

**Site, Object, Audience: A Critical Inquiry into the  
Specificities of Interactive Digital Artworks in the  
Context of Cultural Institutions.**

Gemma Cagney

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fulfilment of the requirements for the degree of Master of Science  
Interactive Digital Media.*

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# Abstract

This research paper correlates fine art theory and new media theory, through the investigation of interactive digital artworks, which contain aspects of both disciplines. The motivation of this research is to contribute to the discourse of fine art and computer science, from my perspective as a student of both. This paper theorises interactive digital artworks through a structured analysis of the existing literature and a contextual analysis of two exhibitions: a) *Recovered Voices: Stories of the Irish at War 1914-1915* (2015) at the National Museum of Ireland in Collins Barracks, Dublin and b) *Lifeloggging* (2015) at Science Gallery, Dublin. The core of this research is focused on a range of interviews which were conducted with the artists and art professionals affiliated with these exhibitions, providing a wealth of rich anecdotal evidence for analysis. The findings of these interviews are disseminated into themes of site, object and audience, in order to discern a wider understanding of the particularities of interactive digital artworks exhibited in the context of cultural institutions. It is the aspiration of this paper to demonstrate that when analysing multimedia artworks and art practices, an interdisciplinary approach to research can be a viable and useful methodology.

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## Chapter 1: Introduction

What is the colour of everyday life? How did it feel for soldiers in the trenches 100 years ago? How big is your digital footprint, or your digital fingerprint? What is the narrative of the quantified self? Would you like to walk around in my mind? Is Ireland proud of us? What are all the things that I held in my right hand during the month of March in 2014? Do you believe in ghosts? What will tombstones say in a thousand years' time? How much am I worth? What does location sound like? These are some of the questions posed by artists exhibiting in the *Lifelogging* and *Recovered Voices* exhibitions in Dublin in 2015. Although the questions vary greatly, the resulting artworks that were created and exhibited share a number of similarities; all of them employ aspects of digital media in varying degrees and all of these artworks are curated in the context of cultural institutions (museums and galleries) with the view to creating interactive, multimodal *experiences* for visiting audiences. The anticipation of an experience is what drives visitors through the doors of cultural institutions, a concept that is gaining momentum across museum, audience and art theory (Pekarik et al., 1999, Packer, 2008, Lü and Liu, 2014, Kirchberg and Tröndle, 2015).

This research aims to theorise interactive digital artworks through a structured analysis of the existing literature and a contextual analysis of two exhibitions: a) *Recovered Voices: Stories of the Irish at War 1914-1915* (2015) at the National Museum of Ireland in Collins Barracks, Dublin and b) *Lifelogging* (2015) at Science Gallery, Dublin. The inherent problem with using academic discourse as a framework for analysing current events in any discipline, is in ascertaining whether the arguments maintain their relevance and validity even though they were constructed in the past, or not? Can theories developed five; ten or even fifteen years ago offer anything to the commentary of contemporary art? Considering historical and contemporary academic discourse, this research will deconstruct specific artworks from the above exhibitions in terms of their site, medium and target audience.

The core of this research is focused on a range of interviews which were conducted with the artists and art professionals affiliated with these exhibitions. Their responses are the basis on which the answers to three questions about interactive digital artworks have been constructed. The data is explored collectively in themes which question where these artworks are located, considers their medium and asks who is contributing to the overall work. Subsequently, using the data and anecdotal insight gained from the interviews, the answers to these questions will guide an overarching critical inquiry that asks: a) what are the specific qualities of interactive artworks and b) how do these qualities influence and how are they influenced by, the contexts of cultural



institutions? It is hoped that this paper will contribute to the ongoing discourse surrounding the theorisation of interactive digital artworks.

## Chapter 2: Literature Review

### 2.1 Locating the Artwork

It is important to establish where interactive digital artworks are located. This is because the 'site' of an artwork often influences the overall context of the piece.

#### 2.1.1 Museum vs. Gallery

The terms 'museum' and 'gallery' are sometimes used interchangeably and any perceived gap between the two has steadily narrowed since the 1970s which arguably marked a watershed in contemporary art. It is understood as the point when art practices became overtly politicised through a culmination of: the rediscovery of *Concept Art* in the 1960s and 1970s; the critical self-awareness and self-reflection of *Modernism* and subsequently *Minimalism*; the co-option and professionalisation of artistic practices, due to the rise in art school education and a rise in funding available to artists (Buren, 1973, Foster, 1982, O'Doherty and McEvilley, 1986, Buchloch, 1990, Manovich, 2003, Kwon, 2004, Bishop, 2007).

Traditionally museums were publicly-funded institutions and housed collections of objects which were often exhibited on a permanent basis; objects were heaped together chronologically rather than grouped in overarching conceptual themes. In recent times, the role of public museums has undergone a paradigmatic shift. The emphasis has been transferred from the internal collection of objects to the external audience of visitors who come to see them (Hudson, 1998). Increasingly, museums are marketed as places of entertainment and leisure, where social and recreational experiences take precedence over "objects and collections and even the emphasis in recent years on information and education" (Kotler and Kotler, 2000)p.276) including *science museums* in particular (Hughes, 2001). Kotler and Kotler argue that a variety of offerings and services, of which some must be immersive and interactive, are not only necessary, but outright expected by contemporary visitors seeking a holistic museum experience (ibid).

Art galleries, by contrast, began in the private sphere as a place where artworks were valued, exhibited and sold by private collectors. Art galleries rotate their exhibitions much more frequently than museums, and for some time approaching and after the watershed of the 1970s, galleries became one of the only spaces where one could see the work of contemporary artists who were less well-known or early in their careers. But the role of the art gallery, like that of the museum, has also undergone an inherent shift and for many of the same reasons (Wiley, 2008).

French conceptual artist Daniel Buren makes only a few minor distinctions between museum and gallery, noting that both 'buy, preserve and collect', the former with a view to exhibiting the work and the latter with the intention of reselling it (Buren, 1973, p.190). The role of the modern museum/gallery according to Buren is three-fold:

- Aesthetic: the museum/gallery is the 'frame' on which the work is presented and viewed, which may influence the types of choices artists make.
- Economic: galleries denote the monetary value of their artworks more explicitly than museums, and museums emphasize the cultural capital and social relevance of the pieces they choose to exhibit.
- Mystical: as part of the art institution, the museum/gallery holds a certain amount of gravitas and thus contributes to the 'mystical' factor of 'Art' and artworks.

Buren wrote extensively on the role of the museum/gallery as an important feature of the art institution which also includes the schools, the collectors, the curators and the market. A contemporary of Buren, Brian O'Doherty is also an artist who has written in-depth about the role of the art institution and the conceptualisation of the art practice, identifying these types of institutional spaces as *white cubes* (O'Doherty and McEvilley, 1986). O'Doherty argues that an institutional space attempts to dislocate the art object from the artist and its context in order to commercialise it; when in fact the context of the gallery distorts even the most self-referential of artworks. Curator Miwon Kwon (2004) remarks that disassociation is a convention of the art institution, and cites Buren's proclamation that any work presented in the context of the 'museum' that does not actively interrogate the connotations of these kinds of contexts 'falls into the illusion of self-sufficiency - or idealism' (Buren, 1973). Exposing the 'false idealism of art' from within the system has been identified by Foster (1982) as a prominent leitmotif in contemporary art practices of this era. Although he notes that the scope of such a critique is very restrictive. Firstly, it is limited to the institutional framework which it critiques; secondly, by the assumption that there are no other discriminations in place, for example, social or gender discriminations; and finally, by the unknowable circulation of the artwork post-exhibition.

It is a little outdated in the 21st century to consider museums and galleries in terms of the museum as a public sphere and the gallery as a private one, but there are of course those which remain as such. Furthermore, there exists a selection of museums and galleries which have similar concerns regarding a visitor's experience, where the distinction between the two is much less defined. These

*cultural institutions* (Mygind et al., 2015) pursue a varied program of exhibitions, services and events which aim to satisfy visitor's expectations of simultaneous *object, cognitive, introspective, and social* experiences (Pekarik et al., 1999, Kirchberg and Tröndle, 2015).

### 2.1.2 Site-Specificity

This paper considers where digital artworks are located within cultural institutions, and whether or not they are site-specific. Kwon (2004) states that some particular art practices dating around the time of the watershed, actively sought to dematerialise the site. In moving an artwork from gallery contexts artists sought to *de-aesthetise* the piece by making it anti-visual, informational, textual, expositional or didactic, and to *dematerialise* the piece by making it immaterial, gestural, performative or temporal. This shift was noted by contemporary theorists of this era, including Adorno (1998) who applied a certain gravitas to the presence and materiality of the art object in relation to the subject, the viewer and the context. Kwon's reappraisal site-specific practices over the last 50 years, was considered timely and concise at the time of publishing and it remains held in a high esteem amongst theorists and widely cited (Townsend, 2005, Scarfone, 2007).

Kwon (2004) updates the language of O'Doherty and McEvilley (1986), Buren (1973) and Foster (1982) and expands on many of their observations when she states that specific sites decode and re-code institutional conventions. She argues that institutions imprint on an artwork's meaning in order to profit economically, politically or culturally. Kwon's choice of language, describing artworks as being coded and encoded with information, draws on Hall's *Encode and Decode* model of reception theory which contends that readers will potentially adopt one of three positions when receiving a text; dominant, oppositional or negotiated (combination of the two) and suggests that personal experiences; age, gender, culture, belief, creates a heavy bias within the reader. Although Hall's model was developed in reference to the experience and reactions of television and film audiences, his framework offers insight for disseminating and understanding the audience of an artwork.

Kwon's dissemination of the *genealogy of site specificity* is particularly instructive when examining digital art as a genre. Although contemporary art practices are not as concerned with critiquing the cultural confinements of the art institution as those of the 1970s to the early 1990s, Kwon identifies three paradigms of site specificity that exist within contemporary practices: phenomenological, social/institutional and discursive, all of which broach institutional critique in some form or another.

Meyer (2000) deconstructs artworks in terms of the *literal* site and the *functional* site. The literal site is understood as the initial point in time and space in which the event or subject of the artwork took place; consequently it is a physical space at a particular time. However, the functional (or informational) site may or may not be physical. In the functional site, even after the locational site has dispersed, the artwork continues to exist in the form of documentation, information or even conversation.

Jean-Francois Lyotard's leviathan exhibition *Les Immatériaux* (1985) at the Pompidou Centre in Paris foreshadowed the genre of exhibition in which a Smörgåsbord of sites alongside digital objects, quasi-artefacts, and simulations were to be offered up for visitors' consumption (Heinrich, 2009). The grand scale and exposure it received at the Pompidou Centre differentiated *Les Immatériaux* from anything that had come before (Rajchman, 2009). The exhibition marked two shifts in discourse surrounding the exhibition of artworks; that the way in which objects are displayed influences their reception and subsequently that the curators are now "'authors' in their own right of the exhibitions they organised" (Heinrich, 2003). The subject of authorship will be examined further in the narrative section of this literature review. But in the beginning at least, the role of the Pompidou Centre (built 1977), was to be a 'pluralistic, democratic institution' and one which differed from its predecessors – those institutions which had alienated both artist and viewer (ibid).

As cultural institutions, museum and art galleries impose specific conditions and connotations on the artworks that are created for and exhibited within their context. It has been established that context openly affects the meaning of an artwork; the next section will explore how meaning can be influenced and informed by medium.

## 2.2 Defining Digital Artworks

It has been proposed that all *new media* are a remediation of old media, a digital version of non-digital ancestor (Bolter and Grusin, 1999, Wardrip-Fruin and Montfort, 2003, Lister, 2003). Bolter and Grusin posit that *remediation*, *immediacy* and *hypermediacy* are idiosyncratic of *new media*, arguing that newer media make reference to some form of older media; which is evocative of a famous expression in art that all artists copy or steal, meaning that everyone receives inspiration from what came before.<sup>1</sup> Lister et al highlight the *dematerialisation* of texts through digital media, a concept

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<sup>1</sup> The earliest written record of this sentiment is believed to have been written by W. H. Davenport (1892). This assertion, in various different forms, has been attributed to a number of artists over the years, including T. S. Elliot in 1920 who wrote "Immature artists imitate; mature artists steal..." Other versions of the phrase are speculated to have been uttered by Igor Stravinsky, William Faulkner and Pablo Picasso.

that has interesting implications when considered in terms of the site/non-site discussion in contemporary fine art criticism.

Due to the fluid and problematic nature of the term 'new media', the medium of the artworks explored in this research is deliberately defined as 'digital'. Digital refers to the digitisation of an old analogue technology but it is also used in a range of different ways, for example by Manovich (2003) to describe independent, novel technologies or media which are encoded in a machine-readable format. The use of the terms 'digital' and 'analogue' is problematic, as analogue is sometimes employed in new media theory to denote the opposite of digital. Arguably this is not always the case, as the terms have different manifestations across different disciplines including mathematics, photography, computational theory and fine art. The positioning of these two terms as binaries (digital data is in binary form but analogue data can have a range of different values) could have stemmed from the necessity to define emergent *digital* media as being different from that which came before it. Nevertheless, the use of analogue as the opposite of digital is common across new media theory (Lunenfeld, 2000, Manovich, 2013, Weinberger, 2012). Analogue retains a different meaning in terms of photography and film in particular, thus further illustrating the complexity of new media as a term.

Manovich's *oeuvre* encompasses a practice that is as much about theorising new media art making as it is about making new media art. He contends that the artworks and art practices which embraced new technology and new media started to become emblematic of cross-contamination between art and technology during the fertile 1960s and 1970s (Manovich, 2003). He has written extensively around the subject of digital media, but the prevalence of his texts online means that many of his newer theories aren't in sync with his older texts, making his position difficult to pinpoint for an analysis such as this literature review. For example, Huhtamo (1995) argues that Manovich overlooks the importance of what level of input and effort systems require from user, computer and/or interface. But one may argue that this is something that Manovich addresses in his recent endeavours employing social media as a medium for artistic expression.

Digital artworks simulate the *real* mathematically, rather than copying it, in that they can be constructed from data about things that the artist never sees and in this respect they are simulacra (Baudrillard, 1994). It might be argued that they have more in common with each other than with the subjects they depict. Attributes appear to be copied from the real world, but by the nature of their medium they are digital/virtual/unreal (Lovejoy, 2004). Lovejoy (2004) suggests that digital technologies have been used amongst artist communities (both real and virtual) to collaborate not

just across media, but also across disciplines. Although this is not a completely new feature of digital technology, the universality and accessibility of digital media has increased the efficacy of these kinds of collaborations. Lovejoy also addresses the disappearance of the object in art in favour of “artificial or virtual facsimile” (ibid). The relative space inhabited by digital data is minute; the site it occupies is almost non-existent in a physical sense.

As is the case with the site or location of digital artworks, the digital medium also raises a number of questions concerning the presence or physicality of the art object. According to curator Christiane Paul, within *new media* (digital) artworks, the emphasis is shifted from the physicality of the object “to process: as an inherently time-based, dynamic, interactive, collaborative, customizable, and variable art form”, and ultimately “challenges the traditional notions of the art object” (Paul, 2008, p. 1). Artists have access to new digital technologies which are becoming cheaper and require noticeably less space than traditional media. Lovejoy (2004) has also noted the gradual disappearance of a single physical art object. A digital artwork is comprised of a number of data packets, and also metadata. The shift from object to process throws up a number of challenges for the curator of digital work (Paul, 2008) such as: how can the immaterial process of content generation, which often takes place within a specific situation, be curated in an interesting and engaging way for public audiences?

### 2.2.1 Medium-Specificity:

Some digital artworks exist immaterially as information and the database has served as both medium and site for these artworks. In this respect, a distinction can be drawn between artworks that explore the potential of the database to serve as a *medium* to create works, and the instances where a database serves as the *site* of a digital artwork, by storing the binary information that constitutes it. This distinction illustrates that what is considered the site and what is the medium of an artwork is complicated, at best.

Manovich (2001) in particular has heralded the database as a new medium for artworks, citing the hypertextual narratives of new media as being defined by numerical code, modularity, automation, variability and transcoding. Manovich identifies transcoding as “the most substantial consequence of the computerization of media” because it describes how computers and culture influence one another symbiotically, where one does not determine the other, a different position to technological determinism of McLuhan (1994) and Kurzweil et al. (1990).

When a work exists in an encoded format, how does one assess what Greenberg (1960) asserted to be the *medium specificity* of a piece? That is to say, an artwork that revels in the unique and specific attributes of the raw medium from which it is made; for example it was popularised by critics when referring to the *Modernism* movement in art, as a means of describing how painters seemed to be revelling in the materiality of paint, in its specific qualities like texture, opacity, flatness and depth. In the context of this research, it could refer to a digital piece which results from an artist actively exploring a technological medium.

Medium specificity is a problematic term when it is employed in a contemporary context concerning digital art, as it was developed as a theory before a digital art practice was a viable one.

Nevertheless, it retains some merit as useful term for describing the essence of any medium, including the digital medium. In an attempt to revisit and update the term for use with new media, Maras and Sutton (2000) compare Carroll (1988) writings on medium specificity with Bolter and Grusin (1999) discussion of remediation. Carroll refers to medium specificity from the perspective of a moving image theorist, but he distils two clear components: a) what 'each medium does best' and b) 'what differentiates it from other arts' (Carroll, 1988, p. 83).

Maras & Sutton argue that Carroll highlights the inherent problems with medium specificity, in measuring excellence and differentiation at the same time. First, there is no single system in which different arts stand independent of one another and can be quantified separately and second, medium specificity as a theory was developed before digital media were established as artistic media (Maras and Sutton, 2000). This second factor in particular must be considered, as it can seem quite limiting when it is the nature of digital media to be cross-disciplinary and multimodal. Maras & Sutton attempt to address this by introducing Bolter & Grusin's (1999) remediation theory as a comparative text, bringing the discussion into the forum of new media theory. Their dissemination of the two texts attempts to establish a new significance for new media through medium specificity theory, believing the overlap between the two could be developed further (Maras and Sutton, 2000). Although their discussion is not conclusive, their comparison of art theory and new media theory texts proved instructive for this paper and highlights the definitions for medium specificity that will be employed by this research.

### 2.2.2. Relational Aesthetics

French curator Nicolas Bourriaud developed the theory of *relational art* which groups together a genre of artworks that are not linked by their manipulation of a common medium, but rather by the context in which a work is made and presented (Bourriaud et al., 2002). Relational aesthetics refers



to a series of art practices 'which take as their theoretical and practical point of departure the whole of human relations and their social context, rather than an independent and private space,' (ibid) and which produce relational art. Relational art is not a 'discrete, portable, autonomous work of art that transcends its context' but rather it is 'entirely beholden to the contingencies of its environment and audience' (Bishop, 2004, p.54). Emphasis is placed on the role of the viewer or participant and how they receive an artwork (Moran and Byrne, 2010). There is a high level of participation within relational art and according to Bishop (2012) participatory art practices come from a rich art ancestry which spans mass soviet spectacles, DADA theatre, Surrealist excursions, Situationist International practices of *derive* and *détournement* and Happenings in America.

Overall Bishop is somewhat critical of certain participatory artworks and Bourriaud's theory of relational aesthetics, claiming that these types of practices produce work that often escapes close scrutiny and questions what makes them 'Art' (Bishop, 2004). Although the theory of contemporary relational art chimes with the ideals of those artists who had originally attempted to detach themselves from the art institution, Bishop's critique is that the *laboratory paradigm* which is encouraged by some contemporary curators, produces work that is "open ended, interactive, and resistant to closure, often appearing to be 'work-in-progress' rather than a completed object", which is work that is unstable and in *perpetual flux* (Bishop, 2004, p. 53). In an effort to differentiate itself from the art institution which is perceived as alienating, this *art lab* then becomes a marketable space of leisure (Bishop, 2004).

The art gallery is commodified once more. Bourriaud describes his work with artists as *collaborations*, further documenting the emergence of the curator-author in contemporary art (Bourriaud et al., 2002). The participants in these kinds of artworks include the artist and curator alongside the viewer. Artists like Rirkrit Tiravanija openly acknowledge that their work is an attempt to blur the roles between all three, casting a narrative with multiple authors. According to Bishop, Bourriaud's argument 'privileges intersubjective relations over detached opticality' and hinges on a demand that viewers be present in a specific situation and a certain time (Bishop, 2004). The dissipation of the author and the reader; the creator and the interpreter, is not unique to participatory art and it is a feature of many digital media practices as noted by Lévy (in Lister et. al, 2003). In research conducted specifically for the Science Museum in London concerning their audience, (Boon, 2011) identifies *co-curation* as a facet of participation; which can be used as an overarching term to describe 'lay people['s]' involvement in developing museum programs. Boon's

work also addresses the relevance and role of the physical object in institutions where digital and virtual media are increasingly present.

Arguably, curator Claire Doherty's theory of 'situational art' is derived from Bourriaud's work (Doherty, 2009). The types of artworks theorised by both tend towards non-digital works which have a distinct human-to-human interaction element, and which are limited by durational and locational factors. The focus is often on the dialogical or conversational (Kester, 2004), in that the event creates a forum for people to address issues the artist wants to raise. This could be conceptualised as being a completely immaterial thing. Doherty consolidates Kwon and Bishop's arguments from her viewpoint as a curator working internationally with site-specific but also *situation*-specific works (Doherty, forthcoming).

Medium, it has been explained, can be defined as the physical material of an artwork as in medium specificity; or it can be considered as a more conceptual process of interaction and conversations, as in relational aesthetics. Both theories attempt to establish the essence of an artwork, through its medium. The importance of both location and medium have been established, the next section explores how interactive digital artworks might be understood in terms of already existing theories.

## 2.3 Theorising Interactive Artworks

Not all digital artworks are intrinsically interactive. This section aims to explore how a model of interactivity might be developed from a range of available theories, with which the level of interactivity of a specific environment can be ascertained. Due to the dynamic and constantly shifting technological nature of digital media, by the time academic papers on the topic are published they or the media they describe might be well out of date. Evidently, if a medium is relatively neoteric it follows that critical engagement with it will be limited. Consequently, older models of interactivity which have been developed for other types of media can be considerably outdated when applied to newer media. Jensen (1998) explicitly encounters an example of this problem whilst constructing his *Cube of Interactivity* model. He discusses the *Four Scales* methodology by Goertz (1995) and suggests adding two extra dimensions to the theory. The process of applying historical definitions as a framework for new media as an ultimately ineffectual methodology for discussions on interactive new media, in part due to the broad scope which the term encompasses; a spectrum which increases incrementally every day due to the fact that digital interactivity is technologically determined and new technologies and media come to light constantly.

According to Lister et al (2003), old media is symptomatic of passive consumption and new (digital) media lends itself to incorporating levels of interactivity more fluidly. Interactivity correlates with the user's ability to 'intervene in and change the images and texts that they access' and consequently this transforms the passive reader to an active user (Lister et al, 2003, p. 22). This transformative capability to intervene is a necessary feature and encompasses the playing, exploring and experimenting aspects of digital media (ibid). The concept of digital interaction as a collaboration between humans and computers is developed at length by Brenda Laurel (2012) who defines both parties as equal *interactors*, unlike Bishop's definition of a participant. Although Laurel is referring to early models of Human to Computer Interfaces, much of what she identifies as effective interface design within this medium holds true to for the types of interfaces designed for what might be regarded as 'Human to Artwork Interaction'. For example, Laurel suggests that interfaces must be designed to enhance and extend the user's experience by doing something more effectively than an 'analogue' version would. This principle can be applied to digital artworks, but it must be noted that the artist may intend for the experience to be one of frustration and alienation. Laurel stipulates that a seamless interface (what Bolter and Grusin refer to as *transparent immediacy*) should be prioritised as a design concern but artworks which are theorised as containing elements of medium

specificity and hypermediacy often aim to highlight the audience's interaction with the interface as part of the experience of the work.

Kiousis (2002) presents a three part *operational* definition for interactivity, considering it a feature of:

- Technology; a means or an interface with which to mediate an interaction.
- Communication; the presence of participants, a combination of human or non-human.
- User perceptions; the opportunity for modification or perceived modification of environments.

Alongside these operational features, interactive environments are subject to *theoretical* conditions such as speed, range, time, sensory activation and dependency. Kiousis' definition of theoretical conditions is similar to the external/incidental factors which influence a situational piece, such as time and geographic location as defined by Doherty. The third set of factors which influence interactive environments are defined by Kiousis as *conceptual* and concern the internal communications of an interactive medium and its ability to simulate interpersonal communications. When examining the implications of these conceptual factors on an interactive digital artwork, the subject of consideration is arguably the viewer-participant's experience and how the interactive environment guides it. Kiousis asserts that these operational, theoretical and conceptual elements are present in varying degrees and combinations in all interactive media.

Lopes (2009) explores how the user's input affects an interactive artwork and uses computer art as his case study, highlighting its newness as a medium. He uses two terms: *weak* interactivity, cases where users have control over the sequence of content and *strong* interactivity, cases where user input determines the subsequent structural properties of the interface of an artwork. Thus, creative interactive interface design must be inherently "protean" in that it must be adaptive and malleable. Lopes also suggests that interactive art must encompass not only the aesthetic properties of interactions between humans and computers, but also portray the aesthetics of the piece itself, for example their form as artworks must be self-referential of the media they are composed from; in other words they must be medium specific. This differs Lopes's definition from Laurel's, when she hints that interfaces should be smooth or invisible, Lopes is implying that hypermediated works which make a point of illustrating their medium possess a unique analytical value and this kind of metanarrative is arguably symptomatic of artistic interface.

Using Lopes's text as a starting point, Preston (2014) affirms that interactive art is "fundamentally interactive" when it can be transmitted to an audience, receive audience input and return feedback and he uses video games as his case study. He suggests that artworks are grounded in algorithms and must also possess structure, narrative and visual and audio features. Preston, like Lopes, uses the features he outlines to rule out older, traditional art forms. His text is based on Lopes' theory that interactive artworks are either a) repeatable, such as video games experienced by multiple users where a single user's experience can be recreated, or b) non-repeatable, such as artworks that have a temporal or situational aspect which means the piece inherently transforms as time progresses (Lopes, 2009). The potential for multiple, repeatable transmissions and displays creates narratives that are inherently non-linear. Preston suggests that these two types of displays designate whether or not a viewer will experience a work as a whole or in parts (Preston, 2014).

The role of the computer as an increasingly dynamic and responsive partner for conversation has unequivocally changed the channels through which art is transmitted and received. Lovejoy (2004) suggests that this is because computers have transformed the experience of art making on an intimate level. As a result, audiences partake in interactive viewing rather than in a linear gaze when they experience an artwork. Traditionally developed in feminist theory as the gaze lavished by a heterosexual white male upon a scantily dressed female (Bryson, 1983, Mulvey, 1975, Forte, 1988), the gaze has historically represented a metaphor for a variety of power plays (Sartre, 2012, Foucault, 1977, Derrida and Wills, 2002). In digital artworks, the tension and emphasis of the gaze lies in the relationship and transformation of passive to active; rather than the power play between male and female. This is emphasised in interactive digital artworks in particular, as the traditional relationship between the artist and the viewer is subverted when the viewer transforms into a participant or co-author, because the artist relies on their input to create a piece. This modifies the roles of both artist and viewer. Viewers are empowered by the interaction offered by the artist, partaking in a parallel experience of choice and journey. In turn the artist places themselves outside of their personal narrative in order to make room for the viewer; they are creators of process and experience. Lovejoy states that successful art should be psychologically interactive and, that interactive artworks are shaped by both artist and viewer and, as such they are systems of exchange (Lovejoy, 2004), p.167 - 168).

From these assertions, a clearer understanding can be gained as to the meaning of interactivity as a feature of digital interactive artworks. The final section of this literature review engages with aspects

of narrative theory as a means to evaluate what artists are trying to communicate to their audiences through their work.

## 2.4 Artworks as Digital Narratives

Roland Barthes's work on the true nature of authorship suggest that texts do not belong to one author in particular, but are instead moulded by the social, political and economic contexts that surround them (Barthes and Heath, 1977). The *sui generis* author no longer exists and potentially never existed. Any narrative discerned from a user's interaction with a text is passed through an internal lens, which reflects their personal experience back into the narrative. The autonomous artist has experienced a similar death to that of the author, yet the eponymous artists reigns strong. A peculiarity of participatory art is the coercion of the viewer-participant by the artist to generate content for them. Content is then selected from and arranged or curated, sometimes with the aid of a curator. The exchange is comparable with the concept of *immaterial labour* found in Autonomism; labour that produces an immaterial good "such as a service, a cultural product, knowledge, or communication" (Hardt and Negri, 2009). The *experience economy* sees artists, institutions, curators, and participants enter into a series of transactions; where goods and services are replaced by constructed experiences (Pine and Gilmore, 2011). These participants are complicit in acts of immaterial labour within the experience economy, and in return they receive *immaterial capital* in the form of a phenomenological experience and yet the artwork is almost always attributed to the artist.

Context, narrative and medium are all innately intertwined and to isolate one from the others is to only equip oneself with only a fraction of the social, political and cultural information available (Ryan, 2001). Ryan also defines interactive narratives; primarily in reference to artificial intelligence systems, virtual realities and the virtual story world, as the integration between user input and "conditions of narrative" (Ryan, 2009). Creator and interpreter become blurred within a user-content driven interactive narrative, this is a condition of the narrative and narratives become non-linear.

The space of total, immersive play has been described by Huizinga (1950) as *the magic circle*; an invisible space or a play-world that is governed by the rules of a game but not necessarily by the rules of the *real world*; subsequently it is a space in which the fantastical can take place. Huizinga suggests those who engage with play worlds together become play communities, an interesting consideration for the motivations behind public art. He also notes the similarities of play and ritual, a similar distinction has been drawn between art and ritual (Duncan, 2005). The *magic circle*

permeates all the spaces of human experience and has been documented in contemporary game theory (Salen and Zimmerman, 2004, Bartle, 2006, Juul, 2011). Bartle explores what the ramifications might entail if the rules of a virtual world created within the magic circle spill out into the real world. Juul's thesis of half-real games explores a similar theory; a half-real game is a game where the game world and the real world influence one another. Although pertaining to gaming theory, the magic circle stands as a useful metaphor with which to examine the gallery space and the behaviours it incites. This is because the museum and gallery can be considered as an immersive space where certain rules are applicable; and there are instances when the rules of either the real world or the gallery might spill from one space into the other.

## Chapter 3: Methodology

How does an understanding of the site, medium and audience of an artwork, offer insight into the overall experience of an interactive digital artwork within the context of a cultural institution?

This research maintains that a qualitative analysis of the literature and interviews is the most suitable approach towards answering the research question, using the available data. The intention behind this research is to distil meaning, rather than quantifiable data, from a collection of small and detailed cases (Adams, 2007). Interviewing practitioners and professionals about their work appears to be a natural and logical progression.

This paper will address this question by means of a qualitative analysis approach which is two-fold. Firstly, a state-of-the-art review of the literature is undertaken with a view to establishing the key theoretical discussions concerning one or more of the following terms: interactive, digital, artwork. The overlap between these three terms, with a particular emphasis on art theory, is the specific area of interest for this paper. Secondly, a series of semi-structured interviews provide a means of gathering primary research on the findings from the literature review. The interviews offer an opportunity to explore the themes raised by the theory first hand and to gain specific insights into the artists' and curators' perspectives on the particularities of Interactive Digital Artworks (IDAs) in the context of two separate cultural institutions in Ireland.

From the textual analysis, a theoretical framework was established, which is used to develop a guide to the themes and concerns of the interviews. This interview guide contains a number of open-ended questions and is outlined below.

The dissemination of the site of IDAs is explored through site-specificity theory, using a framework constructed from Meyer's (2000) theorisation concerning the duality of the site of an artwork - functional and literal - in addition to Kwon's (2004) three paradigms of site-specificity: the phenomenological, the social/institutional and the discursive, as discussed in the literature review.

The reasoning behind employing site-specificity as a theory for deconstructing IDAs is two-fold:

1. IDAs exist in a digital site which is separate from the cultural institution where they may be located during an exhibition. The digital site is site-specific.
2. Although Kwon's paradigms do not explicitly refer to digital artworks, the IDAs explored in this research all contain aspects of the phenomenological, the social/institutional and



the discursive, consequently they are considered interactive and additionally they all employ a digital medium/media somehow.

Kwon's (2004) three paradigms of site-specificity are examined alongside Kiousis (2002) three conditions of interactive environments: operational, theoretical and conceptual. Considering these conditions in terms of interactive digital artworks, 'operational' is interpreted as the medium or technology employed by the artist as a method for communicating with their audience (data visualisation software, Bluetooth check-ins, digital art objects, performances which use digital media) which links it to the phenomenological paradigm, 'theoretical' conditions are interpreted as the situational or institutional features of a work (location, durational performances, temporal aspects) and 'conceptual' conditions deal with the internal communications or discussion stimulated by a piece (interactions with mediators and other visitors, social media, artist talks) linking it to the discursive paradigm. By drawing from two theories, Kwon's (2004) framework for site-specific artworks is given an interactive and digital dimension by Kiousis' (2002) text.

Apropos of the vast spectrum of interactivity outlined in the literature review and in accordance with some of the findings from the interviews conducted with practitioners, two genres of interactive digital artworks are selected for further discussion in this research:

1. Artworks which allow the participant to inhabit the artist's curated virtual reality
2. Artworks which inhabit the participant as a means of gathering inputs and subsequently generating a form.<sup>2</sup>

### 3.1 The Interview Guide

The interview guide was developed to be open-ended in order to gather as much information about the interviewees' thoughts, impressions and feelings about their personal experiences with making and exhibiting IDAs. Some of the key themes which drove the interviews were as follows:

- The common tropes or features of interactive digital artworks, if any exist.
- The role of the user and of the artist and the restructuring of these roles within IDA.
- The medium and the medium specificity of IDA.
- Participation, situation and site.

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<sup>2</sup> The *participant* refers to the role of the active viewer in an artwork. Bishop proposes that participatory art was founded on a "binary of passive and active spectatorship, linked in turn to the desirability of working outside the gallery system." BISHOP, C. 2012b. Je participe, tu participes, il participe. In: BISHOP, C. *Artificial hells : participatory art and the politics of spectatorship*. London: Verso.

- The interchangeability of definitions.
- The artist's identity and how they self-identify.
- Curation as a process of making choices.
- The role of artists, the art institution and the audience in the processes of curation and co-curation.
- The specific location of the audience in IDA.

This method of qualitative research aims to produce an in-depth understanding of interactive digital artworks in the context of cultural institutions in terms of site, medium and audience, based on the reflected experience of practitioners, in order to contribute to the literature on interactive digital artworks.

Interviews were conducted with four practitioners and two staff members from the research and mediation teams at Science Gallery and the National Museum of Ireland. All of the interviewees were selected on the basis of their affiliation with either of the two exhibitions examined:

- a) *Recovered Voices: Stories of the Irish at War 1914-1915* (2015) at the National Museum of Ireland in Collins Barracks, Dublin.
- b) *Lifelogging* (2015) at Science Gallery, Dublin.

Cathal Gurrin is the creator of the *Colour of Life Wall* (2006-2015) a version of which was exhibited in the *Lifelogging* exhibition. The piece is very much based on his experience as a long-time lifelogger collecting data for his own interests, not necessarily with a view to showing it to anyone else.

Participants wear a special camera and then input a cache of images taken from a set period of time to the interface. The interface in turn abstracts each image to a flat block of whatever the dominant colour is and finally, the blocks are displayed chronologically on a large screen in a way that is beautiful but also meaningful to the participant. He was interviewed on the 27th of February, 2015 at Science Gallery, Dublin.

Nicholas Felton is a designer and creator of the *Feltron Annual Report* (2005-2015) which was exhibited in *Lifelogging*, and recently he released the *Reporter* and *Daytum* lifelogging applications. He describes the outputs of his practice as *products* that are based on his own experiences (Felton, 2015). His annual reports are paper-based records and translations of the masses of lifelogging data he records every moment of his life. The results are displayed using charts and graphs in his annual

report in the form of a paper booklet. He was interviewed on the 10th of March 2015, at Science Gallery, Dublin.

Owen Boss is a visual artist and part of theatre company ANU Productions. ANU considers their practice to be highly collaborative and similar to that of an artist's studio which fosters an environment of interdisciplinary cross-pollination where each member contributes to an overall vision (Boss, 2015). ANU developed *Pals - The Irish at Gallipoli* (2015) using a methodology which they have refined over the past 6 years: they work to create site-specific, visually stunning and emotionally stirring performances that are constructed on a strong foundation of historical research. He was interviewed on the 30th April 2015, at the National Museum of Ireland in Collins Barracks, Dublin.

Conor Mary Foy is a recent NCAD graduate who works in video, live art and sculptural intervention. His video and photography work is completely digitally based, often manifesting as recordings of strange performances in the woods. Having recently graduated and already holding a studio at TBG&S, he is located firmly within the art institution and offers a perspective from the inside. He was interviewed on the 29th of April, 2015 in the Joy of Chai cafe, Temple Bar, Dublin.

Gina Kelly is the Lead Researcher and Aine Flood is Lead Mediator on the team behind the *Lifelogging* exhibition. Their expertise is focussed on the behind the scenes process of conception, research, development, production and finally the showcasing and maintaining of the entire exhibition. By interviewing them, potentially some insight can be discerned about how the institution perceives their interactions with artists and audiences. They were interviewed together on the 24th of February, 2015 at Science Gallery in Dublin.

## Chapter 4: Disseminating Site: Where is the artwork?

Of the two institutional spaces examined in this research, one identifies as a gallery and the other as a museum, by name at least. Although the content is dramatically different between these two exhibitions, there are many similarities in their structure and techniques. Both use a combination of digital media experiences alongside phenomenological, human-orientated and situational experiences to immerse the viewer in the multi-sensory narrative of a virtual reality.

The first study considers the events scheduled around the WW1 centenary retrospective at the National Museum of Ireland in Collins Barracks mainly the *Recovered Voices: Stories of the Irish at War 1914-1915* (2015) exhibition and the *Pals - The Irish at Gallipoli* performance by ANU productions. Collins Barracks is a traditional, collection based museum cataloguing Irish military history, with physical objects of war curated in a space which once operated as a military barracks. The curators invited ANU productions to develop an immersive and interactive performance piece to run in conjunction with the exhibition (Boss, 2015). ANU are considered to be at the forefront of Ireland's site-specific installation vanguard (O'Toole, 2013). Members of staff from the curatorial team had experienced ANU's previous works such as *Laundry* (2011), *Dublin Tenement Experience* (2013) and *Thirteen* (2013) and were very keen to collaborate (Boss, 2015). Taking the accounts of three soldiers from the exhibition, ANU developed *Pals*. The significance of the site which is located within a cultural institution but also in an actual barracks was carefully considered by ANU:

*"If you're looking at gallery space, you're looking at 'white cube' and all that that entails. As 'neutral' as that it - because it isn't neutral, we know it isn't. Once you put something inside a gallery... It slips into the history of art, or the history of contemporary art... It also fits into this site-specificity, but then there are also actors as well. So there's this kind of odd, grating - and that's where the magic for us happens. When you take two different disciplines and you put them together and you see how they work together - do they need to be in tandem, in harmony? For this, it just made sense to be here where the soldiers were 100 years ago."*

*(Boss, 2015)*

*The Recovered Voices* exhibition sees a clear distinction between literal and functional site (Meyer, 2000). The collection of historical objects from WW1 alongside the primary accounts of the lives of the soldiers on which the *Pals* performance is based, are artefacts from the literal site of the work. The exhibition itself, as documentation, and the events surrounding the exhibition are evidence of the functional site. When examining the exhibition at Collins Barracks in terms of Kwon's (2004)

paradigms and Kiousis' (2002) conditions, the objects, from an initial event, are contained within the social/institutional paradigm and the theoretical condition in that they are influenced by site (location). They are embedded with a narrative which pre-empts the exact narrative portrayed by the *Pals* performance piece. The performance piece, running throughout the exhibition, is entirely reliant on the presence of the viewer and the experience of viewing. This performance piece brings these objects to life again, making the history of the subject more tangible for museum visitors. Thus, a phenomenological site of the artwork is established in the performance. Kwon defines works with a phenomenological context as follows:

*“The art object or event in this context was to be singularly and multiply experienced in the here and now through the bodily presence of each viewing subject, in a sensory immediacy of spatial extension and temporal duration...”*

*(Kwon, 2004, p.11)*

The phenomenological paradigm is associated with the operational condition of interactivity, relating to the tools that the artist uses to communicate with the audience, who definitively must also be present in order to activate the work. Although the objects exist before the event of the piece happens, it is only when they are used by the artist that they become operational and phenomenological.

The Irish soldiers who fought 100 years ago at Gallipoli, have recently been rediscovered, having previously been obscured from Irish history (Wallace, 2015). The aim of the exhibition and the surrounding events is to bring their stories to light and stimulate discourse around the Irish experience of WW1. The performance was critically well received and enjoyed coverage in national newspapers (Ferriter, 2015, Wallace, 2015). Ferriter particularly notes that the *Pals* performance engages viewers by giving them an emotional experience as well as a historical narrative. This public discourse and any other undocumented private conversations that were stimulated by the piece are evidence of the discursive paradigm of the piece which is associated with the final conceptual condition of interactivity.

The second case study examines the *Lifelogging* (2015) exhibition at Science Gallery, including the events and residency labs that ran concurrently. Taking place over the course of nine weeks, the exhibition aimed to explore methods of data collection, manifestations and visualisation of data and discourse surrounding the practice of lifelogging or the process of tracking and logging personal data. A variety of artists, researchers and technologists were invited to contribute to the exhibition

through an open call and direct invitations (Flood and Kelly, 2015). Submissions ranged from selected data visualisation methods (digital and non-digital) to conceptual design objects which aimed to imagine how these new technologies would assimilate into the quotidian in the future. In tandem with the exhibition, the gallery ran residency labs, where each week a contributor to the exhibition would set up to talk to the public about their work. These laboratories offer a direct human interaction for the audience to engage with, in addition to a plethora of digital media interfaces and objects, which permeated the entire space.

A space like Science Gallery erects and disassembles whole exhibitions in days, the exhibitions last for a few weeks and it doesn't exhibit a permanent collection. The gallery promotes itself as an innovative space for showcasing new media technology and as such, the site possesses a spatial narrative which reflects that in an indirect way. Conversely, the National Museum at Collins Barracks has a clearly defined historical military context, and maintains a permanent collection on-show. Both sites have specific and separate narratives which permeate each object and event contained within their parameters, and each space presents different challenges. For the artists of the *Lifelogging* exhibition, many had to consider how to exhibit work inspired by sensitive private data, in a public space:

*"The Colour of Life Wall you see here has purposely been developed to not require any interaction from anybody that comes to it; in fact it's been made that because of the fact that it's private data. What you see up on the wall there is images that have been chosen by the wearer that have been deemed safe to show to the public. So we have actually turned off the idea of interaction with the lifelog."*

*(Gurrin, 2015)*

Gurrin explains that a permanent, more-detailed version of the *Colour of Life Wall* is located at the DCU Insight Centre and that this version was reworked specifically to fit the constraints of the site of Science Gallery. The choices he made concerning the form and overall narrative of the piece were made on an 'understanding [of] what would work in this space,' It is not that interaction has been removed completely from Gurrin's work, but in the specific context of Science Gallery, the level of explicit interaction had to be reduced.

Site-specificity refers to the particularities of the physical and conceptual locations of an artwork. When theorising an Interactive Digital Artwork (IDA) it is important to note that although a physical point of interaction might exist - such as a screen on display in a cultural institution which makes an

interface accessible to users, similar to the *Colour of Life Wall*, ultimately defining the site of the work is more complex. Arguably, IDAs are redefining the literal and functional site by straddling both simultaneously, with the most interesting discussion stemming from the ramifications the digital medium presents for the conceptualisation of the latter.

Although the context of the two sites differ, in simple terms one looks backwards while the other moves forwards, indisputably both are affected by and in turn affect the narrative of the objects, events and experiences which take place within their parameters. In order to consider how the site of a work can influence it, consider how *Pals* and the *Colour of Life Wall* might be affected if they swapped locations, (see *fig.1* and *fig.2* for comparison). Would they make any sense at all? Perhaps some, but they are definitely stronger if they remain embedded in their respective sites.



FIGURE 1: 'INSTALLATION VIEW OF THE DORMITORY, PALS' BY ANU PRODUCTIONS AS PART OF RECOVERED VOICES – THE IRISH AT GALLIPOLI AT THE NATIONAL MUSEUM OF IRELAND IN COLLINS BARRACKS



FIGURE 2: 'COLOUR OF LIFE WALL' BY CATHAL GURRIN AND DCU AS PART OF LIFELOGGING\_ DO YOU COUNT\_ AT SCIENCE GALLERY AT TRINITY COLLEGE DUBLIN.



## Chapter 5: Digital Objects: What are they made of?

If the concept of site within IDAs is becoming less tangible in a physical sense, it could be proposed that this is a consequence of the digital medium itself. By nature of the digital medium, the perception of an artwork's form or structure becomes more diffuse; more conceptual, theoretical and abstracted. Inherently, digital artworks are numerical, code based data and data is not a physical object. Often the first encounter audiences have with an artwork is its physical manifestation in the gallery, but as discussed in the above chapter that is just the beginning. Medium specificity theory was developed long before the digital medium was a plausible platform for artists and practitioners to explore at length. Employing Carroll's (1988) reading of medium specificity, this research asks: what is it that the digital medium does best and what differentiates it from other media?

Art about art is a common trope in art history and the challenge presented to the curators and practitioners of the *Lifelogging* exhibition is how to present and curate not only data, but metadata in an interesting and beautiful way (Felton, 2015, Flood and Kelly, 2015, Gurrin, 2015). The 16 artworks curated together in the exhibition explore the themes of digital medium (data, metadata, technology, code, human-computer interactions, security... etc) through the digital medium. In particular Flood and Kelly highlight how some practitioners produce a physical artwork as a means to solidify the abstract nature of data. This theme is continued by the curatorial team who aim to include a considered balance of digital and non-digital work in order to offer the audience a more holistic experience (Flood and Kelly, 2015).

Reasons for working across digital and non-digital mediums vary, but the explanation offered by Felton could be considered as a conventional answer with some unexpected reasoning behind it:

*"It's a question of distribution, I want people to have access to it, and I want it to be in a permanent form. Rather than something on the web... I want this stuff to last 100 years. So paper is the medium I chose... The digital stuff will be around for a long time but it will probably seem more antiquated ten years on then the booklet will. And a booklet will of course show signs of wear, while the digital stuff will remain pristine in its original form but it will potentially seem broken in other ways."*

(Felton, 2015)

Democratic distribution or accessibility is a somewhat predictable answer, but his observation that digital media becomes outdated much more quickly than traditional paper is a very interesting one. Technology from ten years ago is obvious in its archaism even if it is well-maintained, but paper

which is properly stored just doesn't betray its age so easily (see *fig. 3* for an installation view demonstrating how Felton's paper booklets are made accessible to the public). In terms of medium, an artist who uses paper cannot be dated to any specific period of time as easily as one relying on digital interfaces. Additionally, the digital medium is more democratic not only for audiences, but also practitioners; a Dublin-based digital artist notes how accessible digital technology has revolutionised his practice and the practice of his artistic peers (Foy, 2015). In that a laptop can perform the duties of a darkroom, an editing suite, a drawing board, a recording studio and more, but digitally. Of course the medium specificity and form of the final piece is inherently different from film or analogue because it is digital.

In both of the selected exhibitions, physical art objects were actualised as a means for creating a presence within the works, but towards slightly different ends. For many of the artworks presented in *Lifelogging*, visual art objects were created as a means of grounding immaterial and digitally-based data (Flood and Kelly, 2015, Felton, 2015, Gurrin, 2015). They were developed and built with a specific purpose: to perform as technologically enhanced storytelling devices for audiences to interact with. Their form is defined by the technology and also the limitations of the context of the Science Gallery (Gurrin, 2015). Sometimes, the artistic value that has been bestowed upon these pieces of technology is entirely secondary:

*"We are trying to get the computer to do things it can't typically do, by applying state of the art computer science stuff, it's not an artistic activity, it's a computer science activity guided by our poor understanding of what is art. Which is not the case because we don't actually understand what art is. Trust me, I definitely don't know."*<sup>3</sup>

(Gurrin, 2015)

During the interviews conducted around the *Lifelogging* exhibition two main points kept recurring: Firstly, large datasets must be made more beautiful, more interesting and somehow tangible in order to appeal to viewers. Data is immaterial and by converting it to a physical object, it is made more appealing (Felton, 2015, Gurrin, 2015). Secondly, in order to experience an exhibition holistically, these institutions encourages visitors to curate for themselves, to follow a nonlinear path around the gallery. This helps to create unique visitor experiences by blending the digital and non-digital artworks with dialogical interactions (Flood and Kelly, 2015).

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<sup>3</sup> The rest of this quote is: "...I hope my answers aren't as you expected. I know I will have a very different attitude as would the guy who made those pictures on the wall, as he is an artist and I am a technologist."

Unlike the lifeloggers, the team behind *Pals* at the National Museum were working with objects over 100 years old and anything else created specifically for the performance, such as costumes, were replicas of existing objects. These kinds of objects emanate a distinct presence, one that is almost shamanistic in its summoning of the past (Boss, 2015), as opposed to one that prophesies the future. Here objects represent powerful storytelling devices also, but these ones are preprogrammed with the stories of the Irish soldiers in Gallipoli:

*“Over the last couple of days we’ve talked about summoning ghosts or a presence, a memory. And Chrissy Poulter, who works in Trinity on the acting degree, she came to see the show at the beginning and at the end... And she wrote this amazing piece and she sent it to us about being shamanistic and summoning of spirits, and memories.”*

*(Boss, 2015)*

*Pals* is so dynamic, as a result of the juxtaposition between the static collection of objects and their textual descriptions, with a durational and emotionally charged performance piece encompassing audio and video elements created a critically acclaimed visitor experience (Ferriter, 2015, Wallace, 2015).

The artist uses digital art objects as tools for communicating with their audience; locating this aspect of interactive digital artworks within Kwon’s (2004) phenomenological paradigm and Kiousis’ (2002) operational condition. Site and medium raise a number of specific questions for artists, audiences and those who work in art institutions to consider. This process of making a certain choice and not a different one is a form of curation that all parties are complicit in. The next section explores the concept of choice as a form of curation more in-depth.



FIGURE 3: 'THE FELTRON REPORTS' BY NICHOLAS FELTON AS PART OF LIFELOGGING\_ DO YOU COUNT\_ AT SCIENCE GALLERY AT TRINITY COLLEGE DUBLIN.

## Chapter 6: Digital Narratives: Who is involved?

### 6.1 Curation and Making Choices

#### 6.1.1 Curation

Curation can be considered as a method of constructing narratives; when artworks (object-based, experimental, performance-based, data-based, audio, visual or experiential) are placed in any context (institutional, educational, historical, social, political or geographical) connections and connotations immediately begin to incubate and evolve, enabling disparate meanings to be discerned at varying rates by audiences. Barthes and Heath (1977) and Hall (1999) contend that the context defines how texts (or arguably artworks) are received and the roles of authorship are transforming. An examination of two exhibitions, both located within the context of a cultural institution was conducted for this research and the literature review outlined some key texts for interpreting these institutions and some insight into curation can be discerned. Buren (1985) and O'Doherty and McEvilley (1986) discuss the aesthetic, economic and mystical roles that the institution assumes when selecting works for exhibition. Weinberger pinpoints 'the rise of the digital' as a turning point in curatorial practice, tracing the genesis of the collection from a physical assemblage of objects to an unassembled cluster which contains not just the physical works themselves, but also 'metadata about the works' (Weinberger, 2012).

*Recovered Voices* and *Lifelogging* are both multi-media exhibitions based around a collection of objects in particular contexts; historical objects commemorating military histories in the case of the former and objects which envision the technological future in the latter. The *Pals* performance piece immerses the viewer by bringing these objects to life; this is achieved through a combination of the richness and history of the site (the three soldiers whose stories are told actually trained in Collins Barracks as part of D company, they would have marched manoeuvres across the courtyard where the performance begins) with a skilful use of digital media. In particular the soundscape which accompanies the performance and the silent video footage of recovering WW1 soldiers are subtle and very effective (See *fig. 4*, for a photographic representation of the eerie aura ANU channelled in their piece). All these digital and tangible elements are pulled together by a talented cast of actors in the foreground and an invisible back of house team. According to ANU productions, everything is as authentic as possible from the props and costumes to the recordings and found footage (Boss, 2015).

The treatment and use of objects in the *LifeLogging* exhibition is slightly different. Objects were used to give the content (data) a physical manifestation in order to communicate with the audience visually and tangibly (Felton, 2015, Flood and Kelly, 2015, Gurrin, 2015). Many of the data collection techniques employed by the practitioners and the gallery are incredibly abstract and technologically advanced systems of digital media. The challenge for the artists and curators was in converting the data into something beautiful and interesting, as was communicated by the interviewees. As mentioned in the above section, several of the artworks converted digital code back into a tangible form, as a poster or a pamphlet. Both of these exhibitions ultimately faced challenges concerning how to communicate narratives to their audience and how to give the art works a sense of presence.

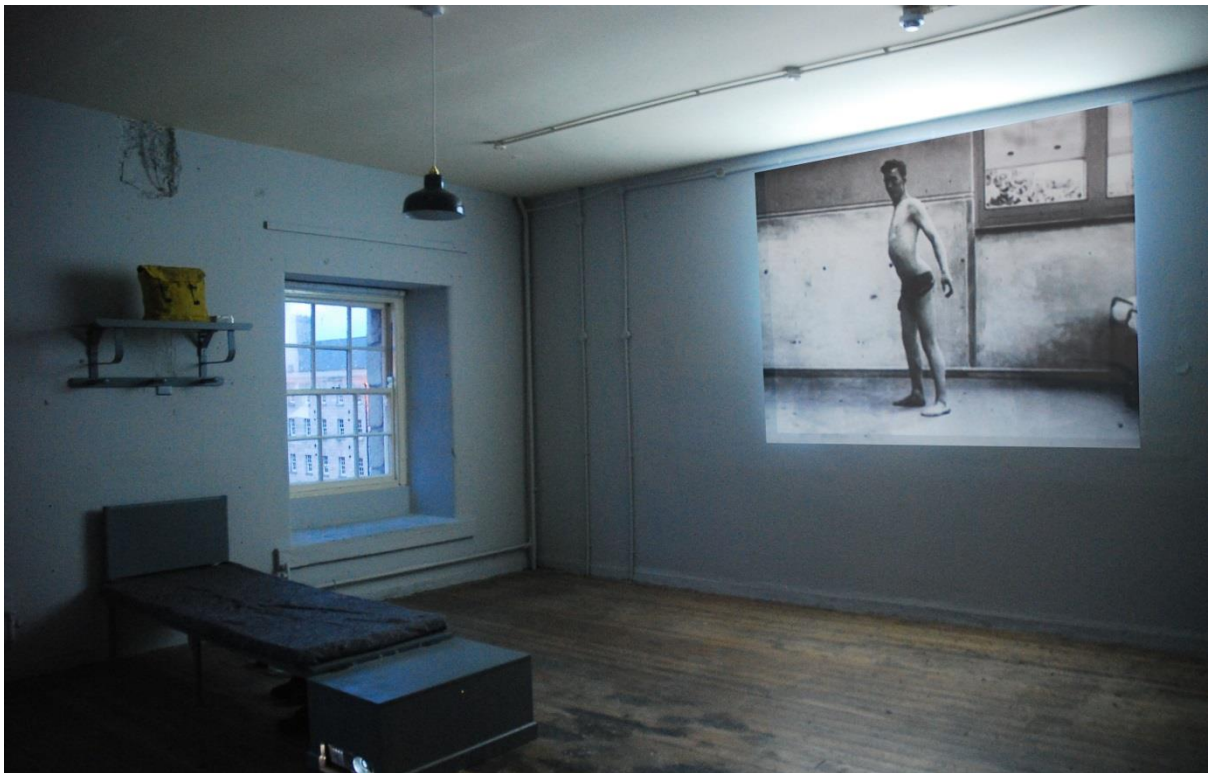


FIGURE 4 'INSTALLATION VIEW OF THE SERGEANT'S ROOM, PALS' BY ANU PRODUCTIONS AS PART OF RECOVERED VOICES – THE IRISH AT GALLIPOLI AT THE NATIONAL MUSEUM OF IRELAND IN COLLINS BARRACKS

### 6.1.2 Self-Curation

In terms of specific artworks within the *Lifelogging* exhibition, two practitioners in particular discussed the role of data-sanitisation in their practice; that is the process of cleaning the data before they could present it in their work. For Felton, this was a process of deciphering not only the most interesting data, but also protecting the wishes of others whom he came into contact with throughout his day (Felton, 2015). Gurrin used participants more expressly in his piece, by collecting data directly from their everyday lives using a camera. This methodology gave rise to a number of data protection questions as the exhibition was contained within an institution (Gurrin, 2015). The participant's sensitive personal data needed to be eradicated, but also some expressed that they did not wish to disclose some more intimate aspects of their lives.

In an exhibition entirely about data these are only two examples, among many, of the questions which confronted the artists and organisers about how to investigate and exhibit this relatively new field of research. Participant's potentially sensitive data is at risk but as of yet, no comprehensive body of laws exist concerning lifelogging. These instances are explicit examples of how artists curate the medium they are working with whether it is their data or the data of someone else. In terms of the data about themselves which arguably belongs to them, it could be suggested that the artists are self-curating, but at what point does the data about other people become the artwork which belongs to the artist too or at least manifests in their name and not the contributors? Once data or participant inputs are part of the artwork and the artist is making choices about their future form it is arguably being curated, long before it is handed to an institution.

Gurrin and Felton's practices are similar in this manner to Manovich's more recent work which has become centralised around his profile as a curator of other people's digital images, his most recent works *SelfieCity* (2014) and *On Broadway* (2015) are demonstrative of this.

### 6.1.3 Curating for the Self

It is now a natural process for us to filter media according to our interests, evidenced by our online interactions; we curate the selection of news, entertainment, social and cultural experiences we engage with digitally (Bikhchandani et al., 1992, Ehlin, 2014). Museum and gallery experiences are no different. In fact museums now actively encourage viewers to explore exhibitions in a non-linear way. Mygind et al. (2015) highlight the role of external mediators as extremely important in exhibitions with a participatory emphasis and this was echoed by the team behind the *Lifelogging* exhibition. The perfect visitor experience was described as taking place in parts over several visits and including at least one conversation with a mediator (Flood and Kelly, 2015). Cultural institutions



are very reliant on their mediators to guide visitors (at least those who ask) through the exhibition. This is done with a view to 'starting conversations' and enhancing the dialogical aspects of artworks, as the invigilator is the arm of the gallery that engages most openly with the visitor. They stand at the front line of the museum's interaction with its audience and modern museum mediators are now equipped with an understanding of communication and audience research techniques (Boon, 2010).

The concept of co-curation encompasses the audience's role in generating the artwork (Boon, 2011) and Duchamp claimed a piece of work is unfinished until it is seen and considered by the spectator (Tomkins and Berdagué, 1999). The rise of the *star-curator*, curators who play a prominent role in the public eye and who often consider their work with artists to be collaborations in themselves (Bishop, 2004) is another element of co-curation. The role of the curator is supplementary to the role of the artist in that it usually occurs after the artist has made an artwork or formulated an idea for an exhibition (there are of course exceptions to this rule). The counter-phenomenon of the artist-curator, an artist who cuts out the middleman and includes curatorial gestures directly in their art practice (Paterson, 2015), could be considered as a reaction to these relationships. Furthermore, the interaction which happens between the viewer and the mediator can also be examined under the same lens and arguably an element of co-curation can be found here too. Similar to the role of the curator, it could be suggested that the role of the mediator is supplementary to the viewer's role in the experience, without the viewer's presence there would be no need for mediation. In this way there are a number of similarities between the two relationships: artist and curator, viewer and mediator.

Exhibitions like *Lifelogging* are laid out in a manner that aims to encourage visitors to follow non-linear trajectories around the exhibition space, enabling them to curate their own personal and fragmented narratives; the types of narratives theorised by Lopes (2009) and (Preston, 2014). It follows that the experience of the exhibition is very important, and consequently the presence of the audience, as Duchamp suggested, is more significant than ever to modern museums and galleries.



FIGURE 5: 'VISITOR IN 'THE LAB' AS PART OF LIFELOGGING\_ DO YOU COUNT\_' AT SCIENCE GALLERY AT TRINITY COLLEGE DUBLIN.

## 6.2 Transforming Roles

This section has proved the most difficult to articulate, and yet it was the most persistent recurring theme of both the literature review and the interviews. It is the suggestion that the roles or position of the artist, the audience and the institution, have undergone a shift where traditional artworks and interactive digital artworks are compared. As indicated in the literature review, the traditional role of the viewer as the passive source of the gaze has been transformed into an active role as an interactive participant. Participants and institutions are engaging in mutual exchanges and acts of the experience economy. Participatory experiences are self-generating in terms of content for the institutions and in exchange, participatory audiences demand more from their museum experience and they expect to be entertained and challenged, in an obvious and explicit manner (Kotler and Kotler, 2000, Hughes, 2001). If the active participant transforms into a co-curator or co-author (Boon, 2011) and now assumes a larger part of the work load, how does that affect the role of the artist?

As stipulated in the literature review, Barthes's (1977) dissolution of the autonomous author can be used as a lens with which to understand the accession of the eponymous artist. Despite the perceived increase in artworks which employ a *collaborative* philosophy of co-authorship and co-curation within the context of cultural institutions, the overall artwork continues to be attributed to the individual artistic mind (the lone artist or artistic collaboration) who conceptualised the work. This is not a new phenomenon: all the masters of the Enlightenment had studios full of students to do the grunt fresco painting work, Duchamp conceived of the *Readymade*, Andy Warhol had *The Factory* and, Jeff Koons and Damien Hirst are not the only prolific artists who have "studios" which employ hundreds of people so they don't need to touch their artworks until they sign them. Since the legitimisation of the readymade as an art object, the essential meaning of authorship has been explicitly altered.

Indeed, some of the interviewees don't even identify primarily as artists, a proportion seem uncomfortable with the term *artist* entirely, and prefer *practitioner* instead; they identify primarily as designers, researchers or technologists. Their apprehension to align themselves with the art institution could be interpreted in several ways. Perhaps like Gurrin, they view themselves primarily as something other, which in his case is as a technologist (Gurrin, 2015). Alternatively if their practice has come to encompass elements far beyond a traditional art practice and they often find themselves exhibiting in spaces outside of the cultural institution and within a totally different context, like the ANU collective (Boss, 2015). As the range of work which institutions choose to add

to their collections and subsequently choose exhibit to the public expands, the scope of different *practitioners* included in these exhibitions will continue to change.

Trying to discern the parameters of individual roles is not the goal of this research, but the topic could be an interesting consideration for future research. How do we define the identity of the artist, for example? Is it the person who conceived of the work, the person who made it or with all these new forms of digital media, is even a person at all? In a broader sense, by examining the roles within the contemporary art institution of artist, audience, curator, object, in terms of their relation to one another, there is an indication that they are not clearly defined or completely separate.

### **6.3 A Note on Discourse**

Over the last 50 years, the definitions of artist and audience; curator and co-curator; object and experience, have collapsed into one another. Arguably, within the context of certain cultural institutions this is a result of these institutions catering for their audiences' *anticipation of experience* (Kirchberg and Tröndle, 2015) which sees them develop cultural programs with an emphasis on active and participatory events over passive showcases of objects. As a result, the roles and locations of the artist, the art institution, the audience and the art object within contemporary art practices have dramatically transformed, more than any other period of the same length in the history of art. Imagining each position as a node in an overall network, it is the interplay and communication between all four that is located within Kwon's (2004) third paradigm of site-specificity, the discursive, and Kiousis' (2002) conceptual condition of interactive environments. This research is part of that discourse.

## Chapter 7: Conclusion

It was the intention of this paper to investigate the specific conditions of interactive digital artworks in the context of cultural institutions. Qualitative analyses of two exhibitions were undertaken as a methodology which combined primary and secondary sources in order to generate case-studies that offered a richness of depth and content for investigation. It was found that artworks are affected by a number of factors which also influences how they are received by audiences. These findings were not unanticipated. The concern of this research was to identify what those factors might be and how they might be deconstructed articulately. Three themes were identified: site, object and audience, as a set of rubrics into which the findings and subsequent discussions were distilled.

Site and site-specificity were theorised using a consolidation of Meyer's (2000) theory of the functional and locational site, Kwon's (2004) thesis on the subject of site-specificity and Kiousis' (2002) model of interactivity. Medium and the presence of the digital art object were examined using medium-specificity theory to discern what interactive digital artworks do that is different from other media and how they might perform better than other media. It was found that when content or medium is digital, there is a requirement for a physical art object in order to make the piece more accessible for viewers. Ultimately, a combination of both digital and non-digital media will create an exhibition that engages viewers on many different levels. Once site and medium were established, the last chapter considered who was participating in these exhibitions, the artists, curators and audiences. It was suggested that each take part in acts of curation, or choice making, which results in exhibition experiences that feel bespoke and unique to audiences. Finally, the roles of artists, curators and audiences were investigated.

It should be noted that the research conducted for this paper was limited by time constraints and the scope of the research itself. By consequence of the specific time period of this research, the case studies were selected from a small selection of exhibitions which were happening in Dublin at the time. In order to further pinpoint the specialisation of this research, it was decided that the interactive digital artworks would be the focus. The omission of other types of artworks and other exhibitions by no means suggests that the phenomena discussed herein do not occur elsewhere also.

The areas of 'interactive' digital' and 'artworks' reviewed in the early stages of research provided a wealth of individual texts for analysis, further studies could explore their intertextuality in greater detail. Kwon (2004) and Kiousis' (2002) theories informed much this research, but the comparison of their frameworks was by no means conclusive, the relationship between the two texts could be

exploited further. A review of the literature highlights the need for a conclusive model of interactivity designed specifically for interactive digital artworks.

As themes, the 'site', the 'object' and the 'audience' of an interactive digital artwork have the potential to stand as individual investigations in their own right, as their realisation in this paper is restricted to short chapters. Interviews were conducted with "artists" and professionals concerning their work in museums and galleries only; future research may include different sites or audience questionnaires and testimonials by way of enriching the data further.

The decision to conduct qualitative research through a series of semi-structured interviews provided a rich vein of data, but one that is subject to interpretation, especially my own. As a graduate of Fine Art, my biases are evident in the prevalence of texts included in the literature review which tend towards art theory. My interpretations of many of the interviewees meant that I considered them as artists, even though some did not identify as such.

As already iterated, this research is part of Kwon's (2004) discursive paradigm of site-specificity and Kiousis' (2002) conceptual condition of interactive environments, mainly as a result of the interviews which offered a wealth of anecdotal and original evidence concerning the social and cultural impact of these artworks. For example, the *Lifelogging* exhibition inspired many of its visitors to partake in their own lifelogging experiments, some of which they uploaded online for maximum distribution (Lynch, 2015). A 93 year old woman who attended the *Pals* performance and brought her father's medals and explained to staff how she had never felt comfortable talking about his service in WW1 (Boss, 2015). The performance was also attended by the great grandson of a soldier who is named in the play; a name which has subsequently been passed down through their family and given to this man (ibid). Anecdotal tales of their work enduring beyond the physical and temporal boundaries of the site sometimes trickle back to artists; it's all part of the process and a sign of things coming full circle (ibid). This research was conducted in an interdisciplinary manner, which is reflective of the multimedia practices it investigated, something that could potentially be developed as an effective as a methodology for future research.

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