

Radical Impact of Digital Humanities on Art

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Abstract

The fundamental nature of the art is to serve expand and enlarge the confines of imagination and creativity. Digital humanity is a combination of academic disciplines that explores the intersection between digital technologies and culture and study subjects, like history, philosophy, literature and modern languages visual and performing arts such as music and theatre. It's a broad field of research and teaching. Digital Arts are highly integrated practices combining strong theoretical frameworks with specific acts of making graphic design, digital photography, digital video and audio editing, web design, animation, digital writing, and mobile application. Combining the two fields facilitates dialogue between creative and humanistic studies, a conversation that is central to the Faculty of Creative and Critical Studies. The paper addresses arts practices that are bending the horizons of digital humanities. Collectively, digital humanities, technology and art using automated tools and computational method are creating miraculous, significances. Intellectuals consider it a post-convergent form of art. Significantly, this digital revolution is transforming the mind-set in the field of culture blending with works of art.

Keywords: Post-convergent, Digital Art, Automated tools, Digital Humanities.

Radical Impact of Digital Humanities on Art: Exploring New Perspectives

In 2011, Steven Ramsay claimed, "Digital Humanities is about building things". (ENDRES.2022)

Digital Humanities constructs a scholarly discourse that generates and produces knowledge digitally yet analysing it aesthetically. This can be 'an archive', a piece of software, model constructed in a virtual realm, or digital art. Significantly, it has the magnitude and dimensions to address the 'nature' and purpose' of the field. Since nature connects with friends, family and work remotely while the purpose extends communication through media advertisements. To establish, determine and comprehend the 'robust area' through digital humanities is the most recent learning. Technological intrusion in the world of art, including art education, has transpired a significant shift. It is persistently altering since the emergence and development of Information Communication Technology (ICT).

In addition to this, digital humanities are changing the way we think and interpret information. A discipline that not only explores the connect between digital technology and culture, but also edifies human society. The striking fusion of the discipline with other subjects like history, philosophy, literature, modern languages visual and performing arts, music and theatre represents the innovative outlook. The field began in the 1950s as scholars imagined ways to use computers as research tools that could analyse large sets of linguistic data. Mark Hall(2020) describe Digital Humanities as a term (DH) which ensures a new facet of research which integrates almost all the digital aspects of the technical domain. "The various different terms and computational areas that had developed in the individual humanities disciplines have slowly been coalescing under this new term, bringing with them a wide variety of methods and data. This has created the necessary critical mass and exchange of ideas that has

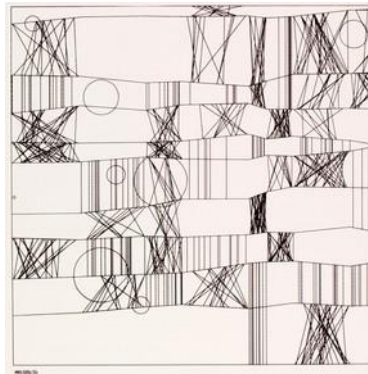
led to a rapid development of a wide range of new methods and tools for investigating humanities research questions’’. (Hall.2020)

Moreover, digital humanities can also be defined as steering fresh, collaborative, transdisciplinary study including printing, and education. A field of scholarly activity that is rapidly developing at the intersection of humanities disciplines and digital technologies. It involves the systematic use of digital resources in the humanities and the analysis of their application (Jaklenec 2021) However, the origin of this technology goes back to 1940s and 50s but it ‘gained acceptance in 2004’. (Jaklenec.) The field continues to ‘grow and change’ thus stimulating, a novel premise for the academics and connoisseurs. Ultimately, the field of digital humanities simultaneously employs technology in the pursuit of humanities research and exposes technology to humanistic interrogation. (Jaklenec.)

Further, it examines the control of digital technologies on arts and humanities research and production by using digital tools and computational methods. However, the use of computational methodologies and analytical techniques enabled by new technology: visualization, network analysis, topic modelling, simulation, pattern recognition, aggregation of materials from disparate geographical locations, etc. (Bishop 2017)

Claire continues the argument by quoting visual theorist Johanna Drucker, writing in 2013, who states that...so far none of art history’s “fundamental approaches, tenets of belief, or methods are altered by digital work”—unlike in the 1980s, when “traditional art history” was upended by the incursion of semiotics, psychoanalysis, Marxism, feminism, post-colonial theory, and post-structuralism (Drucker 2013). Drucker Bishop believes that the future digital databases will foster novel investigation to the ‘canonical’ works ,and envisions that digital art history would synthesize, coalesce to the ‘digital technologies’, ‘network analysis’, and ‘connoisseurship’ (Claire 2017) The protagonist sights an example of Van Eyck to support her argument. The database containing the provenance history of different sources of pigments used in Western manuscript illumination and Renaissance painting, which would situate a work like Van Eyck’s Arnolfini Wedding (1434) in relation to global systems of trade and economic value. (Claire 2017)

In addition to this, the academic discipline explores the link between automated technologies and culture. The assimilation of two disciplines endorse a debate between creative and humanistic studies, crucial to the Academics of Creative and Critical Studies. Digital Arts is a cohesive exercise combining strong speculative frameworks with explicit acts of creation in graphic design, digital photography, digital video and audio editing, web design, 2D and 3D animation, digital writing, and mobile application development. Besides this designers and artists employed the application of tools on analogue computers in the 1950s in a manner that can be perceived as a catalyst to the work of the early digital pioneers. Next the 1960s saw artists and scientists experiment generously with the radical and ingenious assertions of the computer. Initially the computer artists had experimented with the possibilities of organizing form and colour in a ‘logical fashion’. Frederick Nake was one amongst them. Nake took his inspiration from an oil- painting by Paul Klee, entitled 'Highroads and Byroads' (1929) [in the collection of the Ludwig Museum, Cologne]. Originally, a mathematician Nake was enticed by the division of the ‘vertical’ and the ‘horizontal’ lines in Klee's painting.



Frieder Nake, 'Hommage à Paul Klee 13/9/65 Nr.2', 1965. Museum no. E.951-2008.

Nake succeeded to enlighten the rationale of his creations. The 'visually exciting' structures determined the relationship between forms. Bell laboratories contributed to a series of experiments on the 'emerging art and technology'. Amongst many, particular mention has to be made to bitmap film making, by Leon Harmon and Ken Knowlton's 'The Studies in Perception' (1967), also known as *Nude* turned into a profuse exploration in the field. Robert Rauschenberg at the launch of Experiments in Art and Technology asserted that the laboratory displays the painting on the wall behind him while he was interacting with the press. Rauschenberg believes technology as 'the art of the future' and computer code as 'the new artistic material'. Further states that 'nobody wants to paint rotten oranges anymore'. In the succeeding years many artists and sectors of art endeavoured to avail the advantages of using computers in art, thus, expanding 'computer aesthetics' and 'computer art'. However, the 1990 witnessed a shift from the term 'computer art', later the term was used as a device to practise art. The modification affected the artists at the interdisciplinary altitude.

Along these lines digital art expanded the definition of art, increased the accessibility of the subject to the world. This scientific discipline together with art and technology offers distinctive insight into the social and cultural issues involving multiple skill, discipline and areas of expertise. Digital humanities have grown in popularity in recent years, since the mechanical tools provide the best insight into humanities, it has developed into a more pertinent field. Simultaneously the field of digital humanities employs technology in the pursuit of humanities research and manifests technology to 'humanistic interrogation'.

Art is not about the tools used to create it, but rather the vision, message, or emotion of the artist. For us, art is not an end in itself ... but it is an opportunity for the true perception and criticism of the times we live in. (Hugo Ball). Digital art encompasses a wide range of cultural works, it has its roots in Dada and progresses through all twentieth-century art movements. Dada's innovative approach to typography, photomontage, negative white space, layout, letter spacing, and line spacing has played a significant role in the development of communication design. The movement motivated the artists to expand the boundaries of the art world. Significant in this sequence is Marcel Duchamp's contribution. Starting with cubism and leading to surrealism, the French-American protagonist outlook escalated the development of later art movements. On a novel and emerging ground, digital humanities aim to stimulate fresh expanses. Artists use this technology to construct a diverse imaginative exclusivity to art. Further Ball states that the technology would demonstrate 'major changes to the humanities research flow'. First, the requirement to physically visit the source archives is reduced, as much content is now available digitally (Ball). Second, it is now possible to refer to a digital representation of the actual source material during

the analysis and write-up, rather than being restricted to the notes made at the archive. Third, if during the analysis it becomes clear that additional data are needed, it is now significantly easier to acquire this. (Hugh Ball)

Initially called ‘humanities computing’, the field has developed immensely. Evolving as a digital tool it focused on the construction of archives and databases for texts, artworks, and other materials. Successively, computers offered refined methods and techniques to organize and channelized the digital ethics. With recent advances in digital imaging, it is now conceivable to produce excellent reproductions of books and artworks. Also, interdisciplinary projects with complex tasks can be easily conceived and formed. Hence digital humanists are transforming research projects with a novel insight and a fresh outlook of regarding the past and present. Georg Schelbert in the article entitled *Art History in the World of Digital Humanities. Aspects of a Difficult Relationship* says, the reading and comparison of images itself is not too difficult for the computer if it uses colour analysis or outline detection. The challenge consists in bringing together the intellectual concepts of culture with the formal aspects of the artefacts. (Schelbert 2017)

Often the assemblages (historical or literary artefacts) are accessible on digital platforms, with print as an advantage. The facility to combine data sets, social media, sound, web and image archives is possible with greater ease. Equally crucial are the creation of softwares for analysing, and transforming the awareness of the digital materials. Easy accesses of the digital tools allow an augmented distribution of devices, designs and concepts across disciplinary boundaries. Thus, stimulate prospects and openings on a broader periphery.

The paper addresses arts and humanities practices that are shaping technological development in art practices.

However digital art has multiple meanings. It is indispensable to interpretation. Digital art is closely connected to science and technology and this affiliation according to Lino García and Pilar Montero Vilar has the major ‘influence on its categorisation’. This demands reasonable comprehension. The authors sight a paradigm difference between video and interactive art. The former they think is static while the later is ‘dynamic’ therefore is ‘time-based’.

Significantly, the digital revolution is transforming mindsets including the cultural field, which is blending with works of art. Another mechanism used to shape these experiences is the Virtual reality. The computer graphic technique, sanctions the artist to reorganise art forms. The fundamental nature, of the art-form is to expand and enlarge the confines of imagination and creativity. This includes new art experiences, exhibitions etc. Virtual reality makes it possible to explore simulated narratives in a three-dimensional simulated setting. Choices can alter the environment, as they are engaging. It is a new kind of art that utilizes the aesthetic potential of image-creation methods to craft artistic thinking, intellect a fresh insight. Comprehending the technical interface, virtual art corresponds and reciprocates with the art-work. Frank Popper, a Professor Emeritus of Aesthetics and the Science of Art at the University of Paris VII, and a historian of art and technology, in his book entitled *From Technological to virtual Art* writes ‘ that contemporary virtual art is a refinement of the technological art of the late 1900s, as well as a departure from it. What is new about contemporary virtual art is its multisensory nature, its philosophical investigation of the virtual and the real, its emphasis on interactivity, and its humanization of technology. (2006)

Further, the philosopher stresses to illustrate and explain the emergence of a techno-aesthetic ‘Virtual art has a multi-generational and panoramic reach, which Popper stresses to illustrate and explain the

emergence of a techno-aesthetic. In virtual art, openness is emphasized both from the point of view of the artist and from that of the follow-up users in their reciprocating thoughts and actions. (Frank Popper 2006) .García and Pilar Montero Vilar think Virtual reality allows the creation of experiences of immersion. (Garcia,Vilar 2018)The virtuality establishes a new form of relationship between the use of space and time coordinates, overcomes the temporal-space barriers and configures an environment in which the information and communication are accessible from perspectives that were ignored up to now, at least regarding their volume and possibilities. (Garcia,Vilar 2018)

Furthermore, many art intellects consider it as a different entity of a form of art grounded on art and technology. Since the proposition to art is befittingly accessible, anyone can presume how it tends to feel as it is being created. Taking advantage of this technology Museums are digitizing their collection and archives with the new marketing tool. This disseminates an effortless access to enjoy and examine in detail a close view of a piece of art without being bothered by visitors. However this art comprises of all those practices that needs interaction or the ‘spectator's participation’ which García and Pilar Montero Vilar suggest is ‘without the artist's control’. The possibility offers of accomplishing the spectator-participant association in artworks of ‘social character’.

Strategies for creating, marketing, and selling, are developing rapidly. On the other hand, modern artists prefer to work with video tools, and digital colours, which, though they apparently emulate. It is challenging yet demanding to introduce an original and an innovative idea.

But then, traditional tools are entirely different in cognizance to its conventional use and execution. Earlier brush, pencil, charcoal or pastels were considered as the traditional tool for painting and drawing. The artists had to use his skills in accordance with the tools to paint. For the human touch was the fundamental instrument in the classical school of painting. The equipment stimulates into the artist, the notions, mood to frame a painting. Today’s modern technology has, however, reduced the need for the human touch. These mechanisms give access to limitless options that unlock vast horizons for the artists to explore themselves more inventively, creatively, and imaginatively. They are supposed to be fabricated images ensuing to be perfect and classic. Consequently, the artworks appear different from the artist’s notion of the painting. Another digital imaging technology, like the camera, along with Adobe Photoshop established a new culture of advancement of digital manipulation. Since drawing digitally takes as much effort to learn as drawing traditionally. Compared to traditional art, the most significant advantage of digital art is its convenience. Amicable to carry, and easy to publish and share. Significantly, easy to align and enhance thus easier to print.

Thus a digital artist knows how to construct the elements effectively and successfully. However the necessity of preservation of the digital heritage is, at the moment, a ‘desperate claim’ and needs intervention. But then, existence on the universe is conditioned to end. ...continuous human intervention makes possible to prolong the existence of inanimate objects. (Garcia,Vilar 2018)

The progress of this swift and accelerated digital technology has broadened the prospects of creativity and imagination, attaining new artistic endeavours. Prospects for digital artists to gain recognition as the most appreciated artists of the new generation strengthen. NFT (Non fungible token) is a recent digital endeavour, and a piece of art that has changed the perception to view digital arts. The comparison between digital and traditional art is incomprehensible and implausible. However, traditional art is unparalleled and irreplaceable. Handmade artworks prepared by an artist will always hold boundless significance. The two mediums can also be combined, to modernize art in order to expand its progress, enhancing the artistic experience. Digital art will continue to evolve and grow, evolving the process of

innovation .But then it will never entirely replace traditional art. Since creativity has to be an inherently human trend.

The new era of ICT is a substitute for a better life and a more thriving civilisation. The discourse of postmodern culture centres on the advancement with distinct character which asserts rationality, sovereignty and independence above all other things. The discourse of the novel structure delivers more technical enhancements in communication exchange which is constructive and favourable not only for human beings as entities, but also for human generated institutions in general. The primary shortcoming that requires attention is the involvement of the non-professionals into the field. The amateurs are accumulating art by administering and dispensing the desired information. The software with its algorithms and technology generates and transforms the suggestions into an elevated extraordinary art work, hence, affecting the intellect and sentiment of traditional artists.

However, the growing technology has its benefits and disadvantages; yet the adverse aspect is another expanse of study. But then adverse consequences of which are apparent on the traditional artists too. Engaging an emotion-less technology, touching the emotions are confines for human aspect. The manipulation by digital technology is destructive and detrimental. Therefore, the ethical feature is a substance of apprehension.

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