ Has your work/art practice/research/interests been influenced from your membership of the project?
- ☐ What do you think makes/would make this project successful?
- ☐ How do you think creativity is manifested through the project?
- ☐ How do you think the project would influence the human perception of the street and the public realm?
- ☐ Do you see yourself as a member of a community since you joined the project?
- ☐ What does an online community mean for you?
- ☐ Have you collaborated or considered collaborating on a project concerning the public realm with another member of project?
- ☐ If yes, what did the collaborative work involve?

Organising the information from my interviews involved categorising the answers into different categories from a few different perspectives. I started by classifying the information in relation to the project it was connected with, writing notes related to each answer looking for similar themes and patterns amongst the information I received. I used the method described by Ian Day as annotating,

where he discusses reading data as akin to “reading” a situation (1993:87), and where reading and annotating are processes which aid the “digestion” of data (1993). Day explains that this process should not be restricted to recognising the meaning of the symbols through which information is conveyed. It should involve integration as a way of relating parts of data to other parts or to the data as a whole; it also encompasses assimilation, which relates the data to previous knowledge; it needs retention and recall — storing the understanding gained through reading in accessible form; and finally the process culminates in communication, or the use made of the reading in producing an explanation (*ibid.*). Day explains annotating as a process involving making notes about the notes and suggests writing memos as first impressions of the data (1993:93). The author notes that memos should be suggestive, experienced as a creative activity, asking questions in relation to the context and meaning of data, whilst at the same time combining it with a more analytical approach looking for the reasons why certain data is shared or what is the most important thing about it (1993:94).

Miles and Huberman review a series of tactics for generating meaning in qualitative analysis (1994:pp245-246; pp.54-56). Amongst them are: noting patterns and themes; seeing plausibility; clustering information; making metaphors, contrasts and comparisons. Whilst reading the interviews from the participants certain words and expressions “jumped out” as being similar to those mentioned by other interviewees, or related to the theoretical context of the study. For instance, one of the participants shared that the Bubble Project is a “net-like” method of anti-advertising, as it has no centre, no leaders and no ideology. I was able to relate this interpretation to some of the key characteristics of Web 2.0, the one of decentralisation of power or as described by O’Reilly “hacker friendly for maximum innovation” (O’Reilly, 2005). This enabled me to interpret the meaning of the words used by the participant further, in relation to the links between public art as critical spatial practices and the attitudes for innovation and creation enhances by Web 2.1. Following a similar direction, I was able to group information based on the principles of connecting words, expressions, and ideas, whilst at the same time

looking for contrasting opinions or information which did not appear to “fit” my argument. I was tagging phrases with words which I selected to represent themes and aspects occurring in the information and was able to group points of view which were related. This process is represented in a table and a mind map⁶⁸ containing a summary of the questions and keywords and phrases from the participants, accompanied by my memos, looking at where the data was useful in illuminating my argument (Marshall and Rossman, 1995). For instance, one of the participants shared that he does not think that it is a coincidence that the explosion in street art practices occurred around the time of Internet broadband becoming widely available. This was immediately highlighted by me as a very revealing statement, closely connected with my argument for the interconnectedness of contemporary forms of public art practice and the rapid development of technology in the recent decades.

Borrowing the methods suggested by Taylor and Bodgan (1984, in Marshall and Rossman 1995) Marshall and Rossman describe five approaches in report writing. First is the descriptive life history, where the author presents a person’s account of their life; the second approach is the presentation of data collected via interviews and participant observation, where the perspectives of the participants are presented and their views form the framework of the report; in the third approach descriptive data is summarised and linked to general theoretical concepts; the forth and the fifth approaches are the most theoretical ones, relating to drawing theoretical conclusions across types of institutions, types of persons and types of circumstances (Marshall and Rossman, 1995:117).

For the scope of this research, I focus on the presentation of data, collected via interviews, where the views of the participants form the framework of the report. I employ the process of data analysis suggested by Marshall and Rossman (1995:127) for data reduction, data display, and drawing conclusions and verifications in narrative form.

68 The table and the mind map are available in Appendix 1.

In order to reach the final stage of report writing I organised my work using the following stages:

- I arranged key phrases from the interviews in a table, separating the Bubble Project and the Big Art Mob results, my notes accompanying the results and the keywords emerging from each interview.
- I then created a separate mind map⁶⁹ with key themes emerging from each project and in order to achieve a further synopsis of data. I merged some of the themes — for instance *online dialogue* and *feedback* became part of one theme; or grouped those that closely relate to one another — for instance *anti-advertising* and *critique of public space*.
- I then split each theme into two categories: the Internet platforms of the Big Art Mob and the Bubble Project.
- I also matched each theme and selected quotes from the interviews to the properties of Web 2.0. On several occasions one quote could relate to more than one theme or one theme led to another. This connectivity prompted me to use the mind map in more detail, as I was able to move elements and represent connections more easily than by using a table where elements are listed one above the other. This type of visual representation allowed me to further interpret the data, the results of which are available in the *Summary of Findings and Interpretation* in this chapter.

I refer to interviewees using codes for both projects - for instance, a participant from the Big Art Mob is called Participant 1BAM, and a participant from the Bubble Project is called Participant 1BP.

⁶⁹ *Summary of the Interview Answers* table and *Mind Map of the Interview Answers* are available in the Appendices.

5.4 Summary of Findings and Interpretation of the Qualitative Interviewing with Participants from the Big Art Mob and the Bubble Project

As part of my investigation, I conducted primary research in the form of qualitative interviews, where I investigated the use of Web 2.0 in relation to public art from the participants' point of view. The results and analysis of these interviews are presented later in this chapter to support my arguments in favour of the correlation between the two disciplines.

This section describes the research findings from the qualitative interviewing of twelve participants in the Big Art Mob and the Bubble Project. The investigation was designed to contribute to my examination of the links between public art and the Internet and more specifically the use of the tools and properties of Web 2.0 in relation to public art. This research was used to gain insight into how participants in these projects view them (Corbin and Strauss, 2008); how the concepts of Web 2.0 may relate to the cases of the Big Art Mob and the Bubble Project (Day, 1993). In asking *how* and *why* (Small, 2005:6-8) I was able to determine how the properties of the Web of Relations connect with the practice of art in the public realm.

A number of key themes emerged through analysis of the data received from the qualitative interviews such as: sharing, co-creation, networking, decentralisation, open source, critique of public space, education and interactivity⁷⁰. I classified each theme in two categories: a) *The Internet Platforms of the Big Art Mob and the Bubble Project*, and b) *Public Art*. A visual representation of this classification is available in the *Summary of the Interview Answers Table* and *Mind Map of the Interview Answers (Appendix 1 and 2)*. Apart from investigating each theme, I looked for possible connections between them within the two categories. This allowed me to consider the Internet and art in the public realm separately, but at the same time to explore the links between the two disciplines through the

⁷⁰ All themes are listed in Appendix 1.

analysis of the results of the participant interviews and my interpretations in relation to the properties of Web 2.0.

The data collected from the interviews suggests that participants in both projects see themselves as members of a global community based around their interest in, or practice of, art in the public realm. They consider the platforms to be a meeting place for public art lovers and a place where artists and art fans can share work and ideas. The representation of public art online is an opportunity for people from locations all over the world to view public art at specific geographical locations via the Internet, an opportunity which is made possible by the options of geo-tagging and media sharing online:

The site opened me up to others who begun sharing their art and the art around them, so as more information became available I became more interested in art. (Participant 2, the Big Art Mob)

Participant 1 (BAM) shares that the Big Art Mob website is a “locus and a meeting place for public art lovers and a place to share photos and that of others”, and a place that brings people with shared interests together. Participant 5 (BAM) sees the project as a gallery, an “interactive place” but also as a forum for sharing ideas. Apart from feeling connected through common interests, sharing personal work with others is also considered a key element of feeling part of a group. A participant in the Bubble Project points out that:

When you share your bubbles online you realise that there is a force behind you and you are all connected with a wave of actions... it is an invisible community, united by action (Participant 6, the Bubble Project).

According to the data, sharing occurs in the public realm in two ways: firstly, through the invitation to dialogue and participation in the work, and secondly, via the act of working together. A participant in the Bubble Project shares that thanks to the work her and her friends re-discovered each other as they “...worked in groups at night, we created our ideas together” (Participant 6, BP). Another participant says that “The project is self-explanatory, adding a bubble is an invitation for someone to fill it in” (Participant 4, BP). This is an indication of

another characteristic of the platforms, highlighted by the participants as a place for dialogue and critical evaluation of the physical space, which I discuss further in this section.

A participant from the Big Art Mob describes the project as a place where members can create groups based on interests, and thus the project can spread outside the UK (Participant 1, BAM). Similarly, another member explains that the initiative is in essence a gallery, but also a public art forum for discussion and sharing information (Participant 5, BAM). A related perspective is articulated by another participant, who describes the Big Art Mob as a “global artistic viewpoint and a smart tool for viewing art on a broad scale, a global community” (Participant 3, BAM). According to Participant 4BP, the Bubble Project is a world-wide initiative, which give back some freedom of speech to consumers.

Participant 3 (BP) shares that the Bubble Project is aiming to empower individuals to “reclaim commercialised public space”. Participant 1 (BP) notes that the project is an “intelligent form of subverting advertising by creating space for the city inhabitants to express themselves freely”. Participant 5 (BP) notes that through the Bubble Project “people are able to transform the place around them”. According to the same participant, “creativity becomes a possibility for anyone”. It becomes evident that the project is not just viewed as a collection of images of artworks, but as a place for initiating dialogue and expressing personal opinion.

It appears that the social networking properties of the Internet connect people not only while they are connected to the network, but also “offline”, in the physical space via participation in the creation of work. This relates to one of the key characteristics of Web 2.0, its participatory nature. The element of participation is transferred from the virtual to the real space through sharing based on actions via creative practice. Many of the properties of Web 2.0 are a combination of social and technological elements enabling interaction within the network, participation and sharing. For instance, the Software as a Service property is crucial due to its ability to offer opportunities for participation independent from technical devices,

as all possible collaborations actually occur on the network itself. This is reflected in the way collaborations occur as part of the Bubble Project - members of the project shared that they actually connect more closely through discussing and sharing ideas than while they were working on the street. The Bubble Project acts as a platform for facilitating ideas, which is another close link between the project and the social networking elements of the Web. A member of the Big Art Mob suggests that one of the most important properties of the project is that through collective effort the public in all countries received a greater knowledge and understanding of street art (Participant 6, BAM). Another member states that through the Big Art Mob he connected and collaborated with two other members on a project concerning the public realm (Participant 3, BAM).

The participatory nature of both initiatives is expressed through the moments where multiple users take part in adding information, where anyone can contribute and where the project is a constant “work in progress”. This relates to the *constant beta pattern* of Web 2.0, which allows users to interact with the project and contribute to its completion⁷¹. This is clearly shown in the Big Art Mob project, which continues to grow as a database of visual data of public art in the UK and also in the case of the Bubble Project where people from different parts of the world get together and organise themselves, inspired by the original artistic idea. Both projects are not so much technologically as socially open, which is a key property of the “architecture of participation” described by O’Reilly (2004). O’Reilly also discusses Web 2.0 as being “hacker friendly” in order to achieve maximum innovation, referring to hackers as lead users.⁷² In a similar way, the participators of the Bubble Project are hacking the street, looking to change the perception of the public realm by pointing out some of its flaws. A participant in the Bubble Project shares that the work is inviting participation in a public chat and it is “an intervention, breaking the commercial media monologue, curiosity, invention” (Participant 2, BP). This leads to another key theme occurring in the answers of the

71 The key characteristics of Web 2.0 are explained in Chapter Four.

72 For a discussion on hacking and its relationship to innovation and creativity refer to Chapter Four.

participants – the influence over the public space which both projects offer, which I discuss further in this section.

In Chapter Four I discussed the peer-to-peer properties of the Internet as a decentralised way of exchanging information⁷³. The Bubble Project could be seen as a peer-to-peer initiative in the physical space. A direct connection is established through the messages that people write in the empty bubbles and the responses of others. (Figure 47 shows messages written by different people in the same bubble.)

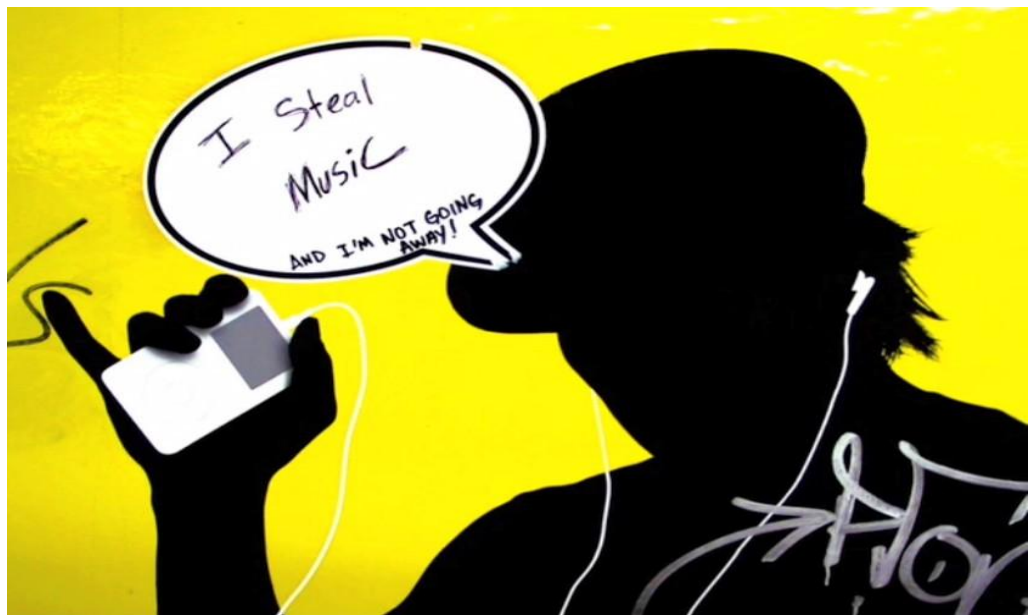


Figure 47. Bubbles over a public billboard, the Bubble Project. 2002

Participants from the Bubble Project share that through the work, creativity becomes a possibility for anyone (Participant 5, BP) and people can creatively contribute to the public space⁷⁴ (Participant 6, BP). A member of the Big Art Mob notes that the project can be seen as providing inspiration for those who visit it (Participant 5, BAM), and another interviewee shared that he already created works for the public realm through collaboration with other members (Participant 3, BAM). Through the social networking and media sharing tools of the Internet the Bubble Project has attracted many members who wish to express themselves

⁷³ Peer-to-peer connection is when people's computers are connected directly for the purposes of exchanging information, instead of using a website that is hosted elsewhere (Oram, 2001).

⁷⁴ I discuss Web 2.0 properties as they relate to shared creativity in Chapter Four.

creatively in the public space, as noted by Participant 1 (BP). Another interviewee, a member of the Bubble Project, shares her experience of taking part in the work by highlighting that her and her group modified the work in their own way:

...we worked in groups at night, dangerous to work individually because of police in St Petersburg. We created our ideas together. We decided to monopolise the message and wrote the comments ourselves. I don't see the sense to connect with the initial project – we have re-invented the work and it has found an autonomous existence (Participant 6, BP).

Another member of the Bubble Project discusses the essence of the work as one opening space for people in the city to express themselves and as a blank canvas inviting anyone to participate and be creative (Participant 1, BP). The options for innovation⁷⁵ are strongly evident in a statement from Participant 6 (BP):

We reinvented the technique of the project. Instead of downloading bubbles from the website we made the templates ourselves and we separated the bubble from the tail, because the position of the human heads on the ads are different.

Participant 6 (BP) continues by discussing the work as a “fractal method of anti advertising with no centre, no leaders, it can reproduce itself to infinity and involve more and more people, it's a virus of imagination and creativity” (Participant 6, BP). A notable point is revealed by the same interviewee, that after her departure from the city where her group worked, the other members continued the project without her. This highlights the decentralised nature of the Bubble Project, which could be seen as carrying its viral properties through the Internet into the physical space. In this sense, the work can be seen to employ the properties of Web 2.0 platforms by being “hacker friendly”⁷⁶ and facilitating further participation in the work by offering low barriers to experimentation and innovation. According to Participant 5 (BP) the project “makes people laugh” and Participant 4 (BP) shares that the project is “simple, open and triggers creativity”.

⁷⁵ I discuss Web 2.0 as a platform and environment for innovation Chapter Four.

⁷⁶ I discuss the term in Chapter Four, in relation to the phone phreakers - the first techno-hackers.

The option for self-moderation which Web 2.0 presents is also closely attached to the properties of the Bubble Project. The author Ji Lee shared in an email⁷⁷ that he is no longer focused on maintaining the work as it continues on its own through the people who get involved in it. The decentralisation of power, where the artist is just an initiator, but the audience continues to develop the artistic idea is another close link between the properties of Web 2.0 and both the case studies examined. Everyone is invited to take part with no restriction on either members of the groups distributing the empty bubbles or the members of the general public who add their messages to them.

Both the Big Art Mob and the Bubble Project recognise the importance of the open source platform, allowing anyone to participate and contribute. Anyone can add comments and modify the map of public art in the UK, and everyone is given the opportunity to succeed or not. It could be said that in the case of the Bubble Project, the success of the work is not measured by the number of clever and subversive texts written in the bubbles spread on the street, but rather in the properties of the work to bring people together, i.e. the architecture of participation originally designed by Ji Lee. The projects could be seen as a network of cooperating services, allowing modification by its participants, where they interact and re-use the information of others to enable the projects to exist and continue to grow. The open platform of the Internet and the opportunities for participation that both initiatives provide has opened up possibilities for interaction in and with the physical space.

The data from the interviews suggests that the participants are aware of the possibilities for influencing changes in public space in relation to public art, which both projects offer. It becomes evident that the initiatives are challenging participation in the processes occurring in the public realm via the opportunities that the projects offer. A member of the Big Art Mob shares that his practice as a street artist has been influenced by the project, as it has revealed to him “how

77 Personal correspondence with Ji Lee, 2010.

global and travelled ones work can be” (Participant 3, BAM). Similarly, another interviewee notes that people would see the street as a place that is alive and an ever changing focus point for sharing ideas (Participant 2, BAM). A member of the Bubble Project explains that:

It’s important to share the photos of the bubbles as a way of showing that you care about public space, as a way of talking back. The project allows interaction and intervention with something which has not seen as interactive before (Participant 2, BP).

A similar opinion is expressed by another interviewee sharing that through the Bubble Project people can participate in the transformation of the public space whilst criticising its saturation with advertisements:

The original message is ‘spoiled’ and brand new message is born. The point is that now people are able to transform the space around them (Participant 5, BP).

Another member shares that the project is an “appropriate answer to the everyday ad attack, bombing the ad by means of mass culture” and that by changing its message re-appropriation of the public space is possible (Participant 6, BP). Participant 2 (BP) notes that it is important to share the photos of the Bubble Project as a “way of showing that you care about public space... [the project] allows interaction and intervention with something which was not sees as interactive before”.

The same participant highlights that “...doing something against the massive corporate media in the public space the idea of talk-back is now embedded in peoples’ imaginary”. This process is summarised by another contributor, who shares that the Bubble Project could be seen as a method of “de-sacredization [sic]” of the street, turning it from a place of “do not” to a place of “do” (Participant 6, BP). The participant talks about “rehumanisation of the street”

... it’s not for government, police or advertisement, it shows that the ad is a dead object attacking our attention, but we can change its message and reappropriate public space. (ibid.)

It became evident that through the process of reclaiming the public space, members of the project that met online have formed groups in the physical space. Participant 6 (BP) shares that

Thanks to the project we re-discovered each other. Once I went back to Paris my friends from St Petersburg continued to work on the project without me. ...Internet is crucial because it multiplies the spectators, you immortalise the instant of your act; by putting the images on the web you participate in a big common project. When you share your bubbles you realise that there is a force behind you and you are all connected with a wave of actions.

She talks about the importance of the “invisible community, united by action and not by ideology” (Participant 6, BP). Communities based on interest that form online can affect the physical space through public art. The same participant shares:

For Russia the Internet is important because it’s the last zone of freedom. The environment is hyper-censored. Once we left an empty bubble on a “social ad” about the police and no one wrote a word - in Russia people have just begun to wake up. (Participant 6, BP).

Similarly, a participant from the Big Art Mob notes that “People would see the street as a place that’s alive and ever-changing focus point for local community to share ideas” (Participant 2, BAM). A member of the Bubble Project (2, BP) notes that “Velocity of sharing is what gives opportunity to meet new people, learn about new art projects, any creative idea that we see unblocks part of our thinking. Community is place for people with shared interests”. Another participant notes that “Online communities are useless unless they are used for stuff in real life” (3, BP). Figure 48 is a demonstration of “real life” action, showing a group of participants in the Bubble Project Group in Incheon, South Korea in 2012.



Figure 48. A Bubble Project Group in Incheon, South Korea. Dubcovsky's Flickr Photostream. 2012

In the discussion with Participant 6 (BP) via Skype, she underlined that for her the Bubble Project is a way of breaking into an environment that is generally perceived as sacred in the sense that it is not meant to be disturbed by those who use it. To her, the Bubble Project was a way to penetrate this understanding of the public space and shift it towards a more participatory and creative place for interaction. These views are an indication that the work has increased the spatial awareness of the people of processes occurring on the street, as another member reveals: “It increased my spatial awareness, I separate advertising from the city now, grown up like that I regarded it as norm before! It makes people re-think who owns the public space bombarded with advertising” (Participant 1, BP).

People who are most critical towards processes on the street are the lead users⁷⁸ of the street. An opinion of a participant in the Bubble Project states that the Internet has enabled the documentation of street art, giving it permanence and that it is not a coincidence that the street art explosion occurred around the time that Internet broadband became widely available (Participant 1, BP). The online documentation of public art, but also the making of art in the physical space has

⁷⁸ O'Reilly refers to hackers as “lead users”, who if allowed to experiment with a system will contribute to its future development (O'Reilly, 2005).

been affected by the evolution of the Internet. The participatory properties of Web 2.1 have contributed to this even further. Through Web 2.0 the Big Art Mob and the Bubble Project have become a bridge between the two spaces – the Internet and the physical space - through the documentation, discussion and production of public art. Both initiatives allow “ordinary people to become co-authors of public reality” (Participant 6, BP).

In spite of its numerous advantages, both projects have limitations which need to be noted. In the case of the Big Art Mob, most of the debate and work happens online, but there was not much evidence of the initiative affecting the physical space through the practice of public art. Nevertheless, the research showed that the project has raised awareness of the public space and also created in-depth connection with the street as it made people more aware of their surroundings. The Bubble Project has undeniably reached a much larger audience by using Facebook and Flickr, instead of the custom-built platform used by the Big Art Mob. However, some of the international groups made on Facebook have disappeared, thus the work documented there is no longer available to view online. Nevertheless, the impact that the Bubble Project made on the street and the connection that it created between its co-authors remains.

The focus of this chapter was to examine how Web 2.0 platforms contribute to the online representation of public art and its creation in the physical space through the investigation of two case studies: The Big Art Mob and the Bubble Project. The examination of the two case studies focused on uncovering the relationship between Web 2.0 and public art. In illuminating the key characteristics of Web 2.0 and the tools of the platform I explored their use in the Big Art Mob and the Bubble Project in relation to the documentation, discussion and production of public art in both physical and virtual spaces.

The Big Art Mob as a platform for the exploration of public art on the Internet and its Web 2.0 tools has provided a place for dialogue and connection between its members via the use of blogging, social networking and media sharing tools. Furthermore, as the qualitative research suggests, the project challenges the

perception of the public space by either facilitating options for collaboration for artists working in the public realm, or by providing an alternative view of the street as a place for interaction between those who occupy it. The Bubble Project could be seen as a viral initiative, shifting from the real to the virtual space via its impact on the street and through the social networking platforms that Web 2.0 offers. Both projects highlight one of the most important functions of contemporary public art, where the passive audience transforms into active participants shifting the meaning of the work from its aesthetic properties towards its effect. These projects could be seen as facilitators of engagement between artists and audience, and as a way of diminishing the distance between the viewer and the creator.

The role of the artist as an initiator or a choreographer as suggested by Jane Rendell⁷⁹, calling for rethinking the world and re-evaluating cultural practices (2001:8) is demonstrated in both initiatives by their engagement with digital technology and its resources in engaging the audience to re-discover and re-create the public realm through participation in creative practice. However, in these cases we see not just one initiator or a choreographer, but a shared effort. Therefore, the tools that Web 2.0 offers should not be seen as the focus of the initiatives, but as ways of facilitating social interaction in the physical space through public art. Supporting the notion of such open-ended creative processes, Miwon Kwon criticises efforts to “democratize” public art. Kwon notes that

. . . salutary efforts are being made to ‘democratize’ art—to engage and enlighten a broader audience, to give voice to marginalized groups thus far excluded or silenced in dominant cultural discourses . . . But in recent years, such efforts have also become formulaic: artist + community + social issue = new (public/critical) art . . . In turn, these ‘communities,’ identified as targets for collaboration in which members will perform as subjects and co-producers for their own appropriation, are often conceived as ready-made and fixed entities rather than multiple and fluid. The result is an artificial categorization of peoples and their reasons for coming together (Kwon quoted in Phillips 1998: 21).

As a result people and their reasons for coming together are artificially categorised (ibid.). As this research has demonstrated, people are coming together purely based

79 See Chapter One, Introduction.

on their shared interests, with no facilitator or leader, but in an open ended and fluid system. The results of these interactions could be summarised into three main categories which are presented below:

1. An open platform for participation and collaboration. As the research revealed, the initiatives of the Big Art Mob and the Bubble Project have facilitated an accessible platform for participation, which transforms the opinion of the public, whilst at the same time transforming the practice of art itself because of its tools. As demonstrated by the viral properties of the Bubble Project, an open-ended, decentralised system has been revealed, where members are free to join or leave at any time, in contrast with the artificial approaches of creation of public art criticised by Hutchinson and Kwon.
2. The practice of facilitating dialogue and discussion in both virtual and physical spaces. As this research has demonstrated, the tools provided by Web 2.0 facilitated new ways of approaching audiences, whilst at the same time opening new possibilities for audience members to interact with each other and with the public space. This property is about facilitating connection via the social networking properties of the Web. At this stage, the artwork is not an object, but a facilitator of dialogue and connectedness. The research has demonstrated that these connections occur both in the physical and in the Internet space through the discussion or practice of public art.
3. A direct effect on the physical space, via virtual means. The intersections between the two disciplines are resulting in effects on the real space. They are seen through creative exploration of the street via virtual means, facilitated by the tools of Web 2.0. As the research shows, effects on the public space range from increased emphasis on critical spatial awareness and re-discovering the meaning of the street to direct influence on, and transformation of, the public space via creative practice.

Chapter Six

Public Art 2.0:

Developing Shared Platforms for Creativity in Public Spaces

6.1. Redefining Public Art

This thesis aims to enrich the understanding of the interpretations of public art in terms of its practice and its discourse within the context of Web 2.0. Chapter Five has highlighted a number of perspectives borrowed from the lessons of Web 2.0, which I offer as methodology and approach towards public art: practice which facilitates an open, de-centralised, platform for participation and collaboration; practice which enables simultaneous dialogue in the virtual and physical public space; practice that enables direct effect within the physical space, via virtual means.

Chapter Two dealt with a number of definitions and interpretations of public art and its various outcomes in the public space. In an attempt to define what is a successful public art project, Harriet Senie asks: Is it good work, according to its type: art, urban design, or community project? Does it improve or energize its site in some way—by providing an aesthetic experience or seating (or both) or prompting conversation and perhaps social awareness? Is there evidence of relevant or appropriate public engagement or use? (Senie, 2003). Cameron Cartiere defines public art as a practice that must fit within at least one of the following categories:

In a place accessible or visible to the public: *in public*; concerned with or affecting the community or individuals: *public interest*; maintained for or used by the community or individuals: public place; paid for by the public: publicly funded (2008:15)

Such definitions focus on the notion of publicness through physical location.

They also imply a possible connection between the practice and community issues, as well as public funding. Patricia Philips' definition proposes that the notion "public" in art is based not on where it is, but what it does (1995: 285), encouraging "the development of active, engaged and participatory citizens" (ibid.:286). Interpretations of the term that signify a shift away from the object of art are seen through Suzanne Lacy's new genre public art, which is "...not only placements or site for art, but about the aesthetic expression of activated value systems" (Lacy, 1995:30).

Whilst welcoming such interpretations it necessary to question whose values are at the heart of this approach. Lacy (1995) notes that the new genre public art focuses on interaction with audiences about issues that are directly relevant to their lives. This clearly represents a step beyond the notion of publicness as location. Interaction implies contact with the audience, communication and establishing a dialogue between artists and their audience. In such scenarios the artist is seen to be the one attempting to support the interest of a specific audience or a community. The discourse on public art should move beyond discussions of physical location or of awakened social awareness. We are now all painfully aware of the history of the *Tilted Arc*, and the pioneering efforts of the Culture in Action program in the 1990s.⁸⁰ What good public art needs is already there – all those who occupy and use the public space. Good public art should provide a framework where creativity can thrive and flourish.

We need to discuss and define public art differently, and move away from the notions connecting it with fine art practice. Public art that exists as a result of policy and carefully administrated procedure belongs to another time – a time when there were different conceptions of public space, different means of distribution, notions of property and distribution of knowledge. Web 2.0 prompts us to reconsider how we share things, how we communicate, how we exchange information and how we build upon each other's knowledge. All the above definitions fail to involve the key ingredient that plays the most important role in a

80 See Chapter Two, where I discuss the history of Richard Serra's *Tilted Arc*.

practice that can be truly public – the creativity of those who occupy and use the public space. Good public art should always start from there.

It is at this point the notion of Public Art 2.0 becomes useful. Through Public Art 2.0 individual authorship has the potential to be organically disintegrated into co-creative practice. And this happens with no public art policies, prescribed agendas and approved outcomes. Public Art 2.0 facilitates a process that is in a constant sustainable stage — where one idea spreads and leads to another. By means of Public Art 2.0 we can reconsider the meaning of publicness as part of a two word equation — *public* and *art*. The case studies referenced show that people, when given an open platform, can organise themselves and build on each others' creativity online and also in the physical space. There is potential for funding bodies to uncover new routes for approaching the way public art is evaluated and funded. Perhaps this would relieve the artists of the heavy burden of finding ways to empower or energise the community and resolve its social issues. Artists who wish to create works for the public space will do their practice regardless of policies and public agendas.

Public art should not be just about establishing a connection between artists and their audience. It is about creating a space for collaboration and organic forms of engagement between the members of the audience themselves. It is about having access to do so. As David Harding suggests “Public art must be a broad inclusive church” (Harding, 1997:16). Comparing good public art to a public library, Harding notes that

Public libraries contain the broadest possible range of books from those for children to contemporary novels, from the classics to the very latest books which attempt to break the bounds of existing knowledge and understanding. Public art must aim to be as representative in its aims (1997:16).

It is a type of practice, which “...potentially transforms itself; transforms its publics; allows itself to be transformed by its publics; and allows these relationships and definitions to be transformed, too.” (Hutchinson, online).

The members of the Bubble Project were able to re-invent and transform work. The project has found an autonomous existence, away from individual authorship, policy guidelines and prescribed agendas. This initiative is just one example of how Public Art 2.0 provides a base for participation and shared creation. It is a decentralised, democratic platform that grows as more and more people use it. It is an idea that turns the public space, using the words of one participant, from a place of “do not” to a “place of do”. It is a representation of the shift from the “sit-back-and-be-told culture”, to the “making-and-doing culture” (Gauntlett, 2011).

The discussion of Public Art 2.0 has also been built around Gauntlett’s ideas on creativity as a process of shared creation. He describes creativity as social glue and as a desire to leave our mark, shape our environment and thus increase our feeling of embeddedness and participation in the world (2011: 223-225). Public Art 2.0 borrows this approach in resolving the issue of publicness. Instead of focusing on physical location or possible connection with the community, Public Art 2.0 provides the opportunity for meaningful encounters between people when engaging creatively with the public space, enriching their environment and leaving their mark in the world. Public Art 2.0 should not be a futuristic or utopian scenario. As this thesis has examined, we are in great need of a new perspective on what the true meaning and realisation of public art should be. As the case studies of the Big Art Mob and the Bubble Project show, we are already observing a new, much needed course that public art should steer towards.

Web 2.0 prompts a reconsideration of public art in terms of process and discourse. The digital platform has become a forum and an arena for people to share, debate and create. Web 2.0 is a public space and a framework that supports creativity through sharing. This has happened without costly commissions or evaluation documents that outline the possible benefits for our society. A consideration of public art through the principles of Web 2.0 is necessary and long overdue. The term Public Art 2.0 that I put forward is designed to indicate that we need a new, enhanced version of the practice.

6.2 Public Art 2.0

Public Art 2.0 is a hybrid type of practice that borrows from the digital world and applies principles of Web 2.0 in the physical space. It is a platform that supports creativity by anyone that wishes to participate in it. It is a creative process that encourages multiple collaborators, where the notion of individual authorship is replaced by the idea of common creation. Projects initiated according to the concept of Public Art 2.0 provide a space for interaction and cooperation between participants, in a bottom-up system with no individual leadership. Public Art 2.0 employs decentralised platforms/systems for decision making. Instead of top-down funding programmes, providing funds to small numbers of artists, a transparent platform for public art funding may be established whereby anyone can access and take part, even by making small contributions.

Such an approach is used in Web 2.0 crowdfunding and crowdsourcing initiatives. In relation to public art such platforms could come under the following categories: the shape of ideas, advice, criticism, financial support, creative proposals or suggestions for improvement of public spaces. In time such small inputs will increase and may take on a life on their own. Such platforms should be for people and shaped by people, through their thoughts, knowledge and ideas. It is about de-centralising the established systems for supporting public art, where the recipients of it are not disconnected from the decision making process. It is about enabling a wide range of people to be involved, instead of a small number of contributors deciding what is best for all. Public Art 2.0 is concerned with building a structure to support such involvement, and as such cannot be a top-down platform. Indeed, the opposite would be the case – decisions should be made by all, involved at all levels through interaction and collaboration. The outcome would be the creation of fertile environments to which anyone can contribute and in which good ideas can thrive. Of course a certain amount of unpredictability is related to such open systems but this is more than compensated for by the tendency of such approaches to encourage public participation and is therefore the first step towards

creating something that is truly public. Both the Big Art Mob and the Bubble Project are examples of how public creativity can be achieved.

As the case study of the Big Art Mob shows, the platform is decentralised and self moderated. Anyone can join to upload work or comment on what has already been shared by others. It is in such environments that the decentralisation of power facilitates the collaborative formation of knowledge. In such platforms, through an open system of discussion, a democratic way of evaluating public art can be seen. By all means, this is not the only system that presents such an option, but it is an example of how the issues of valuing and commissioning public work can be approached. In the case study of the Bubble Project the ideas of decentralisation are evident firstly through the initial concept of the work — anyone is welcome to participate by adding their message in the speech bubbles. Secondly, by using the platforms of Web 2.0, this allows the initiative to spread worldwide for project participants to have the freedom to amend the work themselves. The key here is that there was an environment established for such contributions, a setting providing a basic structure where anyone can observe or actively take part was set in place.

The two case studies represent an open-ended and decentralised system for creation and debate of public art. This is in contrast with the artificial approaches towards the practice, where pre-defined and formulaic working processes are embedded in the evaluation and commissioning of the practice. New genre public art to some extent calls for closer engagement between the artists and their audience. However, what I am addressing here should step beyond these borders and focus on establishing platforms for collaboration and organic engagement between members of the audience themselves.

Borrowing from one of the key characteristics of Web 2.0, *Software as a Service*, where software applications are available through the Internet and not dependent on any device, Public Art 2.0 can easily be updated and enriched with new elements. This was seen in the case of the Bubble Project, where certain

participants altered some of the components of the work to suit their views on how the initiative should be organised. The concept and the key components of the Bubble Project are available through the Web and the original author, Ji Lee, has passed authorship to anyone that wishes to take part. The results of the work are published using Web 2.0 tools — social media sites, blogs and image sharing platforms. This has allowed for various interpretations and alterations to be publicised and shared globally. It represents a move from isolation to interconnectedness, through the framework of the Web enabling multiple participants to share, comment and collaborate. This property is the exact opposite of the one of public art, where a single creator and decision maker are responsible for the work. I examined the results of such initiatives in Chapter Two, discussing the inflexible approaches to public art by commissioning bodies and artists.

In contrast, the openness of projects such the Big Art Mob and the Bubble Project is essential to their success. They are the exact opposite to public art, which is initiated by centralised systems for commissioning and decision making. Public Art 2.0 calls for an open, non-restrictive architecture, with low entry barriers, allowing anyone to extend the project idea and contribute to its future development. Public Art 2.0 is self-regulating, where the power of decision making lies with its participants.

In Chapter Four I noted the complexities of participation as a discourse and I highlighted that such open systems always have the possibility of failure. However, as seen through the case studies discussed in Chapter Five, the benefits of embracing an architecture of participation, instead of using closed and top-down approaches to the creation of public art are numerous. This leads to the other key property of Public Art 2.0, namely the decentralisation of power. This property also allows the project to exist in a constant beta stage. By sharing his idea online, the original author Ji Lee allowed people to interact with his work and develop it further, contributing new features and constantly updating the outcome of the work via photos, videos and thoughts all shared online. The idea of the Bubble

Project was publicised widely in its early stages, expressly to allow the project to grow through participation and collaboration on a global scale. The value of the work is not measured by reports, prescribed agendas and expected outcomes.

Public Art 2.0 can be constantly updated, altered and shifted according to the needs of its participants. Public Art 2.0 is open source, hacker friendly and viral. The viral properties of Public Art 2.0 are twofold. Firstly, such properties appear on the Internet, through the platform and tools of Web 2.0 for sharing and discussion on artworks concerning public space. Secondly, Public Art 2.0 can spread in the physical world using the tools of the Web of Relations, but also through its own properties. As seen in the case of the Bubble Project, the idea spread not only via the Web, but also by word of mouth, through friends sharing their experiences from taking part in the initiative and thus attracting more people to participate.

Chapter Four, discussed some of the experiments performed by the phonephreakers, the first-wave hackers from the 1960s. The experiments, albeit illegal, were designed to stretch the limitations of an already established system, to test its capabilities and to try to improve it. In essence, the Bubble Project is a street hack, and can be considered art activism. The Bubble Project, however, differed in the way the work was structured in terms of options for alteration. The Bubble Project experiments are not officially endorsed as being public art. They relate to the hacker culture and they have their own aesthetic criteria. Compared with projects that are publically funded, such works go in an opposite direction and against the official policies of public art.

The Bubble Project is not a public funds commission, nor do those who participate in it today receive any financial support or gain from it. The work is, however, an open system, that welcomes probing or even disorder from those who are interested in exploring its properties. Such environments recognize that an open process may deliver better results, compared with limited groups of people taking part in a public work. The idea allows for re-distribution and modification and the possibility of failing. No-one can predict how many participants the project will have

nor how they will interact with the project idea. What actually happened is that each participant was able to build freely on the work of the other collaborators. This adds value to the work and underscores another property of Public Art 2.0 – it is designed to absorb hacks and interruptions by its users. It relies on these to improve itself.

Public Art 2.0 focuses on creativity through the process of sharing. Public Art 2.0 uses the “Principle of With” (Leadbeater, 2009) and the lesson of the read-write web, where everyone is a creator and a contributor to the creative process. Such creativity can occur as part of our everyday life, on the street or in the park, where people engage with what is around them. Through the Big Art Mob people connected, opened up and shared online, but it is this process of *digital* conversation that enabled them to view their physical environment differently. The Bubble Project is an example of how elements from our everyday surroundings are actually altered and re-appropriated to be transformed into something different. This process is facilitated through sharing with others via a conversation or in action. The idea of togetherness is embedded in both projects. The process of shared creation is the element that facilitates the bonds between those taking part in the initiatives. The Big Art Mob is not just about the number of works gathered and displayed on the platform. Crucially it is about the people that come together with the view of creating something as a group and making their mark on the world. The Bubble Project is a call to others for action — an empty bubble inviting them to write something in it, a provocation that prompt them to be creative and active.

David Gauntlett (2011) refers to the process of shared creation as “crafting togetherness” and as a “process with power”. He notes that the Internet is the new vehicle for communicating about real-world creative activities, for showing projects and connecting with others. Borrowing from Rozsika Parker, Gauntlett argues that the creative process is really a means to carve out a place for personal thought and self-expression. In the words of Parker, “The processes of creativity — the finding of form for thought — have a transformative impact on the sense of self” (Parker,

cited in Gauntlett, 2011:68). In this sense, the possibilities that Web 2.0 offers in terms of bonding with others whilst expressing your own creative urges are unique.

Compared to the exhausting ways of commissioning and creating art for the public space and art for the public, this approach appears to be superior. Thus, the set of properties and tools of Web 2.0 are those that have mastered the ideas of togetherness, shared creativity and the feeling of community. It is because the discourse around Web 2.0 is participatory. In contrast, the current dialogue on public art is not. Public art remains untroubled by the notion of shared creativity and it continues to exist as a result of policy and procedure. We need a fundamental reconsideration of the practice and the discussion around it in order to open it up and encourage multi-level engagement. Public Art 2.0 provides such a possible resolution through the lessons and toolkit borrowed from the Web 2.0 platform.

Public Art 2.0 uses convivial ways of creating for the public space. In addition to establishing such platforms, new ways of working in the field must be considered. The creative process should be open for anyone who wishes to take part. The old notion of a single creator is replaced with works which allow multiple collaborators. We should be exploring ways in which we can engage in an open-ended process with people who inhabit the public space and the public should have the opportunity to be a part of the process of creation. Only then can we steer away from the pre-defined and prescribed artificial scenarios for public art. If such expectations are pre-defined, then those who take part in the process become players in someone else's game. In such ways, public art can not truly fulfil the notion of being public as it would only use participants to create a pre-defined outcome. The architecture of participation of Web 2.0 is based on providing low barriers for experimentation, where users can "hack" the system and experiment with its capabilities. So fundamentally, Public Art 2.0 is about having access to an open and decentralised system for discussing and creating public art. This is imperative if wider participation is to be enabled.

In Chapter Two, I discuss a number of projects which are not officially endorsed as public art, as they are not commissioned, and do not fall into the traditional category of institutionally recognised creative practice. Nevertheless, they are an expression of the limitation of the systems established to support creativity, not only for a small number of people, but for all. Is it possible to steer towards an approach to public art which places tools to re-shape the world around them in the hands of the viewers previously considered passive? It is meaningful participation that we should be looking for here, which would establish creative intercourse amongst people to interact with their environment in an open and constructive manner (Illich, 1973).

As this research pointed out, convivial tools, providing the opportunity for anyone to enrich their surroundings could be seen in the properties of the Web 2.0 platform. Through the case studies of the Big Art Mob and the Bubble Project, we have observed a scenario where such creative interaction is possible. Such tools provide the opportunity to share ideas rather than protect them. It is the process of constant re-invention and evolution of ideas that is a result of having an environment open to participation.

As seen in the case of the Bubble Project, the original idea of the author and the process by which he approached it drastically changed once multiple participants became involved. Each of them added their mark, shared their opinion and had their own unique input into the work. It has not only transformed the work into something new, but it has resulted in the establishment of a dynamic process which is in constant evolution. Through the convivial processes, supported by the platform of Web 2.0, the case study of the Bubble Project uncovers a type of public art allowing its audience to interfere and transform it, presenting a radically open system of creativity in the public space.

In his book, *Making is Connecting*, David Gauntlett (2011) describes three key principles as core in the architecture of a digital creative platform, using YouTube as an example: a) framework for participation; b) agnostic about content

and c) fostering community⁸¹. The first principle is an invitation for people to participate⁸² by uploading content and without responses to this invitation the platform would be nothing, there would not be anything there. Public Art 2.0 exhibits similar characteristics — in the case of the Bubble Project we observe this through several of the properties of the work. Firstly, the empty speech bubble is an invitation to participate by writing in it. Secondly, the author's decision to publicise the idea online in order for many people to get involved in it is an invitation in itself. Thirdly, the project grew from one city to a global network of participants working and sharing their work online and in the physical demonstrating that the initiative became a framework for participation itself.

The second principle presented by Gauntlett is about the content that users participate with. The author notes that YouTube for example, is entirely agnostic about what contributions are made: "The platform is presented, but the opportunities for innovation in content are left open to the users" (2011:91). This attitude to uncertainty is of benefit to the platform as it keeps the options for uploading an enormous variety of information open. The expectations are low, however, this presents the opportunity for large number of people to contribute to the platform. Public Art 2.0 welcomes this attitude — as the qualitative interviewing research showed, the participants were aware that they have no control over who writes inside the bubbles, nor what is written there. This way of thinking is crucial for Public Art 2.0 as an attitude towards art in public space. In contrast to the artificial approaches in public art commissioning, where the outcome of the project is pre-defined long before the work becomes a reality, Public Art 2.0 offers the idea of an open mindset, where failure is possible.⁸³

81 David Gauntlett discusses these three principles in relation to YouTube, as one of the well established platforms for digital creativity, however these principles can be applied to Web 2.0 in general.

82 I discuss in more detail the notion of participation in relation to public art in Chapter Two and the participatory nature of Web 2.0 in Chapter Four.

83 In Chapter Three I examined the non-restrictive architecture of Web 2.0, where users are allowed to experiment with the platform and thus, contribute to its future development. In the same chapter I also noted that the hacker-friendly culture of the Web 2.0 platform allows innovation and creativity.

The third principle of the digital creative platform of Web 2.0 is described by David Gauntlett (2011) as *fostering community*. Web 2.0 actively encourages users to make comments, give ratings, add friends and send messages. Referring to Henry Jenkins, Gauntlett notes that it is the community of participants that offers strong social incentives to make and share and that users are inspired by “the emotional support of a community eager to see their productions” (Jenkins, cited in Gauntlett, 2011:95). Referring to Yochai Benkler, Jenkins suggests that participation in an online culture “can make their practitioners better “readers” of their own culture and more self-reflective and critical of the culture they occupy” (ibid.). Gauntlett notes, that “Making and sharing activities, online and offline, can be seen as a disorganised (or, rather, lightly self-organized) cloud of creative links which can bind people together” (2011:224). In doing so, human beings need to be able “... to leave their mark on the world, and to give shape and character to the environments that they live in” (ibid.). These are exactly the same properties exhibited through the Bubble Project and the Big Art Mob. Ordinary people, inspired by the support of their community, are making, documenting and discussing public art. Public Art 2.0 fosters motivation for making and sharing.

6.3 Public Art 2.0: A Critical Perspective

The purpose of this section is to raise awareness of some of the possible disadvantages of Public Art 2.0. The basis for this critical approach comes from issues related to Web 2.0, which need to be re-examined in light of the concept of Public Art 2.0.

A number of critical perspectives on Web 2.0 were identified in Chapter Four. Andrew Keen (2007) argues that the platform creates a culture of imitators, rather than original creators, because of the numerous times Internet content is copied, shared and cross-linked. A participant from the Bubble Project shared that sometimes the messages placed in the empty bubbles were irrelevant to the poster

underneath or even vulgar (Participant 6BP). Garret Hardin's concept of the tragedy of the commons (1968) could be a risky one for Public Art 2.0.

However, Public Art 2.0 is about enabling people to take part in the creative process, thus the value of this type of art practice lies more within the "capacity to create – independent of the quality created" (Lessig:online). The same participant (6BP) shared, that their group decided to re-visit the locations of the bubbles and write some of the messages themselves. To a degree, the original idea of the project (to let random people do so) was spoiled. A certain degree of control was exercised over the work in order to ensure quality. Nevertheless, these participants were the same "self-styled commoners" (Bollier, 2008:1) that came together in the physical space because of an idea spread through the platform of Web 2.0.

Art in the age of digital production⁸⁴ challenges the notion of copyright. With works that are digitised, copied and reused online there is not anything physical to reproduce. In a decentralised and open process of creation a certain level of originality of the artistic idea may be lost. In the reappropriation and re-use of content, notions such as authorship and originality may be lost. At the same time, however, the digital concepts of remixing and mashing-up, may be useful in challenging some of the stale traditional approaches towards public art. The "raw material" provided by the commoners (Litman, 1990) may counter-balance the top-down approach in commissioning and creating public "private" art. The Danish artist and writer Le Berthélaine writes:

The digital era is characterised by a momentary and perfect file-copy technique, which challenges the old notion, and in a provocation and inversion hereof *Copyleft* has emerged. The aim of Copyleft is precisely to ensure free flow of the work, both in its original expression as well as any ensuing modified version. ... I say: Copyleft is a beautiful consequence of the ongoing digitalization (2012:75).

The original author of the Bubble Project, the artist Ji Lee, withdrew its authorship from the project and left it to those who wish to use it and amend it. It

⁸⁴ Here I rearticulate Walter Benjamin's theory for *The Work of Art in the Age of Mechanical Reproduction* (1936), where he argues that through the mechanical reproduction of art the originality and authenticity of the work is lost.

was within the initial intention of the project to pass the “tools” to re-create it to others (Ji Lee, 2010:personal correspondence). While this may have been the intention of this particular author, the risk remains that artists who would like to keep the copyright to their work may not be able to do so.

In the era of the prosumer (Jurgenson, 2009), “the growth in user or self-generated content, the rise of the amateur and a culture of DIY will challenge conventional thinking on who exactly does things, who has knowledge, what it means to have élites, status and hierarchy” (Anderson, 2007: 53). Lawrence Lessig supports this kind of amateurism:

I think it is a great thing when amateurs create, even if the thing they create is not as great as what the professional creates. I want my kids to write. But that doesn't mean that I'll stop reading Hemingway and read only what they write (Lessig, 2007).

When it comes to professional public art practice, it may be not about defending amateurism, but about acknowledging the non-professionals in their efforts to create or be part of a creative process in a space that is meant to be public. It is about a hybrid understanding and approach towards public art as a practice that is open to interpretation and change.

A potential risk for public art that uses digital platforms may occur if some of them cease to exist or invoke copyright issues over content that is uploaded, shared and appropriated there. However, any methods and approaches specific to Web 2.0 as a platform for sharing and creativity that are applied to the practice in the physical space would still be beneficial.

In Chapter Four I engaged with the concept of netarchical capitalists (Bauwens, 2010) as a class that controls the participatory platforms of the Internet. An unusual shift of netarchical capital has occurred from the virtual to the physical world through the practice of public art. In a talk from 2009 Le Lee notes that as he was photographing the text in the bubbles he started to notice the words “Yippee ki-yay MF” appearing at a number of locations. (Figures 49 and 50). He eventually realised that this was a marketing campaign for the upcoming movie “Die Hard

4.0”⁸⁵. It appeared that an advertising agency had taken the Bubble Project and turned it into their own tool for promotion in the public space.

The hyperproductive nature of production that netarchical capitalists are interested in as part of Internet peer-to-peer networks has been transferred to the physical space and it has attracted holders of capital. This presents a challenge to any artistic production in the public space and to Public Art 2.0. Any open platform that encourages creative participation in the public space may be exposed to such interference.

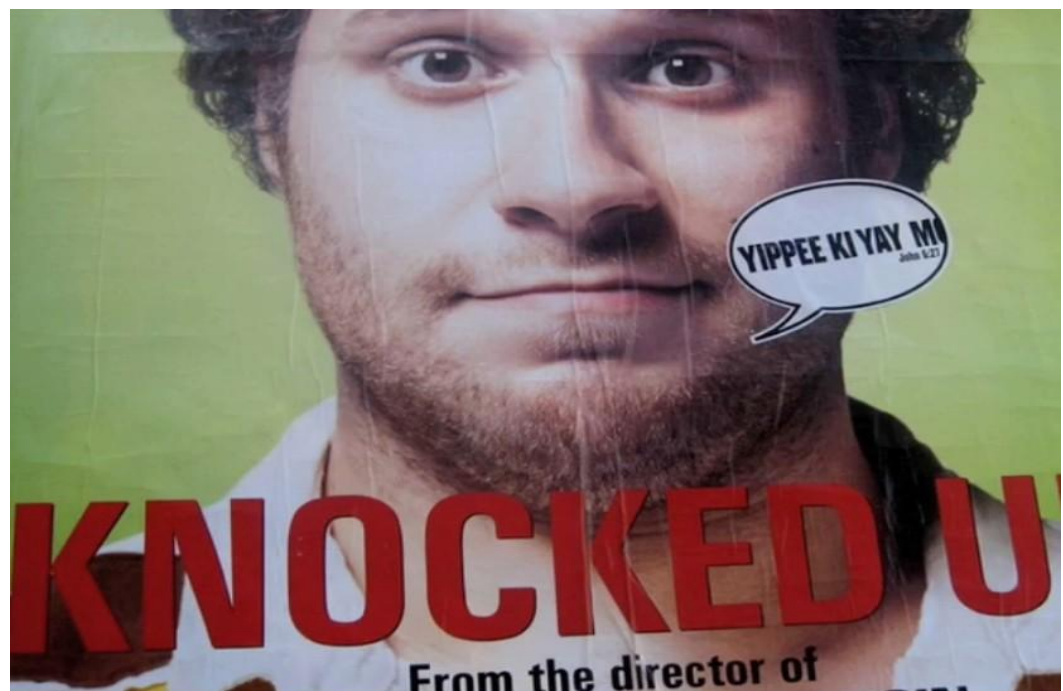


Figure 49. Yippee ki-yay Bubbles over a public billboard. The Transformative Power of Personal Projects, Ji Lee, 2009

⁸⁵ The words “Yippee ki-yay” are part of a popular phrase from the movie sequel “Die Hard 4.0”, which was first pronounced at the first movie “Die Hard” in 1988.



Figure 50. Yippee ki-yay Bubbles over a public billboard. *The Transformative Power of Personal Projects*, Ji Lee, 2009

Another potential issue that may be connected with the participatory web and which concerns public art is the creation of works based entirely online and detached from their public context. This tendency can be seen in a project by Jorge Rodriguez-Gerada, entitled WISH, which is a large land art portrait commissioned by the Ulster Bank Belfast Festival at Queen's for the 2013 Festival (Belfast Festival, 2013). WISH (Figure 51) is a portrait of a girl which is made of 30,000 pegs, 2,000 tonnes of soil and 2,000 tonnes of sand, developed on an 11-acre site in the Titanic Quarter of Belfast (ibid.). According to the Belfast Festival website

... local businesses donated expertise, materials, tools, machinery, staff, soil, sand and stones all free of charge and the land was donated by Titanic Quarter Limited and the Titanic Foundation. The scale and ambition behind this project captured the imagination of the public and media alike during the Festival last October and it was profiled right across the world from America, and Africa to Australia. (ibid.)



Figure 51. WISH, Jorge Rodriguez-Gerada, 2013

WISH can only be seen from space or through images that are available on the Internet and it was promoted and voted as one of the world's top satellite images for 2013 by Digital Globe. (ibid.)

This project could be seen as an example of what Mark Hutchinson (2002) calls bad totality and an art practice that disempowers in the name of empowerment⁸⁶. He explains that such art is conceived with the possibility of developing a relationship with a potential audience and this is observed to a great degree in WISH. The project does not connect with the meaning of public, apart from being built by members of the local community. The project does not belong to the community nor does it say anything significant about it. Furthermore, for the majority of its audience it can only be experienced through Internet platforms even though it is a work that is located in the physical public space. The director of Belfast Festival, Richard Wakely, said that “to present a piece of this quality and magnitude is staggering and provides a unique way to open this year’s Festival” (Belfast Festival website, 2013), which appears to be turning the project into a marketing and branding exercise supporting a public event.

⁸⁶ I discuss this in detail in Chapter Two, Public Art.

It would appear that WISH used crowdsourcing⁸⁷, a Web 2.0 concept, where a large number of people, mostly non-professionals, are involved in producing something together. Despite this approach, the only successful aspect was in building the physical element of the work. It seems, however, not to have worked well in terms of achieving a meaningful connection between the work and its audience. The fact that the work can only be viewed on the Internet and that it uses the principles of peer production does not necessarily make it good public art, nor can it be classified as Public Art 2.0.

It could be said that crowdsourcing was used in expanding the Bubble Project, as the work would have not been so popular if people had not extended it all over the world. Similarly, when Channel 4 initiated the Big Art Project and established the Big Art Mob website they were expecting and promoting the idea that the platform would be populated with content by contributors free of charge. However, the potential of Public Art 2.0 does not lie in the fact that the practice inherits some of the characteristics and, consequently, some of the issues of Web 2.0, but in being a practice that is in a process of constant redevelopment, a continuous beta stage and reinvention by its public.

6.4 Summary

The aim of this chapter was to define and elaborate on the term Public Art 2.0 as a hybrid type of practice that borrows from the ethos and principles of Web 2.0 and applies them to the physical space.

Following the discussion of the case studies of the Bubble Project and the Big Art Mob in Chapter Five, this chapter examined the field of Public Art 2.0 where the convivial tools of Web 2.0 are contributing to the physical environment through creative initiatives. Public Art 2.0 works could be a vehicle of interaction and facilitate dialogue between the project participants. I note that through Public Art

⁸⁷ I discuss this concept in detail in Chapter Four, Web 2.0.

2.0 we can observe increasing spatial awareness and re-discovering the meaning of the street.

In the beginning of this chapter I referred back to definitions of public art, which were examined in detail in Chapter Two. I noted the focus on publicness through physical location (Cartiere, 2008), interpretations of the practice linked with public engagement (Philips, 1995) and the new genre public art, which according to Susanne Lacy focuses on activated value systems (Lacy, 1995).

I argued that despite its numerous interpretations public art rarely provides a framework for creativity, but it is a notion that is connected with fine art practice. I perceive the potential of Web 2.0 in relation to public art as a philosophy and methodology that prompts us to reconsider how we share, communicate and exchange knowledge and ideas. A practice that is truly public focuses on the creativity of those who occupy and use the public space and good public art starts there.

I elaborate on the definition of Public Art 2.0 as one connecting with the fourth stage of public art described by Mark Hutchinson (2002) where the practice allows itself to be transformed by its public and allows its definitions to be transformed by its public. It is a system in perpetual beta stage where changes are welcome at any time. Thus, I note that the term Public Art 2.0 that I put forwards aims to indicate that we need a new, enhanced version of the practice.

In this chapter also provided a critique of Public Art 2.0 raising awareness of some of the possible disadvantages of the practice. Some of the unconstructive trends of the Web 2.0 platform are transferred into the physical space through the practice of public art. A possible risk for Public Art 2.0 may be related to the Hardin's tragedy of the commons (1968) where a project idea could be overused and thus, its original quality may diminish. Another factor that may be risky for Public Art 2.0 is the loss of quality due to its openness for non-professionals. Nevertheless, in the era of the procumer (Jurgenson, 2009) Public Art 2.0 focuses on

acknowledging non-professionals and their efforts to be creative. The definition of Public Art 2.0 emphasises on a hybrid approach towards a practice that is open to interpretation and change and de-centralised systems for support.

Public Art 2.0 is a course which can be followed by avoiding artificial agendas and pre-defined outcomes prescribed by art administrators. The term uses the number 2.0 to indicate a state of constant development and a perpetual beta stage, where changes should be welcome at any time. The phrase Public Art 2.0 is open to interpretation, augmentation and enhancement, just as is the type of practice it is aiming to describe.

Chapter Seven

Conclusion

7.1 Summary

This thesis is about exploring the connections between public art and Web 2.0. It considers the attributes of Web 2.0 as a methodological framework for public art. It offers a reconsideration of the understanding of the contentious issues surrounding the practice using Web 2.0 as a platform of shared creativity.

I argue that Web 2.0 provides alternative ways for making public art, transforming it into an open-ended system of creative interaction in the public space. I call this field *Public Art 2.0*. Public Art 2.0 is a hybrid type of practice that borrows from the digital world and applies the principles of Web 2.0 in the physical space. It exists in the intersection where art practice and Web 2.0 meet. The results of such intersections can be seen in the physical space through creative initiatives concerning that space. They can also be experienced through the Internet via discussions and sharing of public art related information. In both cases, we observe an augmented public practice and discourse.

In the introduction, I present a set of justifications for the research. I provide a critique of public art, outlining a number of the key issues surrounding the practice. I argue that for the most part, public art is actually private art; it has been artificially interpreted as public art practice in order to justify funding and that it has been exhausted through unreasonable expectations. In the introduction to this thesis, I also identify the key research questions which this thesis addresses: What can public art learn from Web 2.0? What are the possible debates that Web 2.0 can provoke in the field of public art? What novel forms of audience engagement could be inspired by the practices of co-creation and sharing integral to Web 2.0? Has the relationship between artists and audience changed because of Web 2.0? In Chapter

One, I also present an outline of the research methods that I employed for this enquiry.

In Chapter Two, I begin with a critique of the art in the public space model (Kwon, 2004), which although considered an approach no longer popular in the creation of public art, seems to be evident in recent public artworks. I provide examples of such projects and discuss possible reasons for why such works are still being made today. The much criticised notion of art placed in the public space with no relation to its physical characteristics nor those who occupy this space, is still evident in works created in the past decade. The model of public art as a decorative element of the public space, representative of the period between the 1960s and 1970s still exists. I see it as being a result of artificially designed approaches in public art policies and strategies. In contrast, artist initiated projects in the public space exist outside of the realm of officially recognised public art in forms of guerrilla art and art activism. The second section of Chapter Two concerns the site of public art. I discuss the interpretations of the term since the 1960s and the controversy surrounding the removal of Serra's *Tilted Arc*. Is it enough to assume that if a work is placed in the public space it will necessarily engage viewers and change their perception of the surrounding space in the way the artist imagined? A possible answer to such issues could be works such as *Urban Oasis* or the body sculptures of Lucy Orta and Michael Rakowitz, where we observe the work as a facilitator of public engagement. In the final segment of Chapter Two, I engage with the third model of public art as defined by Miwon Kwon (2004) – art in the public interest, also known as new genre public art (Lacy, 1995). Investigating a number of projects based on that notion I ask who decided what the public needs and how the role of the artist may change in this process.

Chapter Three deals with the intersections of public art and digital technologies. It examines public art in virtual worlds, public art that exists through browser software and augmented reality public art. I question if the new technologies have given rise to new ways of working in the field. I ask if

technological changes can be responsible for major changes in the art practice bleeding away from the traditional approaches discussed in Chapter Two. I investigate projects in which artists employ the Web to attract audience members not only as passive viewers but also as active participants in the work. Although these projects are not using Web 2.0 tools, they represent a type of public art that is augmented by the Internet. Chapter Three discusses a hybrid public art practice, one that lies between the realms of the digital and the physical world, but does not necessarily extend beyond the traditional models of public art such as *art in public spaces* or *art as public spaces*. Although participation was an important element in these projects, they still rely on a top-down approach to creativity, where the author initiates and controls the work to a great degree and the focus of the artworks appeared to be on technology, but not on people.

Chapter Four concerns Web 2.0, the key principles of the platform and its structure. I discuss how its properties prompt innovation and creativity, supported by the process of sharing. I look into different ways through which technology has been used to connect people – from the story of the phone-phreakers through the Community Memory Project and The WELL to the notion of everyday creativity enabled by the Web 2.0 platform. In the same chapter, I compare the architecture of Web 2.0 and the physical space of public art. I take into consideration the ethos of Web 2.0 as being useful in resolving some of the issues surrounding the gap between artist and audience in public art. This is possible through the way the platform provides convivial tools for artists to engage more closely with their viewers. In turn, the viewers are transformed into active participants in the process of re-imagining and re-creating the public space through art. The virtual tools of Web 2.0 have become tools for the production of creative work in the physical space.

In the same chapter I provide a critique of Web 2.0, focusing on questions such as loss of privacy, privatisation of the online public space and the implications of the crowdsourcing phenomenon. I examine the issues of social networking surveillance and participatory surveillance, where people who contribute to social media are performing surveillance on themselves. In this way they are revealing personal information on websites which can then be viewed and used by corporations and governments. In addition, I explore the notion that Web 2.0 is the opposite of an open, common, digital space, because it is constantly monitored by private organisations. Another aspect relating to Web 2.0 as a common space is the alarming tendency towards restricting the structure of the Internet as an open space and managing the digital commons in order to bring more value to individual consumers.

In Chapter Five, I look at how the platform of Web 2.0 contributes to the representation, discussion and creation of public art through the case studies of the Big Art Mob and the Bubble Project. I present in detail the methods that I engage with in relation to the qualitative research I conducted with participants from the Bubble Project and the Big Art Mob in order to re-affirm the connection between public art and Web 2.0. I illustrate how both projects provide an open platform for participation and collaboration through creative initiatives, establishing an open-ended and de-centralised system of creativity in the public space. I consider Web 2.0 as a platform, which prompts a re-consideration of the understanding of the definitions of public art because of the way it supports creativity through participation and sharing. The connections between creativity and Web 2.0 are particularly relevant to this study from a number of perspectives. Firstly, as becomes apparent, technology, rather than being a focus, is used as a tool to provide meaningful interactions on the street, reduce the distance between artist and audience and provide possibilities for participation in the creative process not only virtually, but in the physical space too. Then, through the groups forming around the social platforms of Web 2.0, the social glue connecting people online is somehow transferred in the physical space, through the properties of the creative

process, in which they engage by participating in public art projects. Most importantly, the enthusiasm for creating and connecting with others doing so on the Internet could be transferred into the physical space, resulting in the latter being re-discovered, re-imagined and re-created.

Chapter Six continues this discussion. I examine the field of Public Art 2.0, where the convivial tools of the online platform of Web 2.0 play an important role in shaping the physical environment through public art. I discuss how the social networking properties of Web 2.0 are transferred to the physical environment through creative initiatives. I note how the artwork becomes a vehicle for interaction and a facilitator of dialogue and connection with others. I show how the field of Public Art 2.0 is responsible for increasing spatial awareness and re-discovering the meaning of the street.

In the same chapter I also provide a critique of Public Art 2.0 with a focus on unconstructive trends and tendencies occurring on the platform of the digital web. It is important that these should be highlighted in the discussion of Public Art 2.0, such tendencies. I consider the concept of netarchical capitalism which appears to have extended into creative practices occurring in the physical space. I also acknowledge issues relating to crowdsourcing and loss of quality due to the involvement of non-professionals and the failure to differentiate between the use of technology in art as a tool for innovation and as a marketing instrument.

As this research revealed, Public Art 2.0 embraces a number of principles of Web 2.0 in being a hybrid practice that borrows from the digital world and applies these principles in the physical space. The practice of public art can benefit from the lessons of Web 2.0 as a platform that supports the creative potential of its contributors. Web 2.0 provokes a number of debates in relation to public art, such as the way the practice is funded, the relationship between artist and audience and the ways in which public art is presented and evaluated.

The de-centralised organisational properties of Web 2.0 can contribute to the way decisions are made in the field of public art where transparent platforms for public art funding can be established. This would contrast with the exhausting ways in which art for the public space is commissioned through top-down systems of art funding and would provide funds to a larger number of art professionals. The focus should be on establishing de-centralised systems for supporting public art, where the beneficiaries will not be disconnected from the decision making process.

Public Art 2.0 focuses on creativity through sharing, which means that the creative process is a collective effort; not due to a prescribed agenda, but due to organic forms of interaction between artists, works and audience. In this sense Web 2.0 has provoked novel forms of engagement where creativity can thrive. The now diminished significance of individual authorship is replaced by open, non-restrictive platforms for participation where anyone can extend a project idea and contribute to its development. In addition, the self-regulating properties of Web 2.0 can be useful in public art projects by allowing participants the power of decision making.

7.2 Limitations of Research

This thesis explores three key areas – public art, Web 2.0 and Public Art 2.0. My investigation into public art could have been approached differently. For example, I could have looked at forms of public art depending on their type: artist-initiated projects; gifts and memorials; community art; art activism or environmental public art.⁸⁸ I decided, however, that I would look at key issues surrounding the practice, instead of categorising its types in a linear fashion. I saw this organisation as more appropriate for this study as the debates on public art appear in any of the above categories. For any further research, it is possible that each one of the types of public art listed could be investigated separately in light of the lessons of Web 2.0.

⁸⁸ A number of books explore these categories – for example *Public Art by the Book*, edited by Barbara Goldstein (2005). The book also deals with funding models, public art planning and maintenance, and legal issues in relation to the practice.

I look at two major case studies and present and interpret the results from the qualitative interviewing of their participants. During the writing up process, I noticed that the number of public art projects that employ digital tools, and particularly those of Web 2.0, is increasing. This presents further opportunities for research in the field of public art and the current thesis could be considered to be opening the debate on the role of Web 2.0 in resolving some of the key issues surrounding the practice.

This thesis did not investigate social media art, although this type of emerging practice relates closely to the platform of Web 2.0. Social media art ranges from artists borrowing content from social media platforms and re-appropriating it in the physical world through large poster-like installations⁸⁹. This type of art was not examined in detail as it can be seen in social networking services designed as art projects, which could also be considered as Net art⁹⁰.

One of the key properties of Web 2.0 is to connect people who share similar interests. However, this thesis does not offer a comprehensive discussion on community formation online and offline. Instead, it focuses on the notion of community through the perspective of shared creativity. Borrowing from the ideas of David Gauntlett (2011), discussing the social meaning of creativity and its relationship with Web 2.0, it centres the discussion around the process of common creation in relation to the public space, rather than on the actor-network theory.⁹¹

This thesis is also not designed to examine the characteristics of blogs, wikis, social networking sites and other Web 2.0 tools in depth, nor does it explore all Web 2.0 tools, also known as Web 2.0 applications, as such material is available elsewhere and the number of these tools is constantly changing. Some useful interpretations can be found in books such as *Web 2.0: Concepts and Applications* (2011) by Gary B. Shelly and Mark Frydenberg, which offers useful definitions of Web 2.0 and its applications in a detailed study into the organisation of digital

⁸⁹ For example, the work of Thomson and Craighead *Tallinn Wall* at <http://thomson-craighead.blogspot.co.uk>.

⁹⁰ I discuss Net art in Chapter One.

⁹¹ See the studies of prominent scholars such as Bruno Latour, Michael Callon and John Law.

information on the platform and the state of online publishing in the Web 2.0 era. Another useful source is *Enterprise Web 2.0* (2009) by Krishna Sankar and Susan Bouchard, which provides a detailed discussion of user-generated content by examining wikis, blogs, and other collaborative technologies, as well as social networking platforms. In his book *Web 2.0: User-Generated Content in Online Communities* (2008), Timo Beck investigates in depth the formation of online communities, the ways in which members participate in such environments and the content generated by their users.

I began this research with the idea of expanding my own practice in the field of public art, and thus initially my perspective was that of an artist. Whilst I am aware that this could have limited my views and interpretations, I also allowed myself to be submerged completely in the idea of Public Art 2.0. I did this though an artistic experiment where I let go of my individualistic artistic urges and came forward into the idea of shared creativity in the public space. I discuss this work in the postscript of this thesis.

7.3 Further Research and Practice

With this research enquiry, I hope to prompt further questions regarding the relationship between artist and viewer in relation to public art. This study could be useful to practitioners working in the field, who are looking to engage further with their audience through their creative practice. It is within the scope of this investigation to contribute to the debate on public art, but within the dynamics of the constantly growing technological development. As the research revealed, there is much to be borrowed and learned from the platform of Web 2.0, both in terms of lessons, but also in terms of tools for engaging with audiences.

The case studies of the Big Art Mob and the Bubble Project are evidence for connectivity and sharing though public art, but also for collecting, storing and archiving artefacts and discussion in the digital space. This presents a possibility for

further research and could be a specific area for future studies on Public Art 2.0.

Our experience of Web 2.0 today extends beyond the digital borders of the computer networks to mobile devices and media gadgets. It is anticipated that a newer version of the Web, Web 3.0, will shrink the boundaries of the virtual and physical world further via personalisation of information, intelligent search and geo-social tools (Bunzel, 2010; Smart 2010). Tim O'Reilly talks about Web 3.0 as a platform looking for new "targets of disruption" (2012:online):

It's kind of a red herring to introduce this idea that it's Web 3.0 or some new version of the web that's driving this innovation," says O'Reilly Media's Tim O'Reilly. "I would say it's more that the web, having disrupted media, is now looking for new targets of disruption and settled on education, which hasn't had a great deal of disruption of innovation in a long time (ibid.).

Jason Calacanis describes Web 3.0 as "the creation of high-quality content and services produced by individuals using Web 2.0 technology as an enabling platform" (Calacanis, 2007: online). For this reason, Web 3.0 is closely associated with another phrase, describing the future of the Internet - the Semantic Web. Feigenbaum et al. describe the term as an enhancement that gives the Web greater utility. He notes that the Semantic Web:

...comes to life when people immersed in a certain field or vocation, whether it be genetic research or hip-hop music, agree on common schemes for representing information they care about. As more groups develop these taxonomies, Semantic Web tools allow them to link their schemes and translate their terms, gradually expanding the number of people and communities whose Web software can understand one another automatically (2007: 90-97).

A worthy observation is made by Nova Spivack (2007), who explains that the Semantic Web is completely independent from how metadata is generated; it is a better way of sharing it in order to make it more extensible and reusable by others. However, Spivack emphasises that the data still comes from people. How can these developments relate to the practice of public art? As this research revealed, this type of art practice has been influenced by the current developments in digital technologies in terms of involving larger audiences, facilitating a process of

interaction between audience members and resulting in a direct influence on the public space. As more technologies come into play in our everyday life, the need for people to interact with them creatively will increase. As a result of this investigation, I am hoping that new forms of creative practices within the field of public art would be tested and explored, where public art does not cope with the onslaught of the virtual world but engages with it further - not by replacing the practice in the physical space but rather complementing it. Fulfilling the notion of Hutchinson's fourth dimension of public art as "an open-ended process, transforming itself through its public"(2002:online), at this stage the question would be no longer whether the Web is affecting the dynamics of public art, but *how* it would shape its practice.

Postscript

My own views of what good public art is have drastically changed since the beginning of this research. From being a person who thought that no matter where art is located the individual artistic authorship is most significant, I now believe that public art really is a space, a process and an experience that should be for and made by all.

At this point I would like to reflect on an experiment of creativity based on the principles of participation and togetherness of Public Art 2.0 through a project called *Wishing Trees* that I did in December 2011 in Sofia, Bulgaria. It was my intention to employ the principles of the Web 2.0 platform but in the public space. I wanted to experiment and use my knowledge and understanding of the principles of Web 2.0 as a platform for interaction, sharing and creativity.

At the time when I received the project commission I was aware that, the brief had limitations in terms of time and cost. I thought that this would be a good opportunity to use the help of others to create the piece. The Sofia Municipality, which allowed the use of the public square where the work was to be installed, had requested that the installation had to relate to the festive period and serve as a decoration. In a panic, my initial thoughts brought me to public sculptures from the 1970s. At that point, I did not know what I would create, but I had no doubt about what the work would *not* be: it would not be something that people could not interact with, experience, play with or amend. Following this line of thought, I arrived at the idea of using Christmas trees decorated with paper balls which people could use to exchange wishes for the New Year.⁹² The trees were decorated with the paper balls and passers-by were invited to pick a fortune whilst at the same time leaving a message for someone else (Figures 51, 52, 53, 54). The message was then made into a paper ball and put back on the tree.

⁹² In Bulgaria it is a seasonal tradition to bake Christmas bread containing fortunes for the New Year.



Figure 52. *Wishing Trees*, Denitsa Petrova. 2011



Figure 53. *Wishing Trees*, Denitsa Petrova. 2011



Figure 54. *Wishing Trees*, Denitsa Petrova. 2011



Figure 55. *Wishing Trees*, Denitsa Petrova. 2011

This work was an attempt to convey my understanding of what good public art should be. The work was responsive to those who were part of it, establishing a reciprocal dialogue between all participants. I did not see myself as a project leader. We were all equal in the wishes that we wrote for the others, and in the joy that we experienced when we opened the paper balls. It is here I saw that reciprocal and organic interaction is perhaps truly possible. This was an attempt to fulfil the notion of making and sharing as a way of being creative.

I was amazed and pleased to see the excitement in people's eyes when they realized that their message was to become a part of something that many people had created. I wanted people to write, to read, to exchange and share – all principles of Web 2.0 – but I wanted all this to happen in the physical space. My intentions were to explore how the artwork could be a platform of sharing and a base for interaction.

For one day only, over two hundred people took part in the work and shared their thoughts with others. I had no control over what was written on the paper used to make the new globes for the trees. The initial messages that I wrote were carefully selected wishes and positive thoughts, but I could not influence what the participants were drawing or writing on the sheets of paper. This uncertainty made me nervous, wondering if people would write something rude, or leave an blank sheet of paper. However, I knew that if I had tried to influence what could be placed on the page, I would disturb the original intention of the participants and perhaps deter them from sharing something special or something out of the ordinary. One of the three principles of digital creativity, as outlined by David Gauntlett came to my mind: "Agnostic about content" (2011:91). I smiled and let go.

It was not my intention to establish a dialogue between myself and the participants, nor between the work and the participants. The goal was that the work was to serve as a platform which would establish a connection between all those who took part. Without them the project would have not been successful. In these properties, I see this work to be communicating the ideas of Web 2.0 as a

platform for sharing and creativity.

My own views as an artist completely changed when I experienced the project as one of its *many* creators. The ethos and philosophy behind Web 2.0 helped me to realise the power of people coming together and sharing the process of creation – this is what Public Art 2.0 is about. It is based on open channels of communication between those who take part in its making and discussion. It is a system, free of artificially prescribed agendas of making and evaluating. Public Art 2.0 is about enabling everyone to be creative as this need emerges. It is open for anyone to join in or leave at any time. It is a shared platform for dialogue and creativity in the public space.

Wishing Trees was an attempt to put into practice some of the lessons that I learned from the process of this research. It was a means for me to let go of my own creative urges and give way to new methods through which I can be creative – with others, through the means of Public Art 2.0.

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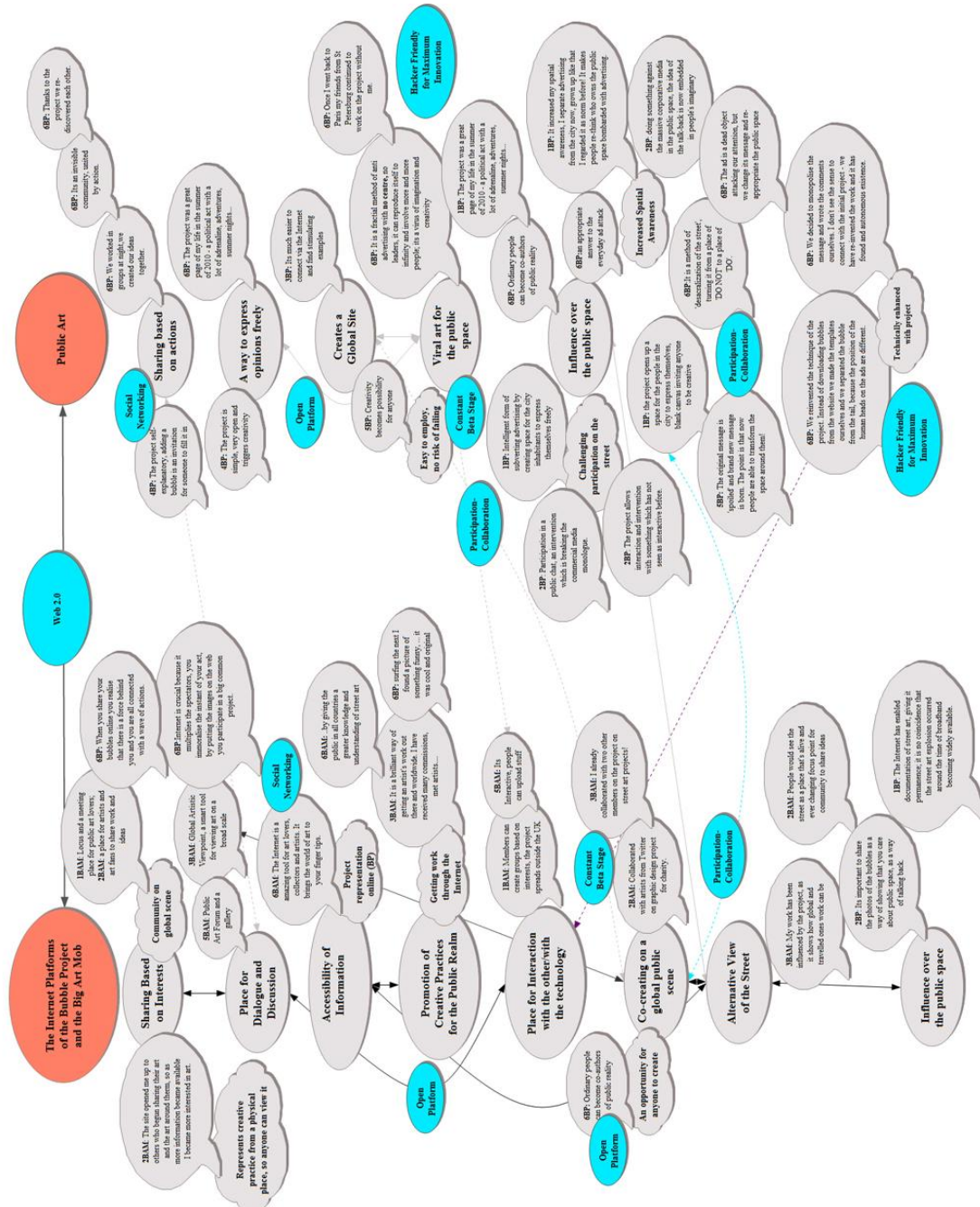
Appendix 1: Summary of Interview Answers Table

Questions	Themes BAM	Notes BAM	The Big Art Mob (BAM)	The Bubble Project(BP)	Notes BP	Themes BP
Referral to the project	Art promotion	Promotion through other type of media	1BAM: On the television via Channel Four	1BP: Through a book on graphic design	work-friend relationship, connection established previously;	Art promotion
	Education	Connection via online friendship	3BAM: Through a friend	2BP: Through a friend	*the person is already interested in activism, found further expression of their interests via the project	Education
	Networking (offline and online)	Connection through offline friendship Friend who is a member	4BAM: Visiting Tate Modern 5BAM: via email 6BAM: through a friend who was a member	4BP: Via doing research on interventionists projects 5BP: through a friend, participating in the project already 6BP: surfing the net, found a picture of something funny – the picture of Starbucks with a bubble and a comment in it, it was cool and original. Great page of my life in the summer of 2010 – a political act with a lot of adrenaline, adventures, summer nights	research is done via the net Promotion through other type of media Random net surf Something <i>funny and original</i> <i>The project has adventurous element</i>	Networking (offline)
Description of the project	Documenting	Area for sharing for artists and art lovers	1BAM: locus and a meeting place for public art lovers, a place to share photos and that of others	1BP: Intelligent form of subverting advertising by creating space for the city inhabitants to express themselves freely	The global site; virtual centre of activity; place for sharing;	Sharing in global scale
	Socialising	Socialising online	2BAM: a place where artists and art fans can share work and ideas	2BP: participation in a public chat, breaking the commercial media monologue, curiosity, intervention	Used the word “chat” – internet term.	Critique of public space
	Online Dialogue	More than sharing, Expressing a viewpoints on a broad scale, a place for discussion	3BAM: global artistic viewpoint, great, smart tool for viewing street art on a broad scale, a global community	3BP: aiming to empower individuals to reclaim commercialised public space	Critique of media	Communication Participation
	Feedback		4BM: artist	4BP: Worldwide project, gives back some freedom of speech to consumers	There is a feeling that this is enforced monologue by the consumerism orientated media, need to talk back.	Reclaiming spaces
	Interactivity	interactive place	5BAM: a public art forum and a gallery	6BP: An appropriate answer to the everyday ad attack. Bombing the ad by means of mass culture; fractal method of anti-advertisement with no centre, no leaders, it can reproduce itself to infinity and involve more and more people; virus of imagination and creativity	Intervention	Decentralisation
		Global community	6BAM: a site for sharing photos of street art, it has a map function		Talk Back, freedom of expression	Anti-advertising No Individual Authorship

Category			<p>1BAM: Collector of street art, documentary film maker</p> <p>2BAM: artist and member of the public</p> <p>3BAM: Artist, Designer</p> <p>4BAM: artist</p> <p>5BAM: artist, member of the public</p> <p>6BAM: artist and other ☺</p>	<p>1BP: art student, artist</p> <p>2BP: member of the public</p> <p>3BP: member of the general public, see myself as co-creator of a global campaign, activist,</p> <p>4BP: designer, art director, member of the public</p> <p>5BP: political activist</p> <p>6BP: student</p>	Co-creating on a global scale	Co-creation
Use of other media sharing sites			<p>1BAM: Fbook, flickr, fatCap, panoramio</p> <p>2BAM: Not a member of Fbook, but exhibits on Flickr, posterous, picplz, twitpic, tumblr, moblog</p> <p>3BAM: web.nl, volkskrant.blog, facebook</p> <p>6BP: Facebook, Flickr</p>	<p>1BP: Fbook, Twitter, Flickr, Tumblr, own website "internet as a platform opened up opportunities for artists"</p> <p>2BP: Fbook, Vimeo, Instructables, own site- yaeltex.com.ar</p> <p>3BP: Facebook – creative groups within the platform, flickr, artsinconflict.nl</p> <p>4BP: Areriroru, Metiss'Arte, TEDTalks, FlashMob Geneve, Pecha Pucha, Theatre Lamartine. Then shares that he exhibits work online via FBook.</p>	Instructables.com is a DIY web-based documentation platform Using smaller communities, based purely on creative interests. No mention of mainstream communities such as FB, Flickr	DIY Social networking through art practice
Relationship between own work/research/interests/ thoughts and the project			<p>1BAM: the project brings them together in sharing interests</p> <p>3BAM: my work has been influenced by the project, as it shows how global and travelled ones work can be</p> <p>5BAM: its interactive, people can upload stuff</p>	<p>1BP: Increased my spatial awareness, I segregate advertising from the city now, grown up like that I regarded it as norm before</p> <p>2BP: important to share the photos of the BP images as a way of showing that you care about public space, <i>talk back</i>. BP allows interaction and intervention with something which was not seen as interactive before</p> <p>3BP: rather think that the project was influenced by my thoughts</p> <p>5BP: great way for culture jamming</p> <p>6BP: we worked in groups at night, dangerous to work individually because of police in St Petersburg. We created our ideas together. We decided to 'monopolise' the message and wrote the comments ourselves. I don't see the sense to connect it to the initial Bubble Project – I have the impression that we have "reinvented" the work and it has found an autonomous existence</p>	<p>Now there is a separation between the commercial elements of the street, and its other features</p> <p>Opened new ways of seeing the street</p> <p>Critical view of public space</p> <p>Interaction and intervention with the public space, which was not happening before.</p> <p>Talk back, reaction towards processes in the public space</p> <p>Strong element of creativity</p> <p>The street is now interactive place</p> <p>The public is now active participant that takes charge</p>	<p>Public space</p> <p>Critique of public space</p> <p>Participation in re-creation of public space</p> <p>Re-inventing the work</p> <p>Co-creating</p> <p>Participation</p>

What makes the project successful	Needs more social networking functions	<p>2BM: would be if there are live accounts on social media sites such as FBook, Twitter</p> <p>6BAM: I think it needs to be more user friendly and also easier to communicate with others</p>	<p>2BP: consists of doing something against massive corporate media in public space, the idea of the talk-back is now embedded in peoples imaginary</p> <p>4BP: the project is simple, very open and triggers creativity.</p> <p>5BP: it makes people laugh</p> <p>6BP: ordinary people can become co-authors of public reality</p>	<p>Talk back. Why the need for 'rude' response?</p> <p>Open project, no risk of failing.</p> <p>Easy to employ, open to anyone to participate</p> <p>Humorous</p> <p>Creativity by anyone is allowed</p>	<p>Critique of public space</p> <p>Anti-consumerism</p> <p>Open source</p> <p>Added benefits</p>
Creativity and the project	Accessibility	<p>This illuminates my argument that the internet and SNS has reflections on public space and communities</p>	<p>1BAM: members can create groups based on interests, the project spreads outside UK</p> <p>2BM: People would see the street as a place that's alive and ever-changing focus point for local community to share ideas</p> <p>3BM: it makes it easier to find street art and makes it a lot more accessible to the viewers</p>	<p>1BP: the project opens up a space on the city people to express themselves, blank canvas, inviting anyone to be creative</p> <p>3BP: important to choose the right backgrounds for the Bubble Stickers</p> <p>4BP: the project is self-explanatory – adding a bubble is an invitation for someone to fill it in.</p> <p>5BP: creativity becomes a possibility for anyone</p>	<p>Creativity</p> <p>Participation</p> <p>User-generated content</p> <p>Feedback</p>
The project influence over the perception of the street	Education in a global scale Education	<p>3bm: illuminates my point about the internet influencing the public space via Public Art</p>	<p>1BAM: broadened conception of what constitutes street art, things are framed through the project</p> <p>3BAM: by giving public in all countries a greater knowledge and understanding of street art</p> <p>4BAM: I don't think the project can influence our perception of the street</p>	<p>1BP: raises spatial awareness, makes people rethink who owns the public space by advertising</p> <p>3BP: Talk Back</p> <p>4BP: it would make it more interactive</p> <p>5BP: firstly, the original commercial message is 'spoiled' and brand new message is born. The point is that people are able to transform the space around them</p>	<p>Consumerism</p> <p>Educational Participation</p> <p>Recreation of space</p> <p>User-generated content</p>
	Aesthetics in art	<p>Need of promotion because of the aesthetic qualities of public art</p>	<p>6BAM: It's a good thing, street art is a beautiful thing and the more people who see it would realise it</p>	<p>Removing the sacredness of the street</p> <p>See Tuan, humanising</p>	<p>Decentralisation</p> <p>Humanising Space</p>

Appendix 2: Mind Map of Interview Answers



Appendix 3

Denitsa Petrova: Conferences, Publications, Grants and Exhibitions

Papers, Conferences and Workshops

Ninth International Conference on the Arts in Society "The Lives of Art"
25-27 June 2014, Sapienza University of Rome, Rome, Italy

Geographies of Public-Art Co-Production - Annual International Conference, London
26–29 August, 2014 Royal Geographical Society with Institute of British Geographers

ISEA 2011 - International Symposium of Electronic Art
14-21 September 2011, Istanbul, Turkey. Big Bird is Watching You:
Art, Activism and Technology in the Public Arena.

Annual International Conference on Visual and Performance Arts, Athens
Institute for Education and Research, 6-9 June 2011, Athens, Greece.
Slice and Dice: The Citizen Artist and the Fight for Public Space. Published paper
ISBN: 978-960- 9549-65-3

CHArt 25th Annual Conference: Object and Identity in a Digital Age
Birkbeck, University of London, November 2009
Big Bird is Watching You: Art, Activism and Technology in the Public Arena.

Producing Culture - National Interdisciplinary Colloquium
20-21 February 2009, Goldsmiths, University of London
Permanent Resistance: Hidden Agendas of Activist Art.

Journal of Writing in Creative Practice
Can You Sleep at Night: Writing Public Art. Published Paper, Volume 2 Issue 3
2009 ISSN: 17535190, 2009

Transilient Boundaries in/of Architecture
30-31 March 2009, University of Edinburgh. Transilient Skyline: Art and Architecture
Collaborations. Published Paper ISSN: 0140-5039

Tallinn School in Social and Cultural Studies
25 July-1 August 2008. Edinburgh Waterfront: Collaborative Placemaking

Through The Looking Glass: Art, Culture and the Environment, December 2006, University of
Edinburgh. Public Art: Scream of Freedom or Social Agenda. Conference Paper and Presentation

Grants

ECA PhD Research Bursary 2006 – 2010

ECA Travel Grant: The City in Transition: The 2nd Annual National Public Art Conference, 17 November 2006, Liverpool, UK

ECA Travel Grant: Telling Places - Narrative and Identity in Art and Architecture, 5-6 December 2007, University College London, UK Graduate

Research School Grant: Tallinn School in Social and Cultural Studies, Tallinn University, 25 July – 1 August 2008, Tallinn, Estonia, Graduate Research School

Grant: Art and Science: Exploring the Limits of Human Perception Conference 12 - 16 July 2009, Centro de Ciencias de Benasque, Benasque, Spain

Grant to attend the “Academic Leader” Program in Aargus University, Denmark, August 2012

Selected Exhibitions & Art Projects

White Corner, March 2014
Public Art Installation, Vitosha Blvd. Sofia, Bulgaria

White or Red Square, March 2014
Public Art Installation, Gradska Gradina Park, Sofia Bulgaria

White Corner, March 2013
Public Art Installation, University Square, Sofia, Bulgaria

Green Ballroom, June 2012, Public Art Installation Commissioned by Culture Valby
Copenhagen Valby Square – Copenhagen, Denmark

White Corner, March 2012, Public Art Installation
University Square - Sofia, Bulgaria

I Must Have Died and Gone to Heaven, January 2012, Drawing
The Sketch Book Project, Brooklyn Art Library - NY, USA

Wishing Trees, December 2011, Public Art Installation
Garibaldi Square – Sofia, Bulgaria

Two of a Kind, May 2009, Painting, Group Show
Glasgow Art Festival, UK

Final Supper, January 2006, Photography Installation
Normalife Unlimited - Group Show Newcastle, UK

CARBUSTER, August 2002, Photography Installation
City Hall - Cartaxo, Portugal

Disclosure -Schizoid Architecture, August 2002, Net Art Installation
Institute of Contemporary Arts – London, UK

The Dirt of Love, July 2003, Painting, Group Show
Transmission Gallery Glasgow, UK

Orange Blue, April 2002, Video Art Installation
Digital Weekend of the Art Academy - Sofia, Bulgaria

Disclosure-- Schizoid Architecture, April 2002, Net Art Installation
ATA Gallery for Contemporary Art – Sofia, Bulgaria

Disclosure - Schizoid Architecture, March 2002, Net Art Installation
Kadinovi Bros Gallery – Sofia, Bulgaria