

# A STUDY ON THE RELATIONSHIP BETWEEN AFFECTIVE EXPERIENCE OF NEW MEDIA ARTS AND THE PHYSICAL GALLERY

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## ABSTRACT

Recently, emergence of new media arts and technology has seen an increase in many related fields of art and design. New Media Art are technology based works which range from mixed media, video and film, digital imaging and performance, photography, film and video, while digital media works are computer-based still or moving images with or without sound. The outputs can be printed on hard copy, displayed on computer monitors, or projected onto a screen and they combine to communicate the intended message and interact with the audience through various media and techniques. As knowledge and technology progress, these newly developed disciplines require suitable physical exhibition space in order for visitors to gain maximum experience from the displayed art work. Thus it is deemed aptly appropriate in the timely discussion among researchers and practitioners to address issues in curating, presenting and exhibiting new media art which challenges the conventional customary method of presentation and documentation. The main objective of this study will therefore to find out whether physical spatial configurations have effects on the affective experience of new media arts content and technology. Observation and survey will be carried out on several presentations of media art in the gallery on how visitors interact and connect with the art work. The gallery space will be determined through space setup, arrangement and plan configuration based on architectural design layout for galleries. This includes partition walls, screens for projection, exhibition furniture (pedestals), lighting, and others to accommodate content such as projection displays, touch screen computers and display panels and others. The findings from this study will be a contribution to artists, designers, researchers and interested parties in the creative realm with the inspiration to encourage a growth of new media art form in conveying intended messages.

**Key Words:** Gallery, New media Art, Affective Experience, Interaction

## INTRODUCTION

‘Architecture is the thoughtful making of space’ – Louis Khan.

Our built environment encompasses of physical structures that envelope solid wall, roofs, columns and other architectural elements. These assemblages speak out the design intention and state the architecture style that defines the idea and concept behind each design.

While our eyes tend to visually comprehend the physical elements from the very first encounter with the building, it is the shape and qualities of the interior spaces that often mesmerize us as we experience the building. We inhabit the spaces of our built environment, live within its walls and create activities in the allocated functional structures.

Therefore, the qualities of these spaces greatly influence human experience and behavior as stated by Frederick (2007). He continued to stress that positive spaces are often preferred by people for social interaction and prolonged lingering, while negative spaces promote movement rather than dwelling, as they have the feel of uneasiness or temporariness. Being able to experience these different types of spaces and to respond to the surrounding environment very much relate to human behavior and perceptions. In this research, physical space; walls, ceiling height, floor levels and openings, as well as the furniture layout that denotes space planning has a significant relationship with human behavior as presented by Franz (2005). He further stated that this systematic relationship has strong implications on the architectural design process which considers stability, functionality and beauty (physical architectural space), and the perception of human emotional state (affective state).

Paul (2008) who often writes about new media is concerned with the representation in art galleries and museums of artworks created via new technologies such as computers and others. With the advancement of technology and resources, artists and designers are using digital tools more in producing artwork and/or the representation and displays. These exhibitions in galleries and museums are important in relation to the work itself, received and understood, but it can also indicate the engagement with our technologized society. New media and new technologies presented in a physical space influences the way visitors behave and react within the artwork and the space. By observing these galleries and museums with digital artworks on display using electronic devices and how visitors work their way in between and around the displays will lead to an understanding of a patterned behavior. It is therefore the main objective of this study to find out the relationship and effects of physical spatial configurations to human behavior and perception in the context of new media arts exhibition.

## **PROBLEM STATEMENTS**

While technology advancement makes its way in nearly all aspects of our lives, the same is felt when more of galleries and museums are incorporating digital means into their multimedia content and mode of presentation. There are more interactivity happening among visitors, content, tools and the physical space. The experience that takes place in a new media setting is enhanced via visual and spatial experience. Certain considerations should be looked into, especially the interior layout and setting for new media in a physical space.

The practical challenge of creating this new hybrid platform needs a continuous maintenance and a flexible and technologically equipped exhibition environment, which museum buildings (traditionally based on the white cube model for physical artworks) do not necessarily provide. The challenge lies in the facilitation of audience engagement in order to make the public more familiar with this emerging art form (Paul, 2010). She further stated that traditional presentation spaces create exhibition models that are not particularly appropriate for new media art.

User's experience is often mismatched with the responsive environment as there lacks proper documentation being done on space and multimedia applications (Meyboom, Johnson & Wojtowicz, 2011).

## **LITERATURE REVIEWS**

### **New Media Art**

This is a continuously evolving field. Characterizing new media art includes process-oriented, time-based, dynamic and real-time; participatory, collaborative and performative; modular, variable, generative and customizable (Paul, 2010). According to Lazzari and Schlesier (2008), any form of art is a primarily visual medium that is used to express ideas about the world around us and our experiences.

The intended messages are contained within its content while aesthetics portrays artistic expression, experience and innovation. Media is classified into traditional; drawing, painting, printmaking, sculpture and craft-making while non-traditional media is represented in the emerging of knowledge and technology such as mixed media, video and film, digital imaging and performance. Some media are based on technology which includes photography, film and video while digital media involves computer-based storage of still or moving images as digital information, with or without sound. While technology supports the production of content, the presentation of new media art also involves creation of platforms of exchange, between artwork and audience, or the public space of gallery and public space of a network (Paul, 2010). Graham and Cook (2010) reported that new media art is made using electronic media technology and that displays any or all of the three behaviours of interactivity, connectivity and computability, in any combination.

### **Galleries**

A gallery has always been considered a place to acquire, conserve, research, communicate and exhibit for the purpose of study, education and enjoyment (Matthews, 1991). Their role has always been important in the social society in areas of traditions, culture, art and craft, education, industrial growth and technological advancement. These institutions are non-profit making, permanent institutions in the service of society and as material evidence of man and his environment. There are important to the society as historical preservers, aesthetic collectors and educational innovators.

Different types of galleries serve different groups of organizations such as National governance where approvals of appropriate projects are in accordance with administration policies, Provincial galleries which adhere to local government authorities to convey historical and future aspirations of local states, University galleries serve a department or the whole university and may be represented by a director, curatorial board or departmental professor, Private trusts where registered charities and trustees set up galleries through grants and professional fund-raising activities, Industry and Corporate bodies to portray individual messages, and Private galleries that offer private and limited business concerns and collections (Matthews, 1991). There are several museologies approaches such science, technology, industrial archaeology, social history, ethnology, anthropology, archaeology, geology, natural history, and fine and decorative arts. The confluence of theories and practises in the recent public management and the new museology bring about a new realm of space design and management (Baddeley, 2009).

### **Human Behaviour**

Experience of human behaviour is based on four categories; sensual thread, emotional thread, compositional thread and spatio-temporal thread. Sensual thread is concerned with sensory engagement with certain situation where the interaction between a person and environment becomes participation and communication. Any derogation of the senses narrows and dulls life experience. Emotional thread lies on the fact that emotions are qualities of particular experiences. They belong to a self-engaged in a situation and are concerned with the movements toward an outcome that is either desired or disliked. Compositional thread is concerned with relationships between parts of the whole experience while spatio-temporal thread relies in each part of experience (McCarthy & Wright, 2004). There is a significant relationship between physical environment and human behaviour, thus any architectural design may affect human behaviour in its environment. The three main fields of psychology to focus on are social psychology, environmental psychology and cognitive psychology, all of which are essential in understanding the unique relationship human behaviour is with their built environment (Cummings, 2012). Interaction and participation are key elements of human behaviour studied in art exhibitions. They are measured via investment of time the viewer-participant makes for each new media works and the amount of expertise that may be necessary to engage with the artworks.

Some works are open but still guided where viewers navigate through a visual, textual and aural system that has been configured by the artist. Some works allow participant to interact and be involved with the artwork installation.

These potentially interactive and participatory nature of new media projects allow people to navigate, assemble or contribute to an artwork in a way that is more than interactive; experiencing it runs counter with the basic rules of museum: 'Please do not touch the art'. Human behaviour that not only actively engage and interact need a certain level of familiarity with the interfaces and navigation paradigms because museum audience consists of all age group and different kinds of visitor groups and expert level (Paul, 2010).

## **The Relationship**

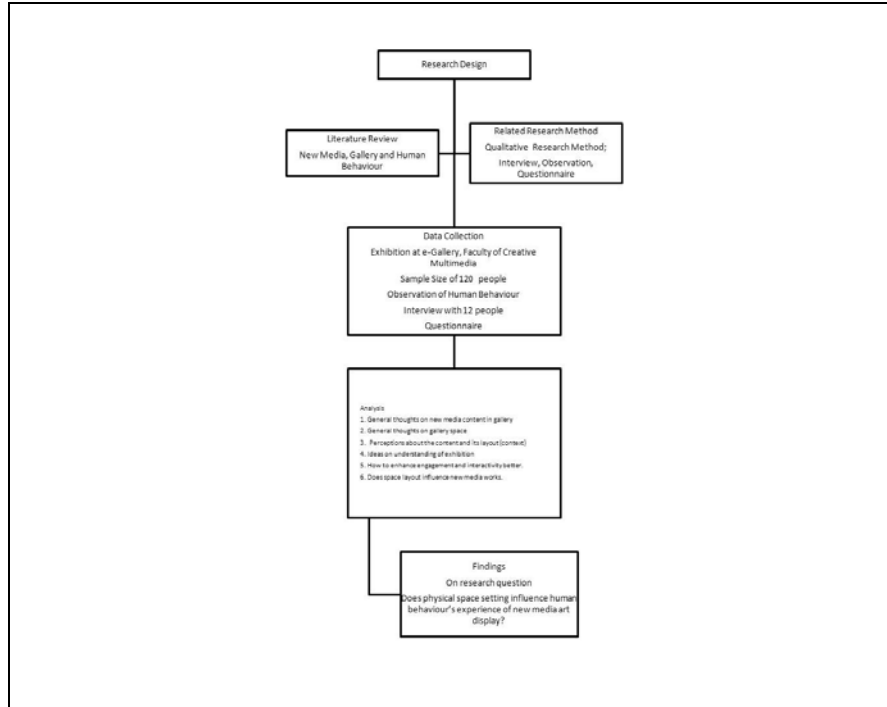
“Designers often aspire to do more than simply create buildings that are new, functional and attractive —they promise that a new environment will change behaviours and attitudes” (Marmot, 2002). Artworks that require an extended viewing period may pose a challenge since visitors tend to spend only a minimal amount of time with one work at a time. Time-based nature of new media art is more extensive than video or film owing to the nonlinear qualities of the digital medium. Viewers may be looking at database driven project that continuously configures itself over time or visualizations that is driven by real time data flow and will never repeat itself (Paul, 2010). These new media installations in a physical space may require certain familiarity and that types of human behaviour is closely related to level of engagement and interactivity. Therefore, configurations of the physical layout to hold these new media artworks have a strong impact to the human behaviour and how they are able to perceive and enjoy the digital display.

## **METHODOLOGY**

According to Dr. Joseph Bilello in his notes Architectural Research Method, architectural research is the study for new knowledge and new ideas about the built environment. Research can be conducted in a variety of sub disciplines, including building technology, environment-behaviour studies, and history of architecture as well as computing technology. With identifiable goals at the outset of research, research projects are directed to seek and respond to a question. In order to pursue that question, one follows a credible, systematic method, or mode of inquiry, relevant and acceptable to the research paradigm. This process will lead to significant results in a thorough, documented manner which reflects a solution.

This research is based on qualitative method in the context of social science research which uses interviews, observations, analysis of documents and other qualitative methods to interpret the meaning (Kenney, 2009). The Research Design is a plan of how the investigation will be conducted and is directly connected to a theoretical perspective. This focuses the questions to study, what information is relevant, how to collect that information and how to further analyse the information; research design helps to link the research question to its conclusions.

**Table 1** Research Design



**Figure 1.0** New media display at e-gallery



**Figure 2.0** Visitors engaged in various content



**Figure 3.0** Interactive touch screen display



**Figure 4.0** Viewing video projection

## RESULTS

From the observation exercise conducted throughout the exhibition held at e-Gallery, Faculty of Creative Multimedia, Multimedia University, a number of one hundred and twenty visitors visited the gallery. Seventy eight numbers of visitors completed the questionnaire and twelve visitors were interviewed. Observation done was non-obtrusive from ten o'clock until five in the evening.

**Table 2** Observation Data Analysis

Action	Art Work				
	Video Projection on Wall	Screen with Chairs Setting	Touch Screen on PC & Monitor	Touch Screen with Tab	Game using Motion Sensor via Screen
Walking without stopping	14%	6%	7%	35%	8%
Stopped at artwork to view	66%	77%	22%	25%	14%
Interacting with artwork	8%	12%	58%	24%	68%
Asked for assistance	12%	5%	13%	16%	10%
Total	100%	100%	100%	100%	100%

**Table 3** Questionnaire Data Analysis

	Strongly Disagree	Disagree	Fair	Agree	Strongly Agree	Total
Installation of artwork in gallery is good.	4%	7%	6%	65%	18%	100%
Able to understand the content.	8%	14%	4%	61%	13%	100%
Able to interact with the content.	3%	7%	2%	63%	25%	100%
Layout & environment setting is good.	3%	5%	2%	74%	16%	100%

From the interview, their responds were:

- i. Some installation may not be driven by concept requirement but technical needs for example dark space for projections.
- ii. The setting of furniture that is casual with seating invites more people to linger and interact more.
- iii. Some new media artwork needs more explanation and assistance in interacting with the technology that may attract visitors with familiar background with technology.
- iv. Apart from the setting, visitors need more information such as labels, brochure and assistance from gallery guide.



- v. Often visitors in group interact better than single visitor due to dislike to be watched by other people.
- vi. Each installation should consider physical set up such as height, lighting, partition, seating and others as part of display furniture to enhance better.

## CONCLUSIONS

New media art is a hybrid form of art, based on time-based technology and digital attributes. Installing these varied multimedia works from projections, videos, interactive touch screen content, kinect based content, virtual reality, software and net art and others in a physical gallery requires study and implementation on the physical layout of furniture and display setting (context) and content and its presentation (tools and technology). Observation of human behaviour and study of their experience, perception and interaction with the space and display can lead to a better environment for the enhancement of engaging with the art work itself. There is no perfect approach in installing new media works as each requires distinctly different requirements such as through projection, presentation, installation, set up of computers (touch screen) and interactive game-like setting. Thus this study offers a guide on how physical arrangement influences affective experience with focus on physical space layout. One distinctive result is that new media as a changed landscape influences visitors to interact and be engaged in a more active manner rather than the passive behaviour of a traditional gallery set up. Technology, audio and visual, content and presentation that is prepared for utilization invites visitors to be more curious as their experience has been enhanced.

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