

To what extent has new media been a driver of change in art and society

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Abstract

This thesis will demonstrate that new media has been a driver of change in the arts and society. In order to prove this, I will explore specific examples of new media art from areas of the world characterised by complex political circumstances and connect new media with the European avant-garde art tradition. These case studies embody a synthesised notion of new media and illustrate the ways new media has challenged artistic and technological convention, and increased access to new media has resulted in growth for a burgeoning community of artists. These transformations can be particularly seen in areas such as Russia and the Middle East, where the integration of new media technology into society has caused a dramatic change in the ways in which people create new art forms and engage with new media technology. These examples demonstrate that new media has become a primary force in driving change in art, social interaction, world views, and politics. I will also outline some fundamental characteristics of new media and explore contrasting definitions of new which are often contradictory and derive a clearer consensus of what new media is and outline an understanding of new media that is embedded in art. New media has driven an "extraordinary transformation of the ways in which our culture, and the creative works that define it, are expressed and communicated,"¹ and is a central focus in understanding the effect of new media on the global landscape of contemporary art practices.

¹ Francis Gurry. "The Global Digital Content Market". (speech, Geneva, Switzerland, April 20-22, 2016. <https://www.youtube.com/watch?v=iBLJYY0t1vQ>. 03.03.2017

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I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

A history of new media and its fundamental characteristics

Access to new media greatly increased during the 1970s during the Microcomputer Revolution which gave individuals unprecedented access to new forms of technology, and this was driven by technological advancements in computing power by companies such as Intel.² This revolution gave artists a wide-variety of new and innovative ways to explore the intersection between new media and society, and the new media art community has since blossomed in abundance. This has taken place across the globe, and there has been a great transformation in areas characterised by complex social, political, and artistic circumstances, and new media lies at the root of many of these changes. New media art in Russia and the Middle East has explored the complex ways in which new media has become integrated into the cultural fabric of society, whilst also critically commenting on the changing political and social circumstances of the areas. The contextual, historical, and stylistic features of new media art demonstrate that not only is there a pervading global new media art collective, but that new media has also been a significant driver of change in recent decades, and an understanding of new media art can elucidate the complex ways in which new media has transformed art and society.

There was an increased emphasis on the electronic arts in the late 1970s and early 1980s that stemmed from a variety of online art communities and digital art institutions. For

² Jensen, Richard. "The Microcomputer Revolution for Historians." *The Journal of Interdisciplinary History* 14, no. 1 (1983): 91-111. doi:10.2307/203518. 13.5.18

example, the electronic arts festival *Ars Electronica* was founded in 1979, and held biennial festivals to showcase the interlinkages between art and technology. Since 1986, the festival has been held annually, and has become one of the largest and most far reaching digital art festivals in the world, and their online archive has a plethora of extensive and informative on new media and digital art. At the festival, a variety of different forms of new media art are shown, including instillation pieces, such as the *Deep Space 8K* exhibition, which uses 8K resolution imagery to create immersive digital environments,³ which is an example of the experimental and radical kinds of art works that characterises the *Ars Electronica* festivals.

During this time many art galleries and online communities began to cultivate collections of new media art. Whilst many art galleries maintained traditional forms of displaying new media art and artistic expression, other communities developed online and showcased new media art in non-traditional ways. New media art was not confined to the white-cube of established art galleries, and a significant partition of new media artists developed and showed their works online. As well as a variety of new media art exhibitions and initiatives, an increasing amount of online new media art collectives began to emerge around this time. *ALTX*, which was created in 1993, became a home for new media art and a critical writing archive for students and theorists to publish ongoing work projects. These decades marked a distinct period of growth for new media art which grew directly in tandem with an increased engagement with new media and particularly the internet. Artists were

³ Ars Electronica. *Deep Space 8K*. <https://www.aec.at/center/en/ausstellungen/deep-space/>. 16.4.2018: 09:48

able to interact with one another across the world on an unprecedented level, and it was becoming evident that new media was having a revolutionary effect on many groups of artists. These changes in exhibiting art also marked a transformation in the way that many experimental art practices were experienced, in that art was moving from the traditional parameters of the white cube and established art institutions, to a more accessible paradigm that was located on the internet.

Despite these developments it was not until the 1990s that new media art experienced its most significant period of change, during which the themes of global connectivity and the increasing convergence between technology and digital culture were being explored by a burgeoning new media art community.⁴ This was often demonstrated by the Russian artist Olia Lialina, who explored the internet's capacity to connect people across the globe and create new art in the process. Olia Lialina was raised in the Soviet Union during a time of intense global tension and used early internet art to question the way the internet could be used to connect people and narratives. This was particularly demonstrated in her 2004 art work *Online Newspapers*,⁵ which is a webpage formed from various newspaper from across the planet and connects media forms from a variety of different contexts. During this period of growth for new media art, technology was developing at such a rapid pace, and because of this it has been often difficult to derive a consistent definition of new media. In *The Language*

⁴ Shanken, Edward. "Contemporary Art and New Media: Digital Divide or Hybrid Discourse". Christiane Paul ed. *A Companion to Digital Art*. (Wiley-Blackwell) 2016. p. 463.

⁵ Olia Lialina. *Online Newspapers*.
http://art.teleportacia.org/exhibition/online_newspapers/ 16.4.18: 09:57

of New Media, Manovich proposed that new media includes “websites, computer games, DVD, and virtual reality,”⁶ or “multimedia, and human-computer interfaces,”⁷ and this emphasis on specific new technology has also been argued for by Harries, who includes the “internet, DVD and digital television.”⁸ Both these critics demonstrate a technologically determinist understanding of new media which separates new media from its larger social and artistic applications.

In order to demonstrate the ways in which new media has driven change, it is essential to outline some of the fundamental characteristics of new media. Firstly, new media is inherently interactive. New media creates new kinds of engagement with digital media technology in comparison to previous forms of media technology (such as television, newspaper, and radio), particularly by putting user interaction at the centre of its functionality. Social media exemplifies this, as it creates new opportunities for individuals to interact with one another in a digital space and expands their means of communication. This in turn allows for far more dynamic modes of interaction beyond more traditional forms of media are capable of doing. Whilst many forms of digital technology act as essential apparatus for new media, it is the way these technologies are used to form networks of communication that new media derives specificity and exclusivity. These forms of audience engagement in an artistic context as a means of deriving a certain art experience echo Roland

⁶ L. Manovich, *The Language of New Media*. (USA: MIT Press) 2001. p, 19.

⁷ Manovich, Lev. *The Language of New Media*. p. 8-9.

⁸ Dan Harries, “Preface” in *The New Media Book*. ed. Dan Harries (London: British Film Institute) 2002. p. ix.

Barthes' *Death of the Author*, where Barthes argues against the centrality of the artist as the sole creator of a work, and instead stressed the audience of the reader, the audience, or the viewer in the creative process. This trend can be seen widely in the internet, where "websites like YouTube and Facebook appear to reflect this understanding of 'participatory culture,'"⁹ but also highlight new media's wider engagement with the critical and artistic context of the twentieth century. Therefore, it is no coincidence that many new media artists choose to use new media to engage with the questions of audience participation and networked creativity, particularly given that an artistic precedence was set in the twentieth century that encouraged many artists to do so.

The interactivity of new media is particularly highlighted by its ability to transform older media forms. As television, film, and newspapers became increasingly common place, the ability for people, societies, and cultures to communicate and interact with one another grew, but these media forms relied heavily on analog broadcast models which created natural physical limitations. However, new media and the internet allowed for individuals and societies to communicate far beyond their traditional societal, economic, and physical boundaries, and allowed for the exchange of information and cultural values to be instantaneous, which represented a dramatic transformation between old and new media. As new media forms increased in usage and abundance, many traditional media forms have had to adapt to the changing social and technology climate. These developments and "widespread

⁹ Creeber, Glen. In *Digital Culture: Understanding New Media*. "Digital Theory: Theorizing New Media". (United Kingdom: Open University Press) 2008. p. 19.

adoption of new organisational media have prompted questions about the role and effectiveness of both traditional and new (online databases, electronic mail, voice mail and videoconferencing) organisational communication channels.”¹⁰ This core element of new media has proven to both bring about new methods and means of communication and interaction, but also transform older media forms. Traditional newspapers have had to transfer content online, as well as maintaining physical publishing requirements and highlights how the perceived dichotomy between new and old media doesn’t have any pragmatic application, but new media has brought about an increased convergence of old media forms during its growth. Social media optimises anyone’s ability to use these communicatory platforms in ways that were not previously possible. These forms of communication media “overcome various communication constrains of time, location, permanence, distribution and distance.”¹¹ The active role that these new media communication forms take in both enhancing and creating relationships and networks imitates a social presence that transcends traditional time, space, distance dynamics. In this case, ‘social presence’ refers to “the degree in which medium is perceived as conveying the actual physical presence of the communicating participants.”¹² However, it is not only social media that exemplifies new media’s interactivity, as interactivity has also become a key feature of many works of new media art.

¹⁰ Rice, Ronald E. "Task Analyzability, Use of New Media, and Effectiveness: A Multi-Site Exploration of Media Richness." <http://www.jstor.org/stable/2635112>.

¹¹ Ibid.

¹² Ibid.

An emphasis on audience engagement was influenced by the interactive and cooperative art practices which were prominent during the 1990s. Bishop recognised a trend at this time and argued that “even if a work of art is not directly participatory, references to community, collectively and revolution are sufficient to indicate a critical distance towards the neoliberal new world order. Individualism, by contrast, is viewed with suspicion.”¹³ This has become a common characteristic of new media, where “websites like YouTube and Facebook appear to reflect this understanding of ‘participatory culture,’”¹⁴ and also highlight new media’s wider engagement with the critical and artistic context of the twentieth century. Swiss artist Carina Ow’s work *Plane White* is an installation work using digital technologies to recreate Kandinsky’s *Composition VIII* in a virtual space. This gives Kandinsky’s original work added interactive dimensions, by allowing the audience member experiencing the work to engage both physically and spatially with an art work that was originally limited by the primacy of its medium, namely canvas. This work engages with “new display strategies and the potential of new media... that the art space could go beyond the recurrent white cube and appropriate elements from experience based exhibition concepts.”¹⁵ By expanding Kandinsky’s work beyond the inherent limitations of the canvas, the mixed-media work *Plane White* redesigns the “real-virtual boundary between the visitor and the digital dimension.”¹⁶

¹³ Claire Bishop. *Artificial Hells*. (Verso: 2012) p. 11.

¹⁴ Creeber, Glen. In *Digital Culture: Understanding New Media*. “Digital Theory: Theorizing New Media”. (United Kingdom: Open University Press) 2008. p. 19.

¹⁵ Architizer. “Plane White”. <https://architizer.com/projects/plane-white/>. date accessed 8.5.2017

¹⁶ Ibid.

Plane White also exhibits how digital technologies have become more embodied in the interactions between people on a daily basis. By "retaining the use of natural/familiar interaction motions, a direct association is established with familiar gestures found in quotidian life, facilitating comprehension of the manoeuvring of the interface."¹⁷ The interplay between the virtual and analogue environment challenges the conventions and orientations of the traditional 'white cube', and by incorporating these new media technologies creates an embodied form of digital information. Digital technologies have already set a precedence in changing the boundaries of traditional analogue environments; we live in a world that is "filling with ever more kinds of media, in ever more contexts and formats. Screens large and small appear just about everywhere... physical locations are increasingly tagged and digitally augmented."¹⁸ The connection between analogue environments and digital ones is where the success of Ow's work lies in reimagining the past, because by reinventing a historic work, *Plane White* directly addresses the present contemporary issues facing digitally engaged society. The canvas, a traditional centrepiece of the white cube, becomes instead the interface, where "new forms of interface reconnect to the world around - not just coordinates or tags for places to go, but also a dense aggregation of other technologies about environments."¹⁹

The inherent differences between new media and old media forms have often become blurred. In Syria, many "artists have harnessed new and old media as well as the public space

¹⁷ Ibid.

¹⁸ McCullough, Malcolm. *Ambient Commons*. (USA: MIT Press). 2013. p. xi.

¹⁹ McCullough. *Ambient Commons*. p. 8.

to make visible the contours of a more meaningful politics and aesthetics,”²⁰ and the Civil War has seen in increasing convergence between new media and traditional style broadcasting companies being created. This suggests that there exist misconceptions about new media due to a problematic dichotomy between ‘new’ and ‘old’ media forms, which subsequently permeates many interpretations of new media. In order to reach a definition of new media that is consistent with the way it is used and its related artistic practices, then the relationship between new and old media needs to be broken down even further. Instead of deriving new media from what is old media, a more accurate definition of new media can be found in analysing what is ‘media’ in its most fundamental sense. New media can be communication tool, but it also changes old tools for communication, and in many ways gives them new meaning, and is further evidence of the fact that new media has had a transformative impact. The term ‘media’ is originally derived from ‘medium’, but the meaning of the term has expanded to accommodate a variety of social institutions, practices, and technologies that are often the carrier of information.

New media is often attributed inaccurate or incorrect characteristics. In Manovich’s *The Language of New Media*, significant credence is given to critical approaches to new media from a Eurocentric perspective that basis its evidence around European films makers and experimental artists,²¹ but there is no acknowledgement of new media practices in its

²⁰ Dina Matar. “A Critical Reflection on Aesthetics and Politics in the Digital Age”. in *Uncommon Grounds: New media and critical practices in North Africa and the Middle East*. ed. Anthony Downey. (London: I B Tauris & Co Ltd) 2014. p. 164.

²¹ Manovich. *The Language of New media*. p. 129-130

larger global contexts. In other instances, contradictory definitions of new media are given, such as the incompatible definitions suggested by Manovich or Harries. These factors perpetuate large misconceptions about the term and what it actually means, and as such better clarification for new media is essential to understanding how artists have adopted it for artistic practices.

New media artists across the world demonstrate how new media art has continually represented these fundamental characteristics, and further exemplify how new media has been at the heart of a variety of technological, social, and artistic change. New media alters art practices and further lends itself to an inherent process of change that affects humans and society in a variety of different ways and is often most effectively manifested in the variety of art practices that it lies at the root of.

Russian new media art and the Internet

During the 1990s the internet was becoming far more accessible and available to mass consumer markets. At the time, internet usage was growing at a drastic rate, and it is estimated by the World Bank that between 1996 and 2000, internet usage increased across the globe from 74 million people to in excess of 400 million.²² During this period many new media art communities were created and grew. The internet has become one of the biggest drivers of change in the modern world; it has changed the way many people create and experience art, fostered a large amount of new media art communities, and has also connected people on an unprecedented level.

Many new media artists have used the internet as a creative tool, and a platform for showcasing "some of the diverse methods by which artists have created and shaped cultural expression by using the internet."²³ New media has also drastically increased universal access for individuals and collectives to exchange information, cultural practices, and values, and at the heart of this global convergence of different cultures lies the internet. The internet is the central tool in an information society, and with this came much foresight of prosperity, as the "idea of a world being transformed from top to bottom up by new forms and uses of socially-

²² *Internet*. Julia Murphy and Max Roser. World Bank. International Telecommunication Union, World Telecommunication/ICT Development Report and database. <https://ourworldindata.org/internet>. 15.4.2018: 14:40.

²³ Greene, Rachel. *Internet Art*. (UK: Thames and Hudson) 2004. p. 10.

relevant information continues to fuel steady stream of commentary directed at general audiences."²⁴

Since the growth of commercially available internet in the 1990s, it has become the most dominant platform for people to interact with other people and cultures, exchange art, and share content on the planet, and a significant reason for this is because information can be transferred incredibly quickly. The internet has its own culture(s) and values; internet artists and online art communities are not defined by nationality and artistic style period in a traditional sense, but instead by online aliases, and the shared online platform as a communal meeting point. Whilst this does break down traditional boundaries that have historically separated art practices, it also offers an exciting opportunity for new global networks of communication in cyberspace; "manifesting itself on computer desktops anywhere in the world but rarely in museum halls and white cube galleries, where the past two centuries have suggested we look for art."²⁵ By analysing the artistic practices of the internet one can reach a more accurate representation of the ways in which communities and individuals formed its values and practices, and offer the most insightful representation of the internet's cultures values, social practices, and its art forms.

Internet art and new media art are not strictly the same, but from a historical and stylistic perspective there is significant overlap between new media art and internet art. On a fundamental level, internet art is either an art work that uses the internet as a platform and

²⁴ Rule, James B., and Yasemin Besen. "The Once and Future Information Society." <http://www.jstor.org/stable/40211041>. Date accessed: 24.10.2017

²⁵ Ibid.

mode of displaying work, or an art work that investigates the underlying sociological and philosophical implications of the internet at its core. As internet art became increasingly assimilated into an emerging new media art canon, the early internet artists began to create far more specific qualifiers that defined the art form, and a vocabulary emerged that was based around the kind of work that artists were producing and the culture these artists was fostering. Internet art was commonplace, but 'net.art' emerged as a term to describe a unique group of Russian and Eastern European internet artists.²⁶ Various categories of interdependent but fundamentally different approaches emerged to address how the internet could be used for art, and internet art often suffers from conflation with other digital and new media art practices, despite the fact that internet art in itself should be defined as art for, by, and through the use of the internet. Internet users and artists are increasingly "turning to online environments to find information"²⁷ over traditional information sources, and as such the overlap between the internet and new media can often be indistinguishable. An understanding of internet art practices with an integration of new media is evidence of the fact that new media has transformed both art and society, and will continue to do so in tandem with internet growth, and as new media becomes a primary source of information and art.

²⁶ Greene. *Internet Art*. p. 52.

²⁷ Brossard, Dominique. "New Media Landscapes and the Science Information Consumer." *Proceedings of the National Academy of Sciences of the United States of America* 110 (2013): 14096-4101. <http://www.jstor.org/stable/42713437>.

Internet art engages with the culture of the internet that has become increasingly related and dependant on the cultures of the real world, as it is “intertwined with issues of access to technology and decentralisation, production and consumption.”²⁸ During the 1990s, internet art was often just a way of exploring the technological capacity of the internet, such as the *Jodi* art collective, which was designed to explore the architectural limitations of HTML protocol, but as internet art broke away from avant-garde art communities it began to address the wider political and social issues in the context of the time. This is one of the primary themes that internet art shares with new media art. As the internet evolved through the 1990s, its assimilation into the everyday lives of individuals represented an essential feature of the larger notion of new media used today. Exploring the themes consistent with internet artists and similarly new media artists can therefore elucidate the complex ways in which the internet is becoming increasingly aggregated with new media forms. Therefore, internet art has come to represent an important historic convergence between new media and internet art forms, and because of the prominence of the internet in organising and manufacturing the wider global culture.

Internet art had a huge breakthrough when graphical internet browsing became a regularity, and it is not coincidental that many of the internet art communities that have since become directly associated with the culture of the 1990s. The internet in many ways represented unwelcome social change just after the collapse of the Soviet Union, and many

²⁸ Ibid.

artists at the time "openly disavowed the consumerist, utopian, and often apolitical content of dominant internet discourse."²⁹ The early Russian internet art was linked with the "technology and politics of the 1990s and early twenty-first century,"³⁰ and this context encouraged "a number of artists to make polemical statements and gestures to attack norms of the art establishment."³¹ Early internet culture lent itself to the same social conventions that the term 'net.art' was born out of. The anonymity of the net meant that people used usernames and pseudonyms whilst interacting with people online.

The earliest net.art practitioners were based in Russia and Eastern Europe, and it is from these artists that the neologism 'net.art' was created. According to Greene, the term net.art was coined by Vuk Ćosić, after "coming across the conjoined phrases in an email bungled by a technical glitch,"³² and "offered ways for Russian new media artists to communicate beyond their borders and reinterpret the net in their own ways."³³ The Russian roots of net.art is an often neglected fact amongst those critically assessing the origins of internet art and new media, with some limiting its origin to just "after the invention and wide take-up of web browsers in the 1990s."³⁴ Many of the early Russian net.art communities recognised the democratising effects of the internet and the notion of the freedom of information, and the Soviet's subsequently aimed the advancement of technology towards a

²⁹ Greene. *Internet Art*. p. 52.

³⁰ Greene, *Internet Art*. p. 31.

³¹ Greene, *Internet Art*. p. 53.

³² Greene, *Internet Art*. p. 55.

³³ Greene, *Internet Art*. p. 36.

³⁴ Stallabrass, Julian. "THE AESTHETICS OF NET.ART." *Qui Parle* 14, no. 1 (2003): 49-72. <http://www.jstor.org/stable/20686165>. Date accessed: 24.10.2017

way of educating "new, proletarian specialists, on whom the Soviet regime could rely wholly and completely in its grand work at the construction of socialism."³⁵ After the Russian Revolution in 1917, Constructivist artists moved away from art as a means of creating art objects, but instead looking at the fundamental process of creating art. Artists at the time claimed that "it is a frequent complaint addressed to abstract, geometric art that it has failed to maintain contact with humanity."³⁶ This implied that art has an inherent impurity in its geometrical form. Whilst there was no direct relationship between the Constructivists and early net.art, the Constructivists had distinct artistic and intellectual influence on net.art which shaped the climate that twentieth century Russian artists would be educated in. From a stylistic perspective net.art and internet art often distanced itself from geometric form, in favour of a playful interaction with the internet as both the form but also the process of creating art.

The Constructivists believed that art had an inherent linguistic property in its ability to communicate on an abstract level, and that "principles could be established that would enable the systematic structuring of properties."³⁷ An implication of this idea is that under Constructivists principles, art has an underlying grammar, and "in art as in language, the system was believed to be made up of component parts."³⁸ Constructivist art reflected the

³⁵ Joravsky, David. "The History of Technology in Soviet Russia and Marxist Doctrine." *Technology and Culture* 2, no. 1 (1961): 5-10. doi:10.2307/3101294. Date accessed: 24.10.2017

³⁶ Author not given. "Constructivism and the New Man". in *The Tradition of Constructivism*. ed. Stephen Bann. (The Viking press) 1974. p. xix

³⁷ Ibid.

³⁸ Ibid.

belief that art "required a familiarity with the idea that the system of art was of a geometrical order and that a function of art could be to lay that system bare."³⁹ This acute attention to the process and interactive qualities of creating art are a distinctive feature of the early Russian net.art, and show the historical lineage between the two modes of thought. Russian's net.art scene also illustrates many of the Constructivist principles realised in the extreme; an absolutists attention to the *systems* of art creation, which in a contemporary context take on the form of technological devices and internet connected networks. Net artists Alexei Shulgin's work *Form Art* is an interactive website that attempts to show the logic of HTML forms. The interactive elements of the website "appear in the guise of menus, checkboxes, radio buttons, dialogue boxes and labels,"⁴⁰ and the artwork plays on the fact that there is no ultimate object, but instead an interactive process in which lies 'the art'. There is not a direct connection between Constructivist art and early net.art, but the characteristics of each show a genuine trajectory of artistic intention that develops through the context of Russia's twentieth century, and it was in light of these principles that emerged during the 1920s that many of Russia's landmark art forms would be influenced. Avant-garde film also had an influence on net.art. As the twentieth century progressed, Russia developed a rich and vibrant avant-garde film culture, that "schooled many young artists in narrative and creed-centred visuals that could be extended and reconsidered on a computer screen with more interactive capability."⁴¹

³⁹ Ibid.

⁴⁰ Artsy. <https://www.artsy.net/artwork/alexei-shulgin-form-art>. Date accessed 15.4.2017: 20:16.

⁴¹ Greene, *Internet Art*. p. 36.

Olia Lialina's *My Boyfriend Came Back from the War* (1996) is an example of net.art that shows an attention to the techniques and formulas that were influenced by avant-garde film. The work tells a bleak dramatic romance narrative of a lover returning home from the war to a failing relationship. The work utilises primitive technology, as it was made at a time "when the web could support only the simplest graphics and text."⁴² The dynamic between the couple is given structural articulation by the dividing frames as we follow different links, meaning that the "two images enter into new combinations with texts and images themselves engendered by the user's interaction with the site."⁴³

As the internet became increasingly more accessible across the globe, internet art gradually broke into mainstream artistic communities, rather than previously being at the fringe of avant-garde art circles. Exhibitions began to showcase works of internet art, one of the earliest being *Net_condition*, which was held in 1999 "at a time when the hype surrounding the Net as a new economic force had taken on the character of collective hysteria."⁴⁴ The purpose of *Net_condition* was not specifically geared towards showing the newest technological capabilities of the internet, but instead show the internet might be used to bring about political and social change as a universal platform. The political and economic circumstances of the time were of particular interest to net artist Daniel Andújar, and further shows internet arts engagement with social justice issues. His work *Technology to the People*

⁴² Green, *Internet Art*. p. 36.

⁴³ Manovich, Lev. "Behind the Screen". http://manovich.net/content/04-projects/018-behind-the-screen-russian-new-media/15_article_1997.pdf. 1997. Date accessed: 24.10.2017

⁴⁴ Baumgärtel, Tilan. [*net.art 2.0*]. (Nürnberg : Verlag für Moderne Kunst), 2001. p. 10.

was shown at *Net_condition*, and is a virtual company that exists only as an artwork, but is aimed to provoke discussion about the homeless, orphaned, mentally inhibited, and other “undesirables.”⁴⁵ *Technology to the People* aims to enable those who wouldn’t normally have access to the newest technology for economic or political reasons a chance to do so, and is an example of the kind of aims early net artists had when using the internet as a means to create art. As well as being an exhibition about positive force for social change, the division of the real/virtual binary was also an important focus of *net_condition*. It has been claimed that “*net_condition* is about how events in real space and events in the virtual ‘space’ of the net react to each other, trigger each other, or just collide.”⁴⁶

Works such as James Stevens’s *Backspace*, is both a physical installation on London’s South Bank and an online space for national and international net art projects. The creators of *Backspace* claim that the work has the aim of “promoting aesthetic inventiveness and radicalism beyond the institutional framework.”⁴⁷ A significant portion of early net artists chose to showcase their work in established art exhibitions which represented a challenge to using the internet as the sole platform for net art. Whilst *Net_condition* was a pioneering event for early net art, it seemed contradictory to not use the internet as an exhibition platform, but coherent web browsers at the time were often primitive, and “after the first

⁴⁵ Andújar, Daniel. http://on1.zkm.de/netcondition/projects/project01/default_e. Date accessed 11.5.2017: 10:12.

⁴⁶ ZKM. http://on1.zkm.de/netcondition/start/language/default_e. date accessed: 11.5.2017

⁴⁷ ZKM. http://on1.zkm.de/netcondition/projects/project03/default_e. date accessed: 11.5.2017

experiments with Web sites, the browser rapidly became the unavoidable framework for net art in the eyes of the artists.”⁴⁸ As these issues became apparent for artists who wanted to represent their work in different forms, the internet would quickly create a solution for its own problem. ‘The Web stalker’ was created between 1997-1998 for manipulating different representational forms on the World Wide Web. The software was designed specifically for artists, and “is a unique example of the re-visualisation of data-space at a deep level by artists.”⁴⁹ ‘The Web Stalker’ was the “first ‘art browser’ to call into question the conventions of representation on the internet on a much more fundamental level than any work on the web was able to,”⁵⁰ and allowed users to see the fabric of the internet from a different perspective. Traditional web browsers such as Microsoft’s Explorer and Netscape’s Navigator were not designed in the same way for artists, so in order to make themselves usable and convenient for the consumer, covered up many of the technical details that ‘The Web Stalker’ would allow people to now visualise.⁵¹ As more programs of this type would emerge, the theme of representation on the internet sphere would become gradually more radicalised. The Jodi art collectives seminal work *Wrongbrowser* “present websites altered so radically, they’re barely recognisable as such at all.”⁵²

As well as artists using net art as a platform for social change, early internet artists were also interested in using the internet to enhance connectivity and interactivity between

⁴⁸ Baumgärtel, Tilan. [*net.art 2.0*]. p. 30.

⁴⁹ V2. <http://v2.nl/archive/works/the-web-stalker>. date accessed: 11.5.2017

⁵⁰ Baumgärtel, Tilan. [*net.art 2.0*]. p. 30.

⁵¹ Ibid.

⁵² Ibid.

people. Heath Bunting's *King's Cross Phone in* explored the possible networks that could be made in the real world through the internet. Bunting created a web page that listed the phone numbers for the many public telephones located around King's Cross Station and urged people who visited the website to call and speak to whomever was on the other side. The purpose of this art project was to exemplify the connections created between people using the internet, and to be quite plainly, something different. On his website, Bunting wrote "I arrived at about 3 o'clock in the afternoon; the phones were already ringing. The market research woman from BT, said it's very strange the telephones had been ringing all day."⁵³

Social media does not only act as a platform for artists to distribute their work, but also as a means of creating new artworks derived from the connections that social media creates. For example, Ben Rubin and Mark Hansen's work *Listening Post* is an installation work created in 2002 that collects real-time text from chat boards and online forums and displays the messages across hundreds of small screens. This work combines elements from visual arts, installation, and participatory art to combine the arbitrary and aimless litter from the internet into a coherent narrative that investigates how people interact with each other in the online world. This example demonstrates that as well as social media having a powerful role in enhancing the way artists can distribute their work; online chat boards, websites, and discussion groups have also fostered a variety of different artistic communities, which both shapes the culture of these online communities, but also the stylistic characteristics of the art that they produce. Websites such as Rhizome provide excellent platforms for people to create

⁵³ Heath Bunting, "King's Cross report", <http://irational.org/cybercafe/xrep.html>. 13.3.2017

new art works whilst also learning about the history of internet art and new media.

Establishing connections in this way has many strengths over traditional methods of artistic dissemination. For example, internet content is far more easily and quickly updated than traditional media such as books and using bases such as Rhizome for research purposes often gives the most up-to-date content in a field that is rapidly evolving due to the nature of the web.

The ability for new media to increase communication between people and cultures is often best illustrated in works of internet art, by being a platform that is globally accessible. New media art puts emphasis on the engagement of the audience member as both a participant but also creator of artistic meaning. For example, in 2015 Jon Rafman held an exhibition in the Zabłudowicz Collection, and he is particularly known for “fusing digital and physical spaces and referencing video games to internet memes”.⁵⁴ The collection of works exhibit “a playful series of new installations that immerse visitors within his video and sculptural works” and are physical and digital manifestations of Rafman’s larger interest in the relationship between technology and human consciousness. The exhibition is a large connection of works, but despite being separated by rooms and walls, there is a great sense of singularity running through the entire experience. After entering the exhibition, and being asked to remove shoes, audience members climbed a ladder, and after reaching the top, people were confronted with streams “looking deep into the web and the pleasures, and

⁵⁴ Molly Gottschalk. “Jon Rafman’s Participatory Playground Hits Harder Than You’d Think”. *Artsy.net* (2015). 4.8.2017: 10:58 <https://www.artsy.net/article/artsy-editorial-jon-rafman-s-participatory-playground-hits-harder-than>. Date accessed: 24.10.2017

acceptance, found in fetish and online subcultures. Buried deep in the pit, the internet's all-consuming grip on our lives makes its presence known."⁵⁵ Continuing through the exhibition, the audience member has the opportunity to enter Rafman's *Mainsqueeze*, which plays many videos from the internet in the confines of a small box. The audience member watches "the piece's quick sequence of video clips... a washing machine convulses until falling to bits; an anime couple masturbates in the glow of a static analog TV; a woman pets a crawfish to classical music and then squishes it with her sneaker."⁵⁶ Throughout this exhibition Rafman was successful on many occasions of capturing the spirit of the internet; complex works engaged the audience member and questioned the validity of the real/virtual binary, and whether it existed at all, whilst also confronting the audience with the banality and overabundance of arbitrary internet content. One of the idiosyncrasies of the internet is how user engagement creates a paradoxically personalised experience whilst masking the true breadth and depth of the platform. The internet is an inconceivably large vat of human interaction, and the one of the works in Rafman's exhibition both engages with and embraces this fundamental paradox. Whilst exploring a large hedge "lined with Rafman's signature digitally rendered busts,"⁵⁷ the audience member searches "out the Oculus Rift waiting at its center. Encountering dead ends is encouraged, as each offer...teasers to the behemoth."⁵⁸ By using an Oculus Rift, the maze blurs the boundaries between the real and virtual worlds and

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Ibid.

creates an increasing sense of endlessness whilst being submerged within the confines of the hedge walls. The audience member is simultaneously aware of what they are being faced with, whilst also parodying the fact that on the internet new information and experiences can be just a click away.

The internet has posed many challenges to traditional notions of textuality, which in turn challenges the precedence of many non-digitally derived art forms that use textuality as essential aesthetic feature. Mark Amerika's GRAMMATRON⁵⁹ was created in 2000 and is described as a "public domain narrative environment."⁶⁰ GRAMMATRON is a hypertextual work, which is a digital software or text that explores the relationships between traditional forms of written textuality and emergent digital methods of written expression. The work "depicts a near-future world where stories are no longer conceived for book production but are instead created for a more immersive networked-narrative environment".⁶¹ As a hyper textual work GRAMMATRON challenges the expectations and historical precedence of traditional written media and shows the potential for digital media to derive narrative in new and modernised textual forms. Digital text forms explore a "reanimated interactivity with technology and environments."⁶² Historically, this would not be the first time that the fundamental elements of story-telling and information transfer have undergone change. The

⁵⁹ Mark Amerika. <http://www.grammatron.com/index2.html>. Date accessed: 24.10.2017

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Maria Angel and Anna Gibbs. "At the Time of Writing: Digital Media, Gesture and Handwriting." <http://electronicbookreview.com/thread/electropoetics/gesture>. Date accessed: 29.7.2017 21:31.

performance of storytelling in relied on orality, and “was ultimately replaced by a culture of silent reflective reading engendered by the technology of the typographic book.”⁶³ However, the fundamental change that occurs with digital texts is summarised by Riffaterre as the following; “the computer revolution because the symbol as well as the means of a revolution in the concept of literature itself by replacing the reactive reading process with an interactive one.”⁶⁴ Before the beginning of the twenty first century, there was a mood of pessimism carried by many about to what extent would computers truly change the nature of the written medium. In an essay from 1989, Paulson claims that “computers and information technology are more important to literature as conceptual models and shapers of intellectual and social context than as concrete devices with immediate applications.”⁶⁵ This pessimism characterised the thoughts of many who were beginning to take the computer platform more seriously, as “an equally sudden lead from pessimism or plain prudence to an assertive and even conquering attitude.”⁶⁶ Amerika’s work challenged this assumption, and GRAMMATRON embraces the potential for the computer and the internet to transform and morph these traditional text based forms. Whilst undoubtedly transforming the intrinsic nature of the text, digital texts also share many of the same fundamental qualities as traditional written medium. Letters and words “expose digital writing’s nostalgia for the hand, the producer’s

⁶³ Ibid.

⁶⁴ Riffaterre, Michael. "Intertextuality vs. Hypertextuality." *New Literary History* 25, no. 4 (1994): 779-88. doi:10.2307/469373. Date accessed: 24.10.2017

⁶⁵ William Paulson. “Computer, Minds, and Texts: Preliminary Reflections.” *New Literary History*, 20. (1989), p. 299.

⁶⁶ Ibid.

creative will to reengage with and express the kinetic impulses of the body.”⁶⁷ Hypertextuality offers an opportunity to expand the parameters of traditional forms of embodiment beyond the kinesis of the written word, and its illustrates in the work *Text Rain* by Camille Utterback. The work is an “interactive installation in which participants use the familiar instrument of their bodies... to lift and play with falling letters that do not really exist.”⁶⁸ Letter appear on a video projection, and the person is mirrored back to them, so letters are created in relation to the movements and motions that are detected. This work asks the participant to reconceptualise the notion of reading and literacy in an interactive artwork that adopts a hyper textual sensibility.

In analysing the transformative effects of new media on art and society, it would be unprecedented to dismiss the role of the internet in changing the world its many societies. The internet and its many art forms act as a medium through which the tangible nature of new media and its effect on societal change can be explored. The internet has achieved this despite "its relative youth; its dematerialised and ephemeral nature; its global reach."⁶⁹ Nevertheless, artists will continue to explore and push the boundaries and limitations of a platform that has become engrained in the cultural and artistic fabric of societies across the globe.

⁶⁷ Carrie Noland. “Digital Gestures” In *New Media Poetics: Context Technotexts and Theories*. ed. Thomas Swiss and Adelaide Morris. (Cambridge: MIT Press) 2009. p. 218.

⁶⁸ Romy Achituv and Camille Utterback. “Text Rain”.
<http://camilleutterback.com/projects/text-rain/>. Date accessed: 29.7.2017

⁶⁹ Ibid.

Middle Eastern new media art

New media art exhibitions and festivals are taking place across the globe in New Mexico, Iran (TADAEX), Egypt (Di-egy Fest), and Israel (Print Screen Festival), as well as a variety of other countries and artistic communities. New media has been used in the Middle East as a platform for artists to critically comment on the complex and multi-layered political circumstances of the region and the upheaval of the Arab Spring. The assimilation of new media into many Middle Eastern countries has not only brought about an unprecedented increase in digital connectivity, but it has also enabled artists local to the region to engage with the practice of new media art, and embodies the ways in which new media has been one of the most significant drivers of change in the region over the past few decades.

The Middle East is a region that has often been defined by its many complex and multi-faceted conflicts. In particular, the Arab Spring saw the geopolitical climate of the region undergo dramatic change. Since 2011, Syria has been plagued by civil war, Yemen has had a revolution, and the fate of many other Middle Eastern countries remains uncertain. However, there is a growing digital art scene at the convergence between Middle Eastern artistic communities and new media, with its own impact on the geopolitical landscape of the Middle East. In the MENA region (Middle East and North Africa), smartphone usage has risen drastically over the past decade, with Gulf News claiming that the “mobile phone user base in the Middle East and Africa (MEA) is now second only to that in Asia-Pacific, with ‘just over 606 million people (in this region) to have at least one mobile phone this year, and the total

will pass 789 million by 2019'.⁷⁰ This growth has transformed the many ways in which civilians, governments, organisations, and other groups access and interact with new media.

Wafaa Bilal is an Iraqi artist who surgically implanted a camera into the back of his head for his art project *3rdi* in 2010. The process involved “implanting a titanium plate onto which a camera was mounted.”⁷¹ He took photos and videos of his everyday life for one year using the embedded camera. The final art work was “streamed live to a global audience via a dedicated website,”⁷² and presented a variety of photos which often seemed lopsided, arbitrary, but yet “disconcertingly intimate.”⁷³ The work tells the story of Bilal’s travels from Iraq, to Saudi Arabia, to Kuwait, and finally to the US, which is indicative of a consistent theme present in Middle Eastern new media art. Story telling is the main theme of the work, and Bilal claimed that the work is “a platform for the telling and retelling of another story.”⁷⁴ However, the work is not limited to storytelling, because there is also a distinctive focus on broadcasting the work to a public and universally accessible space. The aesthetic engagement of Bilal's work with historical conflict cannot be overestimated, and artists "engage with the practices and subject of new media to explore the flux of historical events and their impact upon the global politics of representation."⁷⁵

⁷⁰ Gulf News. “Smartphone usage rockets across Middle East and Africa”. <http://gulfnews.com/business/sectors/technology/smartphone-usage-rockets-across-middle-east-and-africa-1.1585002>. Date accessed: 7.7.2017

⁷¹ Downey Anthony. *Uncommon Grounds: New Media and Critical Practices in North Africa and the Middle East*. p. 13.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Wafaa Bilal, *3rdi*. <http://wafaabilal.com/thirdi/>. date accessed 3.6.2017

⁷⁵ Anthony Downey, “Introduction”. In *Uncommon Grounds: New media and Critical Practices in the Middle East and North Africa*. p. 14.

The work of many Middle Eastern new media artists is inseparable from the many conflicts that define the region, and because of this the themes of storytelling and broadcasting are common. Some artists have attempted to reimagine the recent history of individuals and communities whose reality has been fractured, such as Wafaa Bilal. As a region defined by conflict, particularly since the 2011 Arab Spring, Middle Eastern artists are placing an urgency on telling the story of the complex geopolitical and artistic circumstances of the current time, and this is reflected particularly poignantly in Wafaa Bilal's work, which "arose from a need to objectively capture his past from a non-confrontational point of view."⁷⁶ By simultaneously focusing on the past and present, the work becomes an exploration of the fractured history of contemporary Middle Eastern culture, overwhelmingly dominated by conflict and catastrophic destruction. The camera transmitted photos to a website completely available to the public, despite the quotidian content of the work. It is because this work is accessible on the internet that the work is new media art. Bilal added another artistic dimension to the work by making it accessible online. The work, *3rdi*, is "in total: a device, a website, and a larger instillation that mimics the online platform from which the images are intended to be viewed."⁷⁷ By accessing the content online, the subjective experience of the work is largely left to the 'audience', and this was the deliberate intention of Bilal. He states that, "In this way I become locked to the story as its teller, passing the interpretive mode to an audience with little context so it may be transformed for their subjective interactions and

⁷⁶ Ibid.

⁷⁷ Ibid.

subsequent expressions.”⁷⁸ In a sense, this makes *3rdi* a participatory work. Despite the literal bondage of Bilal with the camera, the narrative of the work is best understood in terms of the larger subjective experiences of the audience, with tells “a fracturing of historical reality that, for many, has impacted upon how we understand the relative relationship of the subject to both time and space.”⁷⁹

The work has also been presented as an instillation exhibition in Qatar. The theme of the exhibition was for told, untold, and retold stories, as part of a larger “exhibition inaugurating the new Arab Museum of Modern Art,”⁸⁰ and further emphasised the connection between Middle Eastern new media and retelling the story of conflict. The physical instillation featured three different rooms, which were separated from the larger art gallery in order to immerse the audience into the telling of Bilal’s story. The first room “prepares the viewer by providing information via wall text that describes the philosophy and background of the *3rdi* project.”⁸¹ The project then progresses to two other rooms, where many LCD screens displayed images that Bilal captured. The media enhancement of the work changes the original online interface of the work into a larger space, by combining the typical ‘white cube’ of an exhibition with the interface of the computer screen. This allows the audience to interact with the project in a different way, because “interaction within this portion of the space is subject to both the number of bodies occupying the room and their movement within

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Ibid.

the space.”⁸² *3rdi* is illustrative of the thriving artistic community invested in creating new media art in the region, and explores some of the core themes around the larger concept of new media. The collection of photos is a digital visualisation of a journey of a person, devolved from authority, and without context.⁸³ The discussion that arises out of this work engages with the ability of new media to explore the “flux of historical events and their impact upon the global politics of representation,”⁸⁴ and greatly exemplifies the need for art historians and scholars to depart from the dogma of the western art canon; the terminology and methodology simply don’t apply to new media art in a mutually supportive and critically engaging way.

Despite conflicting views of what exactly the role of the internet is and should be in certain areas of the Middle East, the website and art archive *Creative Memory* provides a platform for artists to distribute their work under oppressive regimes which may limit internet access. In particular, *Creative Memory* shows many kinds of art produced in Syria since the beginning of the Civil War in 2011. The aim of *Creative Memory* is to “archive all the intellectual and artistic expressions in the age of revolution; it is writing, recording, and collecting the stories of the Syrian people.”⁸⁵ The website has archives all of kinds of art, such as visual, sonic, sculpture, painting, and so on, and is an example of the power of new media technologies to give artists both a way and a means of creating and distributing work, even

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ Creative Memory. http://www.creativememory.org/?page_id=134. Date accessed 5.6.2017

amid humanitarian crisis. As described earlier, the role of *Creative Memory* is inextricably linked with the political circumstances of the Syrian Revolution. The website aims to “enhance the impact of the artistic Syrian resistance, to reinforce its place in the revolution, to gather, archive and spread the messages it expresses.”⁸⁶ In this case, new media technologies are used to create a convergence between multiple artistic practices. In the context of the Middle East *Creative Memory* provide a safe platform for artists and is indicative of the transformative effect new media can have in different global regions.

Lebanese artist Rabih Mroué created the work *The Pixelated Revolution* in 2012 and is a new media artwork documenting the internet posts of civilians during the violence in the ongoing Syrian conflict. The work is another example of Middle Eastern art following the theme of narrative and story, and the collection of stills, videos and texts projected behind Mroué as he performs this narrative on a stage in succession on a large screen. The focus on narrative is an attempt to maintain some inherency of the human condition in a region and conflict where there seems to be little humanity left, and “might well be considered a solution to the problem of general human concern, namely, the problem of how to translate knowing into telling.”⁸⁷ Regardless of social and political context, narrative helps us to understand culture, and artworks can utilise “the telling of narrative to convey and very specific and

⁸⁶ Ibid.

⁸⁷ White, Hayden, 'The Value of Narrativity in the Representation of Reality', in *The Content of the Form: Narrative Discourse and Historical Representation*. Baltimore and London: The John Hopkins University Press, 1987: 1.

complex history.”⁸⁸ The stills and videos shown in *The Pixelated Revolution* are explored in a news-broadcast style, in order to set a context to the stock imagery collected on civilians mobile phones. Kabra argues that this style of presenting the artwork is a reference to the Danish Dogme 95 film collective. The Dogme 95 film-makers utilised certain rules for film-making laid out in a manifesto. These rules are often called the “Vows of Chastity,”⁸⁹ and emphasised traditional values of story, hand held cameras, and always recording on site, amongst various others. Translating the methods and aims of Dogme 95 into a different context provided some challenges, because using the same film-making methods in a violent context in the midst of real conflicts blurred the sense of fiction and reality. For the audience member, the shock of the footage can create a “kind of distance between the very hard, tough and violent subject of revolution and how protestors try to record their daily demonstrations.”⁹⁰ Mroué achieved his intention of highlighting the reality of the Syrian conflict. By using mobile phone video, he showed the “actuality and what is happening now... which is still ongoing in the Syrian Revolution.”⁹¹ Mroué claims that there is a difficulty in narrating the Syrian conflict, because it is “still ongoing, something unsettled and unfinished.”⁹² Mroué’s work marks an important contribution to the corpus of art works critically addressing the Syrian Civil War, at a time where there can seem to be little place for

⁸⁸ Kabra, Fawz. Rabih Mroué and The Pixelated Revolution. http://www.ibraaz.org/news/21#_ftn1. date accessed. 5.6.2017

⁸⁹ Dogme 95. <http://www.dogme95.dk/the-vow-of-chastity/>. Date accessed: 24.10.2017

⁹⁰ Interviewee, Rabih, Mroué. “Lost in Narration”. Interview by Anthony Downey. January 2012. <http://www.ibraaz.org/interviews/11>. date accessed 5.6.2017

⁹¹ Ibid.

⁹² Ibid.

artistic expression, and highlights how new media can be increasingly used to generate positive social change.

New media has been able to permeate a wide-variety of countries and cultures because digital technology lends itself to the process of globalization. New media has made the exchange of culture drastically more efficient. For the Middle East, this creates a particularly set of circumstances where despite being under the tyranny of conflict and oppressive regimes, many factions of society have access to smartphones, the internet, and other new media forms which have come to shape their social and political climate. Whilst globalization is a term excessively used in a political and economic context, its effect on art and culture and art is just as significant, where “images and information are more far-reaching than those of trade in tangible objects.”⁹³ Traditional art forms are often limited by native geographical restrictions, and because of this, national qualifiers have historically been used to associate these art forms, such as French, or Renaissance Italian art. There is a far greater incredulity towards the western art canon of ‘great’ men. The archaic qualifiers used to differentiate these practices have far less influence on art practices that have undergone the process of globalization, and “those lines are now blurred, or have disappeared altogether. Artists collaborate across countries and continents, inspiring their brethren.”⁹⁴ However, the growing initiative across the globe in new media art exhibits its potential as a globalised

⁹³ Hochschild, Adam. "Globalisation and Culture." *Economic and Political Weekly* 33, no. 21 (1998): 1235-238. <http://www.jstor.org/stable/4406800>. Date accessed: 24.10.2017

⁹⁴ Eliot, T. S., James Joyce, Pablo Picasso, and Yaffa Fredrick. "THE BIG QUESTION: Is There a Global Canon?" *World Policy Journal* 27, no. 3 (2010): 3-7. <http://www.jstor.org/stable/40964049>. Date accessed: 24.10.2017

artistic practice, as the art worlds search for an authentic artistic practice in the face of an increasingly convergent technological society.

One of the benefits of studying particular new media artists from the Middle East, is that the specific context of the new media culture in this part of the world reveals important challenges a few essential questions about the fundamental characteristics of new media. In particular, it exemplifies that fact that a reliance on the western art canon can often be misleading when studying new media, because it shows a new media art community that has developed away from that insular context. Furthermore, the importance of artistic practices in framing the reality of conflict is fully actualised in the context of intense political turmoil and conflict. The emergence of these creatives practice indicate that there is not a polarisation between art and the culture, but that they are “extensions of each other... Art embodies and encodes political values, subjectivities and responses as political thought and action... art does not just prove to be a vehicle for political expression - it is that expression.”⁹⁵ Since the political uprisings, and particularly the Arab Spring, artists have “harnessed new and old media as well as the public space to make visible the contours of a more meaningful politics and aesthetics,”⁹⁶ and one of the outcomes of this is that there is a distinctive focus on a few themes in Middle Eastern new media art, particularly storytelling, narrative, and visual representation.

⁹⁵ Dina Matar, “A Critical Reflection on Aesthetics and Politics in the Digital Age”. in *Uncommon Grounds: New Media and Critical Practices in North Africa and the Middle East*. p. 164.

⁹⁶ Ibid.

The Middle East as a region is often misunderstood within the perceptions of western communities, and a large reason for this is because these perceptions have largely been shaped by the spectacle of the War on Terror. New media in the Middle East is directly linked with the politics of conflict and identity, but new media art offers a way of challenging these stereotype and misinterpretations, because the Middle East also represents a gold-mine of artistic practice in the midst of political and social change. Scholars such as Jenkins and Thorburn emphasise the democratising effects of new media, as individuals, communities, and whole societies have increasing access to the flow of public information. They argue that new media has had a "powerful influence on the public's access of governments documents, the tactics and content of political campaigns... and the ways in which topics enter the public discourse."⁹⁷ New media often provides a platform for those involved and victims of armed conflict to find a liberating voice in the digital world, and social media in particular allows minorities and refugees a "space of expression away from the constraints of mass media."⁹⁸ The influx of new media and digital technology has resulted in an accelerated form of globalization changing the geopolitical circumstances of the regions, and this effect is able to test the merits of arguments which blindly advocate for new media's democratisation of information. This is due to the fact that many of the perceived characteristics and benefits of

⁹⁷ Henry Jenkins and David Thorburn. "Democracy and New Media". <https://mitpress.mit.edu/books/democracy-and-new-media>. Date accessed: 28.7.2017

⁹⁸ Myria Georgiou. "Diaspora in the Digital Era: Minorities and Media Representation". *Journal on Ethnopolitics and Minority Issues in Europe* <http://www.ecmi.de/fileadmin/downloads/publications/JEMIE/2013/Georgiou.pdf>. Date accessed: 28.7.2017

new media can be readily tested in an environment and context that is detached and alien from elite American and European intellectual circles. Middle Eastern new media art is no exception when it comes to engaging with the historical, political, and social context within which it is produced.

New media art has an inseparable connection with the politics of the Middle East, even in the midst “changing histories and fractured geographies”⁹⁹ due to military conflict and revolution. This has meant that a significant portion of relevant research material on the ways in which new media has been assimilated into localized Middle Eastern communities has been government or think-tank driven, rather than from artistic communities themselves. However, much of the research from NGOs and think tanks on the effects of new media in the Middle East tends to make far reaching generalisations based on technological determinism and is far more data analysis driven in general. For example, in a journal entry from the University of Michigan, the analysis of new media in the region is considered directly proportioned to the increasing percentage of people in the Middle that have simple access to the technology, and as such the research is littered with statistics about increased internet and smartphone usage. This kind of statistic can easily generalise new media, and lead to an oversimplified and misleading understanding of new media which does not illustrate the ways in which individuals and communities might be using these technologies within their unique socio-political contexts. Whilst this is important for gauging to what extent new media and

⁹⁹ Matar, Dina. “A Critical Reflection on Aesthetics and Politics in the Digital Age”. in *Uncommon Grounds: New Media and Critical Practices in North Africa and the Middle East*. (I.B. Tauris & Co Ltd) 2014. p.164.

digital technology devices have been adopted by people in the region, this kind of analysis gives little indication on how new media is being used in contexts beyond communication technology, even whilst new media is evidently being used for many different reasons.

The War on Terror has created ostracising narratives of the Arab world, which has led to many false perceptions about the Middle East rooted in American and European values, but despite this new media art acts as point of shared cultural and artistic experience that transcends these divides. A direct artistic historical lineage can be traced in America's recent artistic history that shows many artists from the 1960s and 1970s becoming increasingly concerned with the effects of image saturated consumer culture. In this sense, an emphasis on image-saturated media creates a narrative of global events through spectacle and underpins the ostracising perception of the Middle East within mainstream American culture. For many artists, the period during 1960s was the first notable "juncture in American history to witness a wide range of artists who questioned the mass media apparatus by emphasising the dystopia links between art world institutions... and the spectacle of violence dictating American culture."¹⁰⁰ Many American artists during the latter half of the twentieth century put particularly emphasis on exploring the lasting effects of consumer capitalistic culture, whilst simultaneously attempting to distance themselves from the same effects. Artists and groups such as Andy Warhol and Fluxus were "seeking to work outside institutional

¹⁰⁰ Maymanah Farhet. "New Media and the Spectacle of the War on Terror". in *Uncommon Grounds: New Media and Critical Practices in North Africa and the Middle East*. p. 189.

frameworks,"¹⁰¹ and these groups in particular would come to represented seemed to far better articulate the concerns for consumerism and mass media that were prevalent at the time. Traditional art forms were "deemed less effective in articulating the sense of alienation"¹⁰² than the "capitalist spectacle"¹⁰³ compounded in the US. In the US, the intent of many mainstream media companies gears individuals and collectives to preserving global events in a specific way within public consciousness, and these implications of these effects can be unpacked by analysing the artistic traditions during the twentieth century.

The video art works of Nam Jun Paik of bears many similarities with Debord's criticism of consumer society. Debord attacked the media hegemony which controls and influences many aspects of public quotidian life through mass consumerism. Many of Paik's works reference Debord's concept of détournement, "which aim to destabilise mass-media images by repurposing their essential components into new significations" indicate similar concerns whilst successfully integrating technology with art. Debord's concept of détournement was an important component of the Situationists International movement; "a group of likeminded artists, intellectuals and activists... argued that a 'parodic-serious stage' of 'détourned' images could function as a collective sign of protest by negating the 'previous organisation of expression'".¹⁰⁴ It is not coincidental that the War on Terror has derived a similar superficial spectacle in the way it has through new media communication. However,

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Guy Debord. *Society of the Spectacle*. (Detroit: Black and Red): 1983. p. 32.

¹⁰⁴ Myamanah Farhet. "New Media and the Spectacle of the War of Terror". *Uncommon Grounds* p. 189.

because of the thriving community of new media artists in Middle Eastern countries of conflict, the same process of globalization and digital proliferation can be traced, and more coherently confronts the reality of the politics of identity that many artists are exploring. As Andy Warhol and Fluxus, amongst many others, questioned the pervasive effects of consumerism and mass media society during the 1960s and 70s, so too are Middle Eastern new media artists directly coming to terms with the effect of new media during times of intense conflict.

For the past few decades at least, the region has been a point of strategic diplomatic interest, and long before the Arab Spring there was “a distinct focus on media attention in the United States and Europe.”¹⁰⁵ As well as being a point of global interest, the uprisings of the Arab Spring showed how many protestors emboldened the use of new media in order to create their own narrative of the events. Many of the protesters took advantage of the digital technologies at their disposal, and the “use of mobile applications, blogs, and online social media during the 2009 post-election protests in Iran and during the Arab Spring... turned into an elongated meta event.”¹⁰⁶ The emergence of new media in the context of the Arab Spring highlights specifically how new media has the “capacity to transcend not only boundaries, certainly national boundaries, but also potentially other more subtle

¹⁰⁵ Miyase Christensen. *New Media Geographies and the Middle East*. (SAGE) 2013. <http://journals.sagepub.com/doi/pdf/10.1177/1527476413481856>. p. 267. Date accessed: 24.10.2017

¹⁰⁶ Ibid.

boundaries,¹⁰⁷ whilst also revealing the contours of conflict within the context and boundaries of new media communication technologies.

When people involved in the uprisings and conflicts took to mobile phones and digital connectivity to convey their story, the Arab Spring definitively became a strong example of identity politics in the context of the digital age. For many of the people using the internet, “the virtual simply becomes one dimension of personal identity, rather than some magical means of ‘escaping’ from it, an increasingly ‘banalised’ overlay of the virtual on the actual.”¹⁰⁸

Whilst using the internet and digital media as the platform for the spectacle of the Arab Spring, the events implicitly emphasised the distinct relationship between new media and globalization, as well as becoming the focus for many artists in the region. The Arab Spring “opened up a unique discursive space of intense debates through global popular communication networks.” which shaped the global perceptions of the events, tragedies, and prejudices of the events, and opened up a global discourse questioning the merits, failures, and future trajectory of digital media technologies in varying social contexts and political circumstances. The Arab Spring was one of the first global ‘new media events’, because it was often broadcast to the world through new media technologies and social media platforms. The events also highlighted some of the issues when writers talk about the ‘democratisation of information’ that comes with new media, because those claims come with cultural

¹⁰⁷ Walter Armbrust (2012) “A History of New Media in the Arab Middle East”, *Journal for Cultural Research*, 16:2-3, 155-174, DOI: 10.1080/14797585.2012.647666

¹⁰⁸ David Morley. “Communications and Transport: The mobility of information, people and commodities”. <http://journals.sagepub.com/doi/pdf/10.1177/0163443711404466>. p. 746. Date accessed: 24.10.2017

assumptions that new media technology would be used in the same way by different cultures and societies.

In 2011, the use of the new media by protestors in the Arab Spring was intimately linked with the politics of conflicts and identity; the “immediate and expanding communicative spaces such as meta-events open up and accommodate a high level of political/discursive diversity and topical multiplicity stretching over a considerable length of time.”¹⁰⁹ This is often an assumption in the critical literature on new media in the Middle East which suggests that once media technology “was there, then everything could change,”¹¹⁰ and to a certain degree the Arab Spring unequivocally shows that politics and society did change. These cultural assumptions exhibit a specific incredulity towards the plurality of ways in which new media could change society. In the case of Al Jazeera, the media sphere took on a variety of different but mutually co-dependent forms. The multi-lingual broadcast station showed that “an absence of freedom to debate issues of public concern would be replaced with an emergent and democratic public sphere.”¹¹¹ Alternatively, the oppressive regimes in Syria would use internet surveillance would attempt to usurp the western hegemony on information, but instead gave rise to new indigenous news companies for those fighting the regime. In Syria, it has been astonishing how “quickly conversations with oppositionists turn

¹⁰⁹ Miyase Christensen. *New Media Geographies and the Middle East*. (USA: Sage Publications) 2013. p. 268.

¹¹⁰ Walter Armbrush. “A History of New Media in the Arab Middle East. *Journal for Cultural Research*. p. 160.

¹¹¹ *Ibid.*

to new communications technology,”¹¹² and this has involved “borrowed SIM cards from Europe or the Gulf States, proxy servers, the relative safety of talking on Skype or tapping out text on Facebook.”¹¹³ It for these reasons that it is short-sighted to trivialise the transformative effects of new media, which should be placed within their own historical and social contexts. In the Middle East, new media was not necessarily so “transformative that the entire region was magically rendered pluralist; or unambiguously and uniformly Arab nationalist; or Islamist,”¹¹⁴ but it is within the realm of globalization for singular regions to be lumped in with the characteristics and context of other regions, without due credence being given towards any sense of unique local culture that they might have.

The ongoing developments in the Middle East highlight the significance of societal change driven by technological progress and new media, particularly within the artistic communities that are documenting their experiences of conflict and political upheaval. These factors are compounded by the fact that there exists a growing “techno-savvy young population organising and connecting both translocally and globally through transmedia routes.”¹¹⁵ Many of the artists are using new media to discuss the nature of these conflicts, which, on an ongoing basis, continually comment on the complex nature of modern conflict and the politics of identity. New media has fundamentally transformed the Arab Spring

¹¹² James Harkin. *Good Media, Bad Politics? New Media and the Syrian Conflict*. (Oxford: Reuters Institute for the Study of Journalism) 2013. p. 8.

¹¹³ Ibid.

¹¹⁴ Walter Armbrush. “A History of New Media in the Arab Middle East”. p. 160-161.

¹¹⁵ Miyase Christensen. *New Media Geographies and the Middle East*. p. 268.

uprisings but has also driven a change in the artistic climate of the region. The Middle East is now a gold-mine of new media art practices, with a flourishing culture that represents the burgeoning importance of new media art in a region often defined absolutely by conflict and complex diplomatic relations. This culture of new media art present in the Middle East is irrefutable evidence of the inherent driving factor of new media, which will continue to transform art in the region for decades to come.

The European Avant-garde and new media

During the latter half of the twentieth century, avant-garde artists and intellectuals in Europe were pioneering radical change in the arts and aesthetics. Many art practices that characterised the avant-garde movement have had an influence on new media art and become embedded in its stylistic features and historical context, and the relationship between the two is evidence of the fact that new media has driven change in art and society.

An example of the radical approaches towards new media in the avant-garde art movement was the 1985 exhibition *Les Immatériaux*, which was curated by Postmodernist philosopher Jean-François Lyotard. The exhibition explored the connections between postmodernism, new media, and art, and has since gained a cult following among a younger generation of digital artists in France.¹¹⁶ Lyotard “foresaw the advent of globalisation, as a melancholic anticipation of the changing role of contemporary art in this era of accelerated change,”¹¹⁷ and demonstrated the many ways in which new media embodied this ‘accelerated change’. Lyotard was a seminal figure in the philosophical postmodern movement, and in *The Postmodern Condition* he described a sea-change in the “state of our culture following the transformations which... have altered the game rules for science, literature, and the arts.”¹¹⁸

¹¹⁶ John Rajchman, “Les Immatériaux or How to Construct the History of Exhibitions”. <http://www.tate.org.uk/research/publications/tate-papers/12/les-immateriaux-or-how-to-construct-the-history-of-exhibitions>. Date accessed 6.5. 2017.

¹¹⁷ Ibid.

¹¹⁸ Jean-François Lyotard. *The Postmodern Condition: A Report on Knowledge*. (Manchester University Press) 1979. Xxiii.

Les Immatériaux demonstrated a critical approach towards new technologies and postmodernism could be combined and is an example of how new media artists can further embrace radical change in aesthetics beyond the twentieth century avant-garde.

Lyotard curated an exhibition that specifically displayed artistic responses that explored new materiality, interconnectivity, digital technology, and new media. *Les Immatériaux* required visitors to "wear headphones that picked up different radio frequencies as they navigated the labyrinthine maze of grey metal mesh screens,"¹¹⁹ which embodied a form of audience interactivity that challenged the precedence of the typical white-cube gallery already dominant in Parisian art communities. It was a multimedia experience that connected the audience with the environment and the art. However, it was not the radio technology on its own that created a new media experience, because there was a connection between the audio on the radios and the virtual imagery projected onto screens, which created the multimedia immersive experience.

The concept of materiality was a central in the exhibition, and LaChapelle defines materiality as a "quality possessed by something that has a place in the physical world."¹²⁰ Lyotard wanted to explore whether digitally fabricated imagery and realities "leave the relationship between human beings and material unaltered or not."¹²¹ Whilst all digital

¹¹⁹ Tara McDowell. "Les Immatériaux: A Conversation with Jean-François Lyotard and Bernard Blistène". Published by art-agenda. 2014. <http://www.art-agenda.com/reviews/les-immateriaux-a-conversation-with-jean-francois-lyotard-and-bernard-blistene/>. date accessed 30.5.2017

¹²⁰ Daniel LaChapelle. "What is Materiality?". *Art in the Modern World 2014*. <https://blogs.cornell.edu/aitmw2014/2014/07/01/what-is-materiality/>. July 2014. Accessed 11.5.2018

¹²¹ Ibid.

devices and art works have an underlying materiality in their physical apparatus, there are also the coding or scripting languages used to make sense of the devices, which have no discernible physical presence, but still are essential to the physical function and presence of the technology. These languages remain "hidden, and a visible 'front end' that is experienced by the viewer/user;"¹²² they are masked behind the physical device, which acts as medium and an auditor of a digital and sometimes artistic experience. This was another example of a radical transformation in both the materiality of an art work, but also the larger notion of the artistic experience, particularly in established cultural and artistic institutions. As well as focussing on materiality, the art works at *Les Immatériaux* attempted to explore ways in which new media art could create multisensory experiences. The exhibition activated the "entire sensorium."¹²³ For the visual sense, "the space becomes understood, ordered, and rational,"¹²⁴ but Lyotard also "threw up all manners of barriers to vision: darkness, the grey screens, and the twists and turns of the labyrinth."¹²⁵

Les Immatériaux exhibited many works of new media art but was limited in its larger social outreach. New media art practices have often been characterised by a greater sense of outreach and were able to engage a variety of new audiences and transcend particular socio-economic backgrounds, but *Les Immatériaux* was designed for and by the intellectual elite avant-garde art community in Paris, and in many ways failed to show the potential global

¹²² Christiane Paul. ed. Oliver Grau and Wendy Coones. *Museum and Archive on the move: Changing Cultural Institutions in the Digital Era*. De Gruyter (2017). p. 191.

¹²³ Ibid.

¹²⁴ Ibid.

¹²⁵ Ibid.

outreach of digital technology due to the insular reception of the event. The limited reception of the exhibition represents a significant detachment of the exhibition with new media, and whilst many of the central concepts of new media were explored, the capacity for outreach as demonstrated through online new media art practices was never truly harnessed during the exhibition, and this was due to both the limitations of technology at the time, but also the Eurocentric dispositions of the curators.

At the time of *Les Immatériaux* “CDs were a novelty, mobile phones unwieldy luxury and the World Wide Web did not exist.”¹²⁶ Yet the exhibition represented a change in the artistic community, where established modes of displaying and showcasing art in museums and exhibitions was being reconceptualised; art, technology, and radical philosophical thought sat both side-by-side but also as one. In the case of *Les Immatériaux*, the artworks symbolised “the increasing ubiquity of systems of information manipulation and communication presents particular challenges to the art gallery as an institution.”¹²⁷ This exhibition represented an engagement from the artistic community with the future promise of new media technology, and because of this I will be showing in a later section some specific examples of how new media art continually addresses the place of digital technology from past, present, and future within the fabric of this context and culture.

¹²⁶ Charlie Gere, “New Media Art and the Gallery in the Digital Age”. <http://www.tate.org.uk/research/publications/tate-papers/02/new-media-art-and-the-gallery-in-the-digital-age>. Date accessed 6.5.2017.

¹²⁷ Ibid.

In the context of European philosophical thought, Walter Benjamin also expressed deep concerns that technology would ultimately have a negative impact on art and aesthetics. He argued that technology had galvanised a process whereby valuable art works can be infinitely reproduced, which has subsequently diminished the aesthetic value of the original art work. There are various examples where digital technology has not only increased the prevalence of this problem, but in many cases has embraced it, and used this process to create new artistic meaning. Copies of historical art works are easily found online, and infinitely reproducible, but this has not diminished the original value of the art work, and one might argue has made the original even more elusive. New media artists by comparison have demonstrated that new media technology is often used to reimagine other art practices, without diminishing the primary intentions of the original artists.

Benjamin specifically claimed that photography had left other means of reproducing images obsolete. He stated that "photography freed the hand of the most important artistic function which henceforth devolved only upon the eye looking in the lens."¹²⁸ As photography continued to develop during the course of the nineteenth century, "technical reproduction had reached a standard that not only permitted it to reproduce all transmitted works of art and thus to cause the most profound change in their impact on the public; it also had captured a place of its own amongst the artistic processes."¹²⁹ According to Benjamin, the emergence of

¹²⁸ Walter Benjamin. *The Work of Art in the Age of Mechanical Reproduction*. First published 1936.

<https://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm>. Date accessed 31.3.2017: 11:00.

¹²⁹ Ibid.

photography created a crisis for many visual artists, including painters, whose practice was made largely obsolete. Benjamin's argument implies that the sole function of art practices which seek to portray accurate pictorial representation of an image is to produce an identical representation. However, impressionist artists during the twentieth century diverted from this ideal and began to create art works that were not identical, but subjective representations of an image based on their interpretations, and this was particularly evident in Cubism. There is also the fact that photograph and film and shed light on a situation that would normally be impossible to interpret by the human eye; instilling a level of detail that does not diminish an artistic practice that is separate from photography, but one that provides a new opportunity for expression within the realms for a new artistic paradigm. With photography, a new generation of photographic artists could create a process that "can bring out those aspects of the original that are unattainable to the naked eye yet accessible to the lens."¹³⁰ Despite Benjamin's concerns, it has become evident that photography did not result in the end of art by visual representation. Instead, photography enhanced many art forms whilst offering the means to create new art forms.

As well as Benjamin's criticism of photography and the relationship between technology and art, there are many parallels that can be drawn between Benjamin's criticism and new media art. Benjamin demonstrated a concern for how revolutionary movements in the arts became cemented in history, and how this process would create historical perceptions

¹³⁰ Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, (1936), source: <https://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm>, date accessed 16.2.2017: 18:17

of art. He argued that “during long periods of history, the mode of human sense perception changes with humanity’s entire mode of existence.”¹³¹ However, despite Benjamin’s argument that technology would implicate the authenticity of a piece of art, he also argued that an essential component of an art work would remain, which is “its presence in time and space”.¹³² Benjamin continually emphasises in his essay that art works have a certain characteristic about them, that fundamentally differentiates art works from object. This quality however, has the potential to be reconfigured, and is shown particularly in Brian Mackern’s work *This too shall pass*, a multimedia work created in 2014 during a residency at Liverpool University. The work uses a collection of stock footage from undirected journeys around the city of Liverpool, which then has its visual and sound material remix. The point of this work is to trace the socio-historic curve through Liverpool’s architectural geography. This work proves that through multimedia processes one can digitally map multiple spaces and times, whilst tracing Liverpool’s history over the course of a few decades; a “time of transition for Liverpool’s imaginary... the city lost its industry, its power and had to reinvent itself”.¹³³ This combines multiple individual and social collective memories of Liverpool’s history, truncated into a single multimedia twenty-three-minute art piece.

In Benjamin’s lifetime, traditional art works and artistic practices were limited by a physical objectivity and presence. New media art shows allows for the digital representation

¹³¹ Ibid.

¹³² Ibid.

¹³³ Brian Mackern, “Brian Mackern in his own words”, in *Cities in Dialogue*, (Liverpool University Press ed. Claire Taylor, 2016). 93.

of art, and also by putting a strong emphasis on the connections of audience engagement as a fundamental driver of the artistic process. The audience can play a role in creating the art works objectivity through participation, and the underlying information of the art work can often be reconfigured into different data forms and is particularly illustrated in Mackern's *Temporal de Santa Rosa*. This work of new media art uses "body contact, hardware hacking...radio signals... and radiotelegraphy,"¹³⁴ to "manipulate the sound atmosphere,"¹³⁵ which recreates the digital and temporal presence of the Santa Rosa. The work is also often created live and reflects the audience's interactions in order to change the shape, presence, and atmosphere of the digital representation of Santa Rosa, and represents a simultaneously disembodied but entirely present art work that challenges the notion of spacio-temporality.

Benjamin's criticism of the historical process is directly related to the pervading question of canonisation in the arts, whereby certain art forms gain historical privilege over others often based on purely arbitrary factors. This problem pervaded the postmodern circles from which Benjamin has become particularly known for, and this led many postmodern philosophers and artists to question the role of history in establishing a formula for associating artistic movements. Many postmodern philosophers subsequently came to the conclusion that history was entirely subjective, and dependent on a set of cultural and societal circumstances. Bürger argued that "the historicity of a theory is not grounded in its being the expression of a *Zeitgeist* nor in the circumstance that it incorporates earlier theories

¹³⁴ Brian Mackern, "Temporal de Santa Rosa". 2010. <http://34s56w.org/xtcs/>. Date accessed: 26.9.2017 12:28.

¹³⁵ Ibid.

but in the fact that the unfolding of object and the elaboration of categories are connected.”¹³⁶

In *After the end of Art*, Danto claimed that he had “a vivid sense that some momentous historical shift had taken place in the productive conditions of the visual arts.”¹³⁷ With the benefit of hindsight not afforded to Danto, the twenty first century artistic climate has shown that visual art has remained a poignant medium for expression. In a popular context, the work of Banksy and recent winners and nominees of the Turner Prize are testament to the fact that visual art is still powerful and was never in a period of decline or extinction and Danto’s argument infers. Danto’s argument is based on the idea that conceptual art was undergoing a period of growth during the eighties, leading the critical judgement at the time to conclude that art was in a transitory period of reconceptualization, which would leave older practices obsolete.¹³⁸

Baudrillard echoed a similar argument. He stated that “history... is only the production of men by their material life,”¹³⁹ and concluded that this was a defining characteristic of postmodern society. Baudrillard argued that the central reason for the deterioration of historical narrative was because of the horrifying events of the twentieth century.¹⁴⁰ He had a great dissatisfaction with a cultural reluctance to truly represent extreme events that were connected with totalitarian regimes during the twentieth century.¹⁴¹ In *The*

¹³⁶ Bürger. *Theory of the Avant Garde*. p. 16.

¹³⁷ Arthur Danto, *After the End of Art: Contemporary Art and the pale of history*, (USA: Princeton University Press, 1997), 1

¹³⁸ Arthur Danto, *After the End of Art*, 4.

¹³⁹ Jean Baudrillard. “Simulacra and Simulation”. In *Baudrillard Selected Writings*. Ed. Mark Foster. 2001. p. 99

¹⁴⁰ Jean Baudrillard, *The Spirit of Terrorism*. p. 4.

¹⁴¹ Ibid.

Spirit of Terrorism, Baudrillard extended this argument to the twenty first century in light of the 9/11 attacks, calling it “the absolute event, the ‘mother’ of all events, the pure event uniting within itself all the events that have never taken place.”¹⁴² Whilst Baudrillard’s claims initially seem dogmatic and hyperbolic, he isn’t the only thinker to make such a radical claim. Bleiker similarly argued that the 9/11 attacks “precipitated a breach of understanding. Prevalent faculties, including reason, were simply incapable of grasping the events in its totality.”¹⁴³ Baudrillard believed that this event changed the way both individuals and collective society perceived history, that “the whole play of history and power is disrupted by this event.”¹⁴⁴ Baudrillard’s striking criticism illustrates the larger issue that Postmodernism had with the history; that “that the past has no reality,”¹⁴⁵ and history is just a text with no important distinction between fact and fiction.¹⁴⁶ This definition of Baudrillard’s ‘post historical’ world is unclear, but he evidently believes that there is a crisis in historical meaning. One of the reasons that his definition is unclear is because there is a common inconsistency in Baudrillard’s polemical writing style, that despite claiming that history has ‘lost its reference points’, he continues to use divisive historical markers to differentiate what he believes are historical reference points.

¹⁴² Ibid.

¹⁴³ Bleiker, Roland. "Art After 9/11." *Alternatives: Global, Local, Political* 31, no. 1 (2006): 77-99. <http://www.jstor.org/stable/40645174>.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Hayden White, “Postmodernism and Historiography”, http://www.ritsumei.ac.jp/acd/gr/gsce/news/200901022_repo_0-e.htm, date accessed 16.3.2017: 15:09.

Baudrillard put particular emphasis on the relationship between objects, and how cultures categorise objects and assign symbolic and semantic value in relation to consumer society. In *The System of Objects*, Baudrillard argued that “human beings and objects are indeed bound together in a collusion in which the objects take on a certain density, an emotional value – what might be called a ‘presence’.”¹⁴⁷ Baudrillard applied this concept to art, and argued that Pop Art in particular was characterised by reducing the semantic value of art to a series of superficial set of images and relationships, and “thus replicating what he sees as the logic of Postmodern society.”¹⁴⁸ However, contrary to Baudrillard's central idea that the defining characteristic of Postmodern society was its dependency on image-saturated culture and consumerism, Pop Art was interested in re-contextualising everyday objects and imagery into new forms. Douglas Kellner argues that “Pop Art thus constitutes a turning point in the history of art for Baudrillard whereby art becomes quite simply the reproduction of signs... in particular the signs of the consumer society which itself is primarily a system of signs.”¹⁴⁹ Baudrillard is very explicit that Postmodern society represents a distinctive and definitive change in the values and structures of society from the modern epoch. However, According to Baudrillard's logic, if Pop Art is defined by the same criteria as Postmodern society, then Pop Art would also indicate the 'end of art', in the same way that Postmodern society would signify the end of history. However, the hindsight of history has shown that Pop Art, like all

¹⁴⁷ Jean Baudrillard. *The System of Objects*. (Verso) 1996. P. 16.

¹⁴⁸ Douglas Kellner. “Jean Baudrillard and Art”.

<https://pages.gseis.ucla.edu/faculty/kellner/essays/ baudrillardandart.pdf>. Date accessed: 20.9.2017

¹⁴⁹ Ibid.

art forms, was a phase of stylistic ideas related to the context of the culture at the time, and as such has been assimilated into the 'historical' just as much as any art form.

Artists and writers have also challenged the legitimacy of history, such as Hervé Fischer who claimed that the history of art had ended, “that art was dead, and that we now live in an age of meta art.”¹⁵⁰ Digital art emerged and embraced new ideas and innovative technology; it exhibited new ways of creating art, and explored new concepts in a radically changing and dynamic artistic climate. New media art has implicitly challenged these claims that art and history has ended, by offering radical and dynamic ways for people to create and interact with art and changing the art paradigm. New media has emerged alongside artificial intelligence, cyber culture, virtual communities, and is orienting new ways of thinking about the connections that govern art and society, whilst actively distancing itself from postmodern dogmatism. There have been other significant developments of this nature in history, such as the mass proliferation of the printing press in the fifteenth century, which ensured that “literacy went beyond a cloistered elite.”¹⁵¹ In a similar capacity, new media has enabled drastically different cultures to connect with one another easily across the globe.

The historical context that digital art grew out of was heavily involved in a time where art and aesthetics were undergoing radical change, and art therefore often represents a challenge to those claiming that we have reached the 'end of history', or the 'end of art'.

¹⁵⁰ Vaughan, William. “Introduction Digital Art History?”. in *Digital Art History*. ed. Anna Bentkowska-kafel, Trish Cashen, Hazel Gardiner. (UK: Intellect Books) 2005. p. 4.

¹⁵¹ Gilmore, Eamon. "Democratisation and New Media." *Irish Studies in International Affairs* 23 (2012): 5-12. <http://www.jstor.org/stable/23489209>. Accessed: 24.10.2017

Whilst past attempts to define new media have had limited results, discussing new media in the multiple contexts within which it is situated may lead to a more coherent understanding of the phenomena. For example, the global outreach of new media and its ability to create cultural connections across historically and geographically established boundaries is reflective of one of its fundamental characteristics. New media is interactive; it represents a “radical, even bewildering shift in terms of who is in control of the information.”¹⁵²

Whilst this is an example of a specific artistic work challenging the precedence of time, space, and traditional derived objectivity of art, the larger notion of the digital has an inherency in exploring the relationship between the digital and the analogue (or the ‘real’). Digital information has no physical embodiment, but shares “many essential features of the physical things such as substantiality, extensions, and thing-totality.”¹⁵³ Therefore, digital art also has an authentic quality in its capacity to have multiple forms of embodiment. With an increasing amount of human activity and interaction occurring in a digital capacity, an important clarification needs to be made about the ontology of the digital-being. Johaan raises deep-rooted philosophical questions about new media; “are these computer files and programs another sort of ‘thingly beings... or, are they merely ‘non-things’ somewhat close to Heidegger’s ‘hallucinations’... because they are not ‘real’ and do not have material basis nor specific places in objective time and space.”¹⁵⁴

¹⁵² Ibid.

¹⁵³ Kim, John. “Phenomenology of Digital-Being.” *Human Studies* 24, no. 1/2 (2001): 8. <http://www.jstor.org/stable/20011305>. Date accessed: 24.10.2017 p. 87.

¹⁵⁴ Ibid.

These inherent criteria of new media art that I have outlined make the following points. Firstly, that new media art offers a unique and insightful means to explore what the larger social and cultural significance of new media might be, and that the scholarly literature surrounding new media would benefit from being more contextually and critically engaging with its history and wide-ranging connections. The literature surrounding new media whilst often maintains an important focus for analysing the complex and multi-faceted nature of new media, an inter-disciplinary approach to understanding new media is essential. As a phenomenon that has implicated many forms of cultural output, particularly art, not only does there remain to be seen a specific, accurate, and nuanced way of understanding new media, but also a notionally 'correct' way of thinking of new media that gives due credence to its complexities and idiosyncrasies.

The European avant-garde art tradition represented one of the greatest shifts in art practices and philosophical thought of the twentieth century. For artists this meant a significant period of change which ushered in radical means of creating art coupled with new intentions, and the relationship between this artistic tradition and new media constitutes a necessary quality in new media to be a driver of change. New media art represents an artistic practice that embraces the challenges of the future. Exhibitions such as *Les Immateriaux* marked a synthesis between art, philosophy, digital technology, and new media, in a manner that bucked the trend of radical aesthetics. The fact that European new media art has been influenced by the avant-garde art tradition demonstrates that it is fundamental within the historical and artistic lineage of new media art to embody radical change and experimental

art practices. This fundamental characteristic is also embodied in the stylistic characteristics of new media art, such as interactivity, and synthesising new media and radical art movements, thus constituting a necessary artistic notion of change embedded in the culture of new media.

New media art and globalization

Globalization has been one of the most significant drivers of change in the modern world. New media has a direct relationship with globalization, as new media technology connected people and cultures across the globe and galvanized an accelerated rate of globalization. Many new media artists have used art to engage in a shared cultural experience and explore the concept of globalization. In doing so, new media artists have challenged globalization and its effects on culture and art, and it is therefore evident that new media lies at the heart of this global change in its ability to connect people, artists, and art.

One challenge that new media artists have had to face in the midst of globalization is in maintaining a distinct sense of national style, particularly at a time when the world is being increasingly understood as one interconnected place. For Irish new media artist Paul O'Brien, there is a "growing difficulty in pinning artists down in a national or geographic sense,"¹⁵⁵ and this has had distinct implications for the Irish new media art communities, and also the larger art community from Ireland. O'Brien claims that the root of the problem in establishing a nationalistic identity lies in the agenda of many political institutions who have a distinct political agenda to push the process of globalisation. In O'Brien's opinion, the European Union in particular threatens "to make both Irish National and Ulster loyalism irrelevant."¹⁵⁶ For many critics including O'Brien, the importance for artistic representation in

¹⁵⁵ O'Brien, Paul. "New-Media Art: An Irish Context." *Circa*, no. 120. 2007. doi:10.2307/25564802. Date accessed: 24.10.2017

¹⁵⁶ Ibid.

a world that is perceived to be becoming increasingly globally connected is directly related to the politics of globalization, the implication of which are often manifested in specific agendas and policies pushed by political institutions and organisations. For new media artists, the implications of globalization mean reconciling the presence and representations of artists and individuals in the digital realm and internet cyberspace with the innate and directly related 'politics of the real'. Whilst this concern isn't often recognised in the relevant literature on new media art, the specific works from new media artists within the global community show that this is becoming an increasingly prominent concern.

Despite the fact that Ireland has been at the "forefront of computer software development for a number of years,"¹⁵⁷ a prominent Irish nationality in the arts has become "increasingly clouded."¹⁵⁸ There are concerted efforts to integrate digital art practices into Ireland's contemporary art community. The *Dublin Art and Technology Association* (DATA) encourages collaboration between a variety of different kinds of artistic practitioners, including musicians, visual artists, and technologists, who all meet at the intersection between new media and art in Ireland. Many Irish new media art works engage with globalization, such as the work of Jonah Brucker-Cohen, who is a co-founder of DATA. His website *coin-operated* is a collection of interactive artworks that engage with the potential of networks whilst being critical of politics and certain world events. Jonah Brucker-Cohen

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

collaborated on the new media work *Killer Route*,¹⁵⁹ which used live public domain crime data and a GPS to route the user through neighbourhoods with particularly high crime rates. The aim of this project is to give a wider perspective about the urban geography of areas which are particularly rife with crime, and through the network created through the app, give the user an opportunity to explore both physical and virtual areas that they might not have done in the first place. This work amongst others, and the growing place of Irish nationality within Ireland's new media art community shows both the potential and negative implications of globalization on the artistic community.

John Gerrard uses real-time computer simulation to explore historical moments of human endeavour through the scope of modern technology. His 2017 work *X. LAEVIS (SPACELAB)* “responds to Luigi Galvani’s eighteenth century experiments in which he studied the effects of electricity on the amputated legs of dead frogs.”¹⁶⁰ Gerrard juxtaposes the eighteenth century experiments with a similar experiment on the Space Shuttle *Endeavour* of 1992, testing whether a specific breed of frog could reproduce in zero-gravity, thus anticipating of sustainable future for life beyond planet Earth. Whilst this art work might initially appear as just a critique on the historical precedence of testing frogs, the virtual simulation provides a new means of clashing the scientific, technological, and historical values of times and worlds apart. Through new media technology, these concerns are fused

¹⁵⁹ Brucker-Cohen. *Killer Route*. <http://www.coin-operated.com/2017/02/25/killer-route-2017/>. Date accessed 5.12.2017

¹⁶⁰ Gerrard, John. *X. LAEVIS (SPACELAB)*. 2017. <http://www.johngerrard.net/x-laevis-spacelab-2017.html>. Date accessed: 7.9.2017

into a single art work that can critically comment on a wide-variety of different issues. Whilst this work is not directly addressing the issues of globalization, the comparison between Gerrard and Brucker-Cohen's work show a potential to acknowledge art works from similar or different regions and celebrating cultural similarities or differences. Many works of new media art or particularly net.art can often be generalised into specific kinds of communities unique to the medium. Whilst these communities are a necessary quality of the given art from, (such as the online internet communities and net.art), addressing the native contextual characteristics of these works elucidate cultural difference in an often-over-generalised context.

Gerrard's work *Western Flag* is a digital simulation that depicts one of the world's first major oil drilling site 'Lucas Gusher.' In the real-world, the site is barren, because all the oil has been exhausted, but Gerrard's digital simulation depicts a "flagpole bearing a flag of perpetually-renewing pressurised black smoke."¹⁶¹ The digital flag is often a symbol of ownership and triumph and "runs in exact parallel with the real site in Texas throughout the year: the sun rising at the appropriate times and the days getting longer and shorter according to the seasons."¹⁶² This effect is created through software that calculates the frame of each animation with respect to the real-time site. Gerrard claims that the purpose of the art work is to draw attention to the fact that "One of the greatest legacies of the 20th century is not just population explosion or better living standards but vastly raised carbon dioxide levels

¹⁶¹ Gerrard, John. *Western Flag*. 2017. <http://www.johngerrard.net/western-flag-spindletop-texas-2017.html>. Date accessed: 7.9.2017

¹⁶² Ibid.

in the atmosphere. A new flag attempts to give this invisible gas, this international risk, an image, a way to represent itself.”¹⁶³ Similarly to *X. LEAVIS*, the work is both culturally and historically engaging, and exemplifies the ability for new media to simulate and reproduce the past, whilst anticipating the challenges and complexities of the future.

Chinese and Korea new media art communities have also engaged with the concept of globalization in an artistic context, as this has particular historical importance for new media as these countries have put a massive emphasis on growing technological infrastructure and pushing development. During the twentieth century, “the Chinese Communist Regime paid great attention to science and started by encouraging scientific education throughout the country.”¹⁶⁴ By comparison, “until the late 1990s, it was hard to imagine that one day Korea would become one of the most powerful players in the global digital media scene,”¹⁶⁵ but now Korea is “is fully saturated in most information communication technology (ICT) sectors, including games, mobile media, and the Internet.”¹⁶⁶ The artistic communities in these regions encouraged this development. During the beginning of the twenty first century, “media departments opened one the other... and increasing amount of young people took up studies that moved toward combining technology and the fine arts.”¹⁶⁷ Particularly in Korea,

¹⁶³ Ibid.

¹⁶⁴ Modelski, J. A. "Communist China's Challenge in Technology." *The Australian Quarterly* 30, no. 2 (1958): 57-68. <http://www.jstor.org/stable/20694661>. Date accessed: 24.10.2017

¹⁶⁵ Hyeryoung ok. “New Media Practices in North Korea” <http://escholarship.org/uc/item/3292g385>. Date accessed: 9.11.2017

¹⁶⁶ Ibid.

¹⁶⁷ Li, Zhenhua. "Media Art in Beijing." *Leonardo* 40, no. 3 (2007): 222-23. <http://www.jstor.org/stable/20206407>. Date accessed: 24.10.2017

the central name to the legacy of digital arts was Nam June Paik, whose innovative work in video art challenging convention, created new boundaries, and his work would become famous across the globe in museums and university art departments. Serwer claims that “he is the uncontested father of video art”, and an exhibition in New York on his work “immediately brought to mind Paik’s original career as an avant-garde musician and composer.”¹⁶⁸ An inherent theme in Paik’s work is not just using technology (particularly televisions at the time) as a means of displaying artistic practices, but using the technology themselves to generate new artworks and artistic connections. Paik’s work TV Bra for Living Sculpture demonstrates this concept at an early point in Paik’s career. The work attempts to demonstrate “a way of humanising the technological by forcing it into a hybrid relationship with the body as well as other artistic media such as performance.”¹⁶⁹ The work raises essential questions about the notion of hybridity in a technology derived artistic context, and how by combining two concepts, objects, or other agents, a new form is created.

Whilst globalization is not a concept directly addressed by Paik, his art style and legacy demonstrate the crossing of cultural boundaries through the specific medium of his work, but also from the context with which he practices art. In terms of Paik’s career, “his amalgam of East and West comes through as well. Because he grew up in Korea during the Japanese occupation, studied in Japan, Hong Kong, and Germany, and ultimately made his

¹⁶⁸ Serwer, Jacquelyn D. "Nam June Paik: "Technology"." *American Art* 8, no. 2 (1994): 87-91. <http://www.jstor.org/stable/3109146>. Date accessed: 24.10.2017

¹⁶⁹ Art Electronic Media. “TV Bra for Living Sculpture”. <http://artelectronicmedia.com/artwork/tv-bra-for-living-sculpture>. Date accessed: 9.11.2017

career largely in New York.¹⁷⁰ Paik's cross-cultural awareness and breadth of understanding for different societies is demonstrated in his 1992 work *Video-Wall*, which was originally exhibited in New York. The work "paid tribute to Mozart...Paik arranged 86 television monitors into a wall-sized sculpture, which plays simultaneous videos of Mozart, John Cage and Joseph Beuys, in a continuous loop."¹⁷¹

Paik's art works demonstrated a new approach to understanding cultural change rooted in technological advancement within an artistic context. Paik put a particular emphasis on exploring how television could offer new opportunities for creating art.¹⁷² Many of Paik's works make significant use of television, which draws attention to the fact that many of Paik's works are explicitly object-oriented. *Bakelite Robot* is a sculpture by Paik created in 2002, constructed from nine radios, however the radios have been modified to also show television monitors. As the supposed 'father of video art', this sculpture is a diversion from the artistic practice that Paik is often known for, but is relevant to the contexts of 1960s Tokyo, where Paik went to study robots and colour television.¹⁷³ Whilst Paik's art works so often demonstrate and explore similar concerns that new media artists would explore a generation later, such as the changing nature of the artistic interface, some critics such as Freed tend to limit the scope of Paik's work to the television specifically, the way in which Paik explores the

¹⁷⁰ Serwer, Jacquelyn D. "Nam June Paik: "Technology"." <http://www.jstor.org/stable/3109146>. Date 24.10.2017

¹⁷¹ Ibid.

¹⁷² Freed, Hermine. "Nam June Paik Retrospective." *Art Journal* 42, no. 3 (1982): 249-51. doi:10.2307/776590. Date accessed: 24.10.2017

¹⁷³ Hannah Dewar. "Nam June Paik: Bakelite Robot". <http://www.tate.org.uk/art/artworks/paik-bakelite-robot-t14340>. Date accessed: 11.9.2017

television shows an exploration of form and connections rather than purely content. As is demonstrated by TV Bra for Living Sculpture, the television becomes purely a medium for exploring the connections created from hybridisation and shows that Paik's work isn't purely about exploring the technological capabilities of television and video, but that Paik as an artistic is both historically and culturally engaging. Paik's work has not necessarily come to define national Korean identity, in fact he spent a large portion of his career working and defining American artistic styles. However, Paik represents the most recognisable contribution to the convergence between digital media technology and Korean culture, at a time when Korea was putting increasing emphasis on technological advancement, and Paik's works have since gained a distinctive global resonance.

The emergence of global and national political infrastructure has been increasingly relevant in the context of a 'global society', because whilst establishing individual nation states might indicate a kind of individualism of national identity, the world has inevitably been moving "towards a world consciousness... a universal persona."¹⁷⁴ However, the concept of globalization for the arts is more relevant to the notion of 'cultural globalization', and the convergence of artistic values beyond geographical boundaries. Many art and cultural forms benefit substantially from the process of globalization in terms of outreach, and this has been particularly enhanced by communication technologies. Film is one of these beneficiaries, as "American movies make a large percentage of their profits overseas."¹⁷⁵ From this process

¹⁷⁴ Ibid.

¹⁷⁵ Carroll, Noël. "Art and Globalization: Then and Now." <http://www.jstor.org/stable/4622217>. Date accessed: 24.10.2017

cultural dialogues can be created, such as the many Americans who have “developed a taste for Japanese anime and martial arts films from Hong Kong.”¹⁷⁶ However, a post-colonialist interpretation of the increased interest in Japanese Anime from the US would argue that this interest further reinforces a perception of anime which defines it by its Saidian 'otherness', which defines these cultural forms by the specificity of national cultural identity. Away from specific policy-making, many of these art forms show the ability to combine different cultures into a more unanimous form, but do not necessarily reveal the driving force behind this process. In the case of film and television, these forms specifically lend themselves to communications technology, and the medium only creates an easier mode of access for these different cultural forms.

Marshall McLuhan’s concept of the ‘Global Village’ was prophetic of the ways in which media would aggregate communities into a ubiquitous notion of a global culture. New media lends itself to McLuhan's concept of a global village, where the "ability of the ICTs has not only enhanced the penetration of mass media... but it has also produced new opportunities to accelerate communication at the grass root level applying technologies like internet or cellular phones."¹⁷⁷ McLuhan writes that "the new media and technologies by which we amplify and extend ourselves constitute huge collective surgery carried out on the social body

¹⁷⁶ Ibid.

¹⁷⁷ Altaf Shah & Professor Dr. Allah Nawaz. *Impacts of Globalization and Digital Technologies on Access to Radio*. Global Journal of Human-Social Science. 2015. <https://goo.gl/n7KjRu>. Date accessed: 1.8.2017: 12:30. p. 3.

with complete disregard for antiseptics,¹⁷⁸ and an initial interpretation might suggest that McLuhan is using a surgical (and perhaps cybernetic) metaphor to illustrate the overabundance of media technologies in the everyday lives of people. McLuhan wrote that the effects of new technologies have had specific effects on the body, and the way people physically interact with media forms. He stated that "the effect of radio is visual; the effect of photo is auditory. Each new impact shifts the ratios among all the senses."¹⁷⁹ Whilst it would initially seem that new media inherently sustains a 'global village', there are primarily two factors that would indicate the opposite. Whilst new media has given a window of access to different cultures and their art forms, there are various instances where this merely reinforces an oriental 'otherness' to those cultural forms.

The 'Global Village' has many similarities with globalization, in that the "electric speed in bringing all social and political functions together in a sudden implosion has heightened human awareness of responsibility to an intense degree."¹⁸⁰ McLuhan's concept was revolutionary in outlining an archetypal process of globalization where societies and cultures across the globe would become increasingly connected through new avenues of media communication. McLuhan was "aware of the coming of the Net, the Web and other digital media,"¹⁸¹ and predicted that as digital connectivity would increase the exchange of cultural

¹⁷⁸ Marshall McLuhan. "The Nemesis of Creativity". <http://web.mit.edu/allanmc/www/mcluhan.mediummessage.pdf>. Date accessed: 31.7.2017.

¹⁷⁹ Ibid.

¹⁸⁰ Marshall McLuhan. *Understanding Media*. p. 4.

¹⁸¹ R. K. Logan. "McLuhan misunderstood. Setting the record straight" p. 34. in *Understanding Media, today. McLuhan in the Era of Convergence Culture*. November 2011 Collection Sehen, Editorial Universidad Oberta de Catalunya, Barcelona, España

dialogue, traditional boundaries that separated cultures, nations, and geographies would break down. However, McLuhan's global village implies the emergence of a "homogenised global culture,"¹⁸² rather than the multi-layered borrowing of cultural ideas and values that are apparent in global iterations of new media art. Instead, Crane argues that "cultural globalization is recognised as a complex and diverse phenomenon consisting of global cultures, originating from many different nations and regions."¹⁸³

It is not possible "to speak of the meaning of local/global identity in art without taking into account the art *system*... the apparatus (galleries, museum...) which integrates the cultural and economic dimensions."¹⁸⁴ With the integration of new media and internet computer technologies into other countries and cultures, the development and of globalization has a far more concrete outcome. Art institutions have had to make concerted efforts to address the opportunities and challenges that globalization and the consequent advancement of technology presents. More museums and galleries are adopting technological forms in the curational space, and there is a far bigger emphasis on showcasing the international art communities work than there were a few decades ago. However, the study of the expansion of the art institutions to an international community thus far been limited, and has "rarely been studied for what it is and without the rhetoric that belongs to ecumenism or

¹⁸² Diana Crane. "Culture and Globalisation: Theoretical Models and Emerging Trends". In *Global Culture, Media, Arts, Policy, and Globalization*. (UK: Routledge) 2002. p. 1.

¹⁸³ Ibid.

¹⁸⁴ Bolognini, Maurizio. "Globalization, Art and the Art System." <http://www.jstor.org/stable/43623736>. Date accessed: 24.10.2017

the global and, more recently, anti-global dimension."¹⁸⁵ Whilst the increasing convergence of international art scenes might initially indicate that artists and artworks from different regions can coexist within westernised art institutions, there is much evidence to suggest that "artists have often been selected according to criteria ending to separate the work from its original context."¹⁸⁶ By removing an artwork from its original context, art institutions may lend themselves to exoticising a work of art and its artistic context, creating a kind of orientalism centred around a piece of art as an 'other'. Art galleries have given "increasing space to artists from South-East Asia, Africa, and Latin America,"¹⁸⁷ but these regions are not necessarily reflected equally in the global art trade, on which the US makes up half of the bought artistic assets across the globe,¹⁸⁸ and is evidently not equal to the total artistic assets across the globe.

Globalization offers an opportunity to embrace new media art from a variety of different contexts and allows us to learn from the many complex contexts from which these art works come from. New media is not the sole driving force of globalization, new media galvanises the process by allowing a platform for individuals and communities to connect with one another through the internet and shared cultural experience. Featherstone argued that globalization has had a negative impact, by stressing which implications of globalization would ultimately have on the western global hegemony, at the expense of second and third

¹⁸⁵ Ibid.

¹⁸⁶ Ibid.

¹⁸⁷ Ibid.

¹⁸⁸ Ibid.

world countries. According to Featherstone, we live in a “global condition in which we in the West find it more difficult to view ‘the other’ through the long-distance lens implicit in terms such as ‘the savage’, ‘the native’, and ‘the oriental’.¹⁸⁹ Featherstone’s argument stressed that the process of globalization inherently couches the globe into a singular unified notion of culture and society. On the other hand, Dunning claimed that globalization is the most “efficient wealth creating system known to man,”¹⁹⁰ but gives no indication this quality might have a negative impact. There is “a strong tendency for globalization to provide a stage for global differences... examples of the distant exotic are brought directly into the home, but to provide a field for a more discordant clashing of cultures.¹⁹¹ The globalization process has historically been used to fulfil diplomatic ambitions, and that “the world had little choice but to become increasingly like it (more democratic, more capitalistic... and so on).”¹⁹²

These art works and critical approaches to globalization highlight the significance of the relationship between globalization and new media. Understanding this connection engages the works of new media art with the unique experience and histories of individual countries and local cultures and demonstrates the fact that new media has driven change. New media art embodies the change of globalization and offers insight to the effects of globalization the from the cultural context and experiences of the artists themselves, each

¹⁸⁹ Featherstone. *Undoing Culture: Globalization, Postmodernism, and Identity*. (USA: Sage Publications) p. 82.

¹⁹⁰ John Dunning. *Making Globalization Good: The Moral Challenges of Global Capitalism*. p.1.

¹⁹¹ Featherstone. *Undoing Culture: Globalization, Postmodernism and Identity*. p. 13.

¹⁹² Ritzer, George. "Rethinking Globalization: Glocalization/Globalization and Something/Nothing." <http://www.jstor.org/stable/3108635>. Date accessed: 24.10.2017

with unique understandings of the ways in which globalization has changed the world and art.

Challenges for new media art today

The evidence that new media has driven change in the arts and society is overwhelming, but there is often very little tangible evidence of the ways in which new media might drive further change in the future. Contemporary new media art practices have embodied the notion of change, and there is a distinct precedence among new media art institutions and festivals to demonstrate the radical and experimental ways in which new media is transforming the arts and society, and with that emphasis on change comes a variety of new challenges in the future new media art initiatives.

New media art has challenged established traditions of portraying art in a museological context. Traditional museums have had to make significant adjustments in order to accommodate digital art forms of portraying and exhibiting different art works by updating historically established museological conventions. Since the 1980s, the "conventional notions and practices of exhibition... always appeared anachronistic and inappropriate for their objectives."¹⁹³ One result of this is that new media art generally didn't lend itself to the titanic symbols of nationalistic artistic institutions, and new media art rarely inhabited "buildings that look like traditional art museums and particularly not like the neoclassical structures of the Louvre in Paris or the national galleries of London."¹⁹⁴

¹⁹³ Jonathan Harris. *The Global Contemporary Art World*. (UK: John-Wiley & Sons.) 2017. p. 66.

¹⁹⁴ Harris. *The Global Contemporary Art World*. p. 66-67

The 2002 Multimedia Art Asia Pacific (MAAP) Festival was held in Beijing and demonstrated many of the challenges and convergences that new media digitally based art forms would pose to traditional museum and museological forms of presentation. This festival was then held at an apex of artistic engagement with these technologies and is somewhat archetypal in its artistic ambition and experimental modes of audience engagement. For example, “at the time of MAAP, interaction in Chinese media art consisted solely of physical interaction”, which seems to indicate a strange neglect towards digital forms of representation which would lend itself to the theme of the festival. Many of the works exhibited attempted to combine digital and ‘real’ environments, such as Shaw’s Web of Life. The work “is formed by an immersive conjunction of projected three-dimensional computer graphic and video images, together with a fully spatialized acoustic experience and a specially conceived architectural surrounding.”¹⁹⁵ By combining the different environments, Shaw’s work gives “symbolic and experimental expression to the action of connecting oneself to an emergent network of relationships,”¹⁹⁶ but also challenges the precedence of the ‘white cube’ commonplace in museums as the standard of artistic representation. The emergence of artistic spaces away from the art gallery had a transformative effect on the art communities in Beijing, as it affected the geographical circumstances of many new media artists. Whilst “there is a growing trend in Beijing towards the conglomeration of private art spaces, artists’

¹⁹⁵ Jeffrey Shaw. Web of Life: Network Instillation. http://www.jeffrey-shaw.net/html_main/show_work.php?record_id=117. Date accessed: 11.9.2017

¹⁹⁶ Ibid.

studios and gallery spaces,¹⁹⁷ an increasing amount of concentrated artistic districts began to emerge in Beijing, such as the '798 Art Zone' in Dashanzi. Originally a military base, this area would become a hub for a thriving artistic community, and art practices would increasingly escape the boundaries of the museum to showcase works in the real world. This localisation of artistic communities would ultimately become acknowledged and reflected through specific government policy and should not be overlooked in the evolution of Beijing's art community development. In 2006, a "centre for creative industry was established to mark the start of a new era in which state and non-state elements could collaborate, come together and announce the beginning of Chinese media art."¹⁹⁸

In September of 2017, the *Ars Electronica* hosted its annual festival in Linz with a specific focus on artificial intelligence, and the focus of the festival may have been an indication of a future direction for new media within the art community. Many of the art works and artists were simply described as "media artists,"¹⁹⁹ despite showcasing works that demonstrate new media technology in incredibly advanced and experimental forms, which may indicate that 'new media' as a term is becoming outdated. The work *Lightscale II* by Uwe Rieger transformed St. Mary's Cathedral into an installation light show. The curator claims that the work "floats through a virtual ocean, materializing environments, events and user interactions. The installation generates a tactile data experience through 3D projections onto

¹⁹⁷ Li, Zhenhua. "Media Art in Beijing." *Leonardo* 40, no. 3 (2007): 222-23. <http://www.jstor.org/stable/20206407>. Date accessed: 24.10.2017

¹⁹⁸ Ibid.

¹⁹⁹ Author not given. <https://www.aec.at/feature/en/festival2017/>. Date accessed: 18.10.2017:1:13

multi-layered gauze surfaces.”²⁰⁰ This emphasis on creating virtual spaces was a consistent theme throughout the festival, and far more closely represents what has typically been considered new media to its old counterpart.

The festival also focused on many other challenges that the digital art community is currently facing. The central theme to the festival, artificial intelligence, challenges the notion of authorship and authenticity in art practices, but also encompasses the "cultural, psychological, philosophical and spiritual aspects beyond the technological and economic horizon.”²⁰¹ There is a challenge to the authenticity and human value of art if artificial intelligence demonstrates the ability to create art. In the case that artificial intelligence becomes capable of producing art, there is no methodology in place for how these art works might be treated in terms of their aesthetic and contextual context, and whether these works should be considered art in the first place. On one level, modern technology has consistently pushed the boundaries of how artists identify with their works; technology has become both the tool for the creation of art, but also the artwork itself. Artificial intelligence takes this change in the dynamic to its absolute extreme, and potentially makes art as an inherent form of human expression redundant. Creative and artistic thinking is an essential human quality, but should AI become artistically and ethically autonomous, there may be a crisis in how humans place themselves within the artistic world.

²⁰⁰ Uwe Rieger. “Ars Electronica Lightscale II”.
<https://www.flickr.com/photos/arselectronica/36956739381/>. Date accessed. 18.10.2017

²⁰¹ Aec. “Artificial Intelligence: The Other Me.” <https://www.aec.at/ai/de/theme/>.
Date accessed: 30.7.2017

Minsky stated in 1968 that the definition of artificial intelligence is the "science of making machines do things that would require intelligence if done by men,"²⁰² and this was particularly insightful at a time when research into artificial intelligence was irregular and for a limited group of computer scientists. However, this definition of artificial intelligence marked an important moment in the development of the field, because it indicated a distinct theoretical approach that moved away from applying "computer techniques to engineering and business,"²⁰³ to intelligence specialists speaking of "replacing the human mind."²⁰⁴ Whilst the early days of research into artificial intelligence were largely centred around elite universities, a far bigger emphasis in the contemporary discourse on artificial intelligence comes from corporations.

In 2017 researchers at Facebook were required to shut down an artificial intelligence research project, because the system had developed its own language,²⁰⁵ demonstrating an ability to learn beyond its programming language. Automated learning is one of the major current concerns about the development of artificial intelligence, and in the case of Facebook's artificial intelligence project, the "AI being monitored by humans has diverged

²⁰² Marvin Minsky. *Semantic Information Processing*. (Cambridge: MIT Press) 1968, p. v.

²⁰³ Bolter, J. David. "Artificial Intelligence." *Daedalus* 113, no. 3 (1984): 1-18. <http://www.jstor.org/stable/20024925>.

²⁰⁴ Ibid.

²⁰⁵ Andrew Griffin, "Facebook's Artificial Intelligence Robot shuts down after they start talking to teach other in their own language". <http://www.independent.co.uk/life-style/gadgets-and-tech/news/facebook-artificial-intelligence-ai-chatbot-new-language-research-openai-google-a7869706.html>. Date accessed 5.12.2017

from English to develop its own language,²⁰⁶ and these factors are increasingly raising concerns that artificial intelligence is consistently violating Asimov's fundamental laws of robotics. If AI systems continue to develop their own language without human intention, then the second of Asimov's rules which states that "a robot must obey orders given it by human beings,"²⁰⁷ then there is a clear safety and humanitarian issue. Artificial intelligence systems will soon develop beyond their current linguistic capabilities, and "we shall soon regard computers as a full-fledged medium of verbal and visual communication."²⁰⁸

The fears of artificial intelligence share many consistent themes manifested in the literary and artistic responses to a growing fear of the unknown, and whilst some of these responses are specifically relevant for artificial intelligence, some merely share characteristics. The critical dialogue surrounding artificial intelligence often neglects its practical achievements, because the more compelling story is the "metaphor that lies behind the programs: the idea that human beings should be seen as nature's digital computers."²⁰⁹ In a world where there is increasing evidence that AI threatens many of the fundamental ontological privileges of being human, the literature of H. P. Lovecraft finds a new sense of relevancy. Whilst Lovecraft's literature does not explicitly explore the fear of self-advancing technology, the omnipresent cosmic horror of something greater and more powerful than

²⁰⁶ James Walker. "Researchers shut down AI that invents its own language". Digital Journal. <http://www.digitaljournal.com/tech-and-science/technology/a-step-closer-to-skynet-ai-invents-a-language-humans-can-t-read/article/498142>. Date accessed: 30.7.2017

²⁰⁷ Asimov. "Runaround". *I, Robot*. https://www.ttu.ee/public/m/mart-murdvee/Techno-Psy/Isaac_Asimov_-_I_Robot.pdf. p. 26. Date accessed: 24.10.2017

²⁰⁸ Bolter, J. David. "Artificial Intelligence." *Daedalus* 113, no. 3 (1984): 1-18. <http://www.jstor.org/stable/20024925>. Date accessed: 24.10.2017

²⁰⁹ Ibid.

humankind remains a consistent theme throughout his novels. For example, in Lovecraft's most recognisable character, Cthulhu, the horror of the unknown as something more powerful than humankind bears many of the same emotional and philosophical responses that the contemporary discourse on artificial intelligence indicates. Similarly, in the Asimov's short stories, many of the robotic characters and plotlines embody the human paranoia aimed towards artificial intelligence. This highlights that the critical discussion around artificial intelligence often lacks objectivity, by basing its premises on unknown factoids. This reinforces the relevancy to take artistic responses to artificial intelligence more seriously and may provide a more coherent blueprint for discussion in the humanities.

Artificial intelligence poses challenges for the traditional visual arts that have historically been dependent on the human skill such as drawing or canvas painting. There has already been research conducted into the creative capacity for AI, and "since the dawn of Artificial Intelligence, scientists have been exploring the machine's ability to generate human-level creative products such as poetry, stories, jokes, music, paintings, etc.." ²¹⁰ In order for artificial intelligence to create authentic art, the process by which art is made needs to be creative rather than emulative. Whilst artificial intelligence can derive algorithms to mimic the stylistic characteristics of traditional art forms, the work is not authentic, and it is only once this creative capacity is reached can an AI system be considered truly artistically autonomous. Whilst new media art creates a distance between user and interface, the

²¹⁰ Ahmed Elgammal et al. "CAN: Creative Adversarial Networks Generating "art" by Learning About Styles and Deviating from Style Norms". <https://arxiv.org/pdf/1706.07068.pdf>. p. 1. Date accessed: 24.10.2017

convergence between human and machinery can be shown in many of the works by Cybernetic artists. The work of Nicolas Schöffer revolutionised the digital art world, "by creating some of the first kinetic sculptures, which gave rise to the dynamic world of technological art."²¹¹ His sculptures such as *CYSP 1*, "employed an 'electronic brain connected to sensors that enabled the human-scale kinetic sculpture to respond to changes in sound, light intensity and colour... including that of the audience."²¹² Minsky argued that there "is no real difference between humans and machines,"²¹³ and that humans are actually "machines of a kind whose brains are made up of many semiautonomous but unintelligent 'agents'."²¹⁴ Based on Minsky's theory, the sculptures of Schöffer emulate the same kind of intelligence and creativity displayed in many human artistic works, even though the cybernetic elements of *CYSP 1* are derived from a human architect. These examples illustrate that in many cases the earliest voices of concern over the potential of artificial intelligence derived from artistic communities. Whilst discussion and discourse on artificial intelligence is often limited to the social, technological, and political spheres of society, the artistic responses can often shed light on a subject of increasing concern.

²¹¹ Erica Gonsales. "Cybernetic Art Pioneer Nicolas Schöpfer Lifetime of Kinetic Sculptures. (October 2012). https://creators.vice.com/en_uk/article/d7xq7x/cybernetic-art-pioneer-nicolas-sch%C3%B6ffer%E2%80%99s-lifetime-of-kinetic-sculptures. Date accessed: 30.7.2017

²¹² Art Electronic Media. "CYSP 1". <http://www.artelectronicmedia.com/artwork/cysp-1>. Date accessed: 24.10.2017.

²¹³ Glenn Rifkin. "Marvin Minsky, Pioneer in Artificial Intelligence, Dies at 88." (New York Times) 2016. <https://www.nytimes.com/2016/01/26/business/marvin-minsky-pioneer-in-artificial-intelligence-dies-at-88.html>. 30.7.2017 15:05.

²¹⁴ Glenn Rifkin. "Marvin Minsky, Pioneer in Artificial Intelligence, Dies at 88."

As artificial intelligence develops into increasingly autonomous 'beings', the need to legislate also grows equally and accordingly so that artificial intelligence can ethically integrate into human cultures and social traditions. By legislating effectively and accordingly to the needs and progression of AI technology, a greater consolidation can be made between the fearful unknown future of AI, and the ways in which the technology has practical benefit. In certain digital humanities fields this had already begun to some extent. As social media is becoming increasingly used as a research tool, there is a greater need to understand the ways in which social media can be used both ethically and effectively as a resource. With regards to social media, there are two primary issues on this topic. The first is how the internet and social media change the dynamic of intellectual property. If, for example, you reference a YouTube video for the purpose of research, there is no clear indication of who 'owns the content'. To a large extent this issue can be solved by implementing the same scepticism towards any resource for the purposes of research; where does a source come from, but similarly to the tendencies of new media art represent a transformation in how content is to be interacted with online.

Fake news is an example of this problem, but fake news is yet to demonstrate any significant impact on artistic communities but represents fundamental challenges to the nature of information. The term fake news has often been used alongside 'post-truth society', as a way of describing a crisis in the validity of information, particularly in reference to the way societies assess political candidates. Fake news has a direct relationship with new media, because new media is the platform and means of access that fake news uses to shape public

opinion. However, fake news is not a recent phenomenon; the ability to undermine public perception of global events and relationships has been established for centuries, but it is only recently that it has become a point of public debate and headline news. In 2016, there were two major events that have become associated with fake news, the UK referendum to leave the European Union, and the US presidential election. Fake news played a role in changing the way the public perceived the reality of these events. This has particular relevance to the ideas of Jean Baudrillard, as fake news represented a drastic change in the relationship and meaning of signs and symbols, and it is through new media technology that fake news is undermining meaning. In one sense, art has been for a long time a platform for political expression, and as such artists have the ability to both critical comment on the importance of fake news, whilst also perhaps using fake news itself for artistic expression. Future art works could be created using new media technologies that deliberately attempt to undermine the viewers experience of the art work in the same way that fake news does, and as such raise questions of artistic authenticity, and who controls the art works own institution. For new media, fake news presents a challenge, where the fundamental element of media communication is undermined and taken to its logical extreme; in a world where fake news is prevalent, the virtue and necessity for media systems to maintain democracy is undermined, and it is directly through the channel of new media communications that fake news finds its strength.

New media will permeate cultural and geographical boundaries as technological and industrial infrastructure continues to grow. Anil Dash argued; “what we are faced with now in

the world of new media is making sure that we are creating environments that everyone can participate in, and making sure that we are encouraging a culture of inclusion.”²¹⁵ By creating an environment and culture where the versatility of new media can be merged with the global potential for new media to enhance people’s lives can be reached. This potential will be realised by making the broad sets of tools that new media can provide increasingly more accessible, such as making the “fanciest trick you could do on Photoshop”²¹⁶ and the “most advanced video editing tool”²¹⁷ available and usable to anyone. However, this issue isn’t as simple as just making those software’s and technologies more available for the developing world and more rural locations, because software companies design technology for the benefit of the consumer, they “don’t realise the cultural assumptions... when we make what we think are features in software, we are actually defining culture.”²¹⁸ For example, using Soundcloud as a platform for musicians to distribute their works both defines and shapes the parameters of online musical cultures. Or in the case of Apple products, Mac One way of combatting this issue could be in making new media forms more ‘open source’, so that individuals and cultures can tune the features of new media to fit their own desires and values.

Critical approaches to new media are often biased towards retrospective hindsight.

The result of this is that very little indication of what tangible change new media might bring

²¹⁵ Dash, Anil. “The Future of New Media”. Recorded July 2009. Duration 7:11. <http://bigthink.com/videos/the-future-of-new-media>. Date accessed: 24.10.2017

²¹⁶ Ibid.

²¹⁷ Ibid.

²¹⁸ Ibid.

in the future, particularly to the global art practices that use new media. Manovich argued that he wished “someone in 1895, 1897, or at least 1903, had realised the fundamental significance of the emergence of the new medium of cinema and produced a comprehensive record,”²¹⁹ but this demonstrates a fundamental problem by claiming that an arbitrary relationship between new media and old cultural and artistic practices might provide fundamentally sound basis for how new media ought to be thought about. It is evident through art and society that new media has drastically changed the world at an unprecedented rate, but scholars have rarely made any attempt at discussing the future of new media art and digital technology, and this is a limiting characteristic permeating the large realm of critical literature on new media. From Manovich’s perspective, new media is only defined by being different from old media, and this logic is a perpetual problem for new media criticism, because it rarely attempts to address the future of new media.

If new media studies are to remain a relevant part of the digital humanities, then scholars must begin to take seriously the fact that there is an essential relevance and pragmatic application of studying new media with a specifically forward-thinking approach. Without an attempt to outline the future of new media based on current evidence, then research into the topic runs an issue of becoming outdated very quickly. As such, scholars should embrace the challenges of future technology, and situate developing technology and ideas within present context, in order to gauge what the realistic future for new media might

²¹⁹ Lev Manovich. *The Language of New Media*. p. 6.

look like. Artists will often rush to new tools for creating art to experiment with its potential, but if those tools are deliberately designed within the realms of corporate interest, then there can only be a finite amount of versatility in using those tools for art. There is the potential for art forms to adopt exciting and revolutionary new forms. In the case of more public platforms such as the internet, not only is there a corporate interest to maximise on the perceived accessibility of the internet, the chaos of the internet can often make it very hard for individuals to live up to the perceived potential of universal access.

Conclusion

The growth of new media art practices across the globe has been testament to the fact that new media has become both embedded in culture and has driven drastic change in the arts and society. In places such as Russia, the Middle East, Ireland, China, and Korea, new media artists have explored the complex political and social situations which define their regions and have often put particular focus on the increasing proliferation of new media technology into wider cultural forms. By using new media art as a central framework for discussion, I have demonstrated that new media has been at the centre of global change as a fundamental driving force, transforming a wide-variety artistic communities, societies, and cultures.

Critics such as Manovich and Harries argued that new media has driven change in society but gave very little tangible evidence of the specific ways in which new media has brought about this change, particularly with reference to new media art which has challenged and explored the increasingly dynamic ways in which people are engaging with new media. As part of my investigation I have shown how new media art has had a distinct historical and artistic relationship with the twentieth century avant-garde which was similar in its historical intentions of driving radical artistic change. Many artists associated with the avant-garde movement during the twentieth century were challenging, re-evaluating, and responding to deep challenges that art at the time was faced with, and new media has presented a comparable sea-change and transformation to aesthetics from its fundamental roots in the

1950s, through its significant period of growth in the 1990s, right up to the present day. Lyotard's early new media art exhibition *Les Immatériaux* put a deliberate and explicit emphasis on exploring the potential of digital technology and new media to transform culture and shows a clear relationship between new media and experimental art forms within the context of European experimental art groups. Similarly, some critics have claimed that Dada was an important influence on new media artists, and whilst there is very little evidence of an aesthetic relationship between Dada and new media, there is a mutual concern for the direction of artistic forms between the two art movements.

In contrast to the European responses to new media, artists from other areas of the world have often used new media as a platform for political revolution and protest, whilst also changing the way many nations and groups of people interact and establish local identities. During the early commercial growth in the internet in the 1990s, the internet and new media offered artists the opportunity to comment on the complex changing politics of the time, which included the fall of the Soviet Union and the integration of the internet into Russian and Eastern European life. An integral part of the change which new media has shaped has been in transforming and creating new ways for people to interact with one another, which has allowed for artistic practices across the globe to grow and develop in conjunction with new media. During the Arab Spring in many Middle Eastern countries, “some of the world’s least powerful people are leading the way toward creative and ethical global media

citizenship.”²²⁰ Many groups who are politically, socially, or economically marginalised were using “a range of new media to expand their voices, extend the range of perception, and expand their collective power.”²²¹ Whilst it would initially appear that new media within this context is separated from the work of new media artists, they are in fact intrinsically linked, and show one of the fundamental qualities of new media in connecting and identifying with and for different people. Whilst thinkers such as McLuhan would argue that the increasing access to new media across the globe aggregates different regions and cultures into one unified and ubiquitous ‘global village’. The assimilation of new media into different countries has shown that new media is often used to reinforce disparate geographical and cultural heritage and identity. In Ireland, new media is finding a place within contemporary Irish digital art communities as a unique way of exploring direct challenges to national identity and ‘Irishness’ and is further testament to the fact that new media is changing how many online and analogue communities and individuals identify themselves.

The role of new media in an artistic and political context should not be regarded as an amalgamation of two differing applications of new media, but instead a synthesis of both in a context where it is required. The role of new media artists in the Middle East exemplifies this within extreme circumstances, and it is no coincidence the new media artists in the region distinctly focus on the role of new media in orchestrating certain characteristic within these wide ranging and multi-faceted conflicts. Therefore, it is essential moving forward that critics

²²⁰ Alia, Valerie. "Scattered Voices, Global Vision." <http://www.jstor.org/stable/j.ctt9qd5x7.10>. Date accessed: 24.10.2017

²²¹ Ibid.

of new media give due diligence to the role of new media technology in a wide-ranging set of contexts, without unnecessarily disregarding these contexts and implications on thematic or theoretical grounds. One of the factors that has compounded this idea is that new media technologies have brought about an increasing convergence between new and old media forms in some of these specific locations. In Syria, the connections created from new media have brought about a vast and exponential increase in the creation of traditional media outlets, which allow civilians and refugees a platform to escape and exchange information away from the tyranny of oppressive regimes. Valeria argues that within a “wide range of media techniques and technologies, indigenous people are developing their own news outlets and networks, simultaneously maintaining and restoring particular languages and cultures and promoting common interests.”²²² Trends and tendencies towards new media technologies shows an updated aggregation between new and old media forms, which many theorists either neglect or simply don’t address, and that new media is driven a transformation of a variety of media forms.

It is therefore paramount to continue to address the relationship between new media art and society. New media has become an essential part of a world undergoing fast-paced change, and new media art embodies a radical stylistic, historical, and aesthetic capacity to drive change. This continues to be demonstrated at the many festivals of new media art across the globe as new media artists investigate tangible and demonstrative ways in which

²²² Alia, Valerie. "Scattered Voices, Global Vision."

new media has driven this change. These transformations are deeply rooted in the computer and digital technology, which act as a receptacle for new media, and also allows artistic innovative and experimental opportunities to push the boundaries of how art is created and defined. New media will continue to generate a wide variety of cultural practices, in many cases by redefining and reimagining old ones, but all of which demonstrate a vision for the future relationship between art and technology.

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