

## The Applied Media Aesthetics to Visual Communication Design Works Based on Augmented Reality

**Namuri Migotuwio<sup>1</sup>, Reza Pustika<sup>2</sup> & Refita Ika Indrayati<sup>2</sup>**

<sup>1</sup>Visual Communication Design Study Program, Institut Teknologi Sumatera

<sup>2</sup>Visual Communication Design Study Program, Institut Teknologi Sumatera

✉ namuri.migotuwio@dkv.itera.ac.id

**Received:** March 17, 2023 / **Revised:** April 13, 2023 / **Accepted:** May 10, 2023

---

### ABSTRACT

This study aims to reveal the influence of humanism and socio-cultural aspects on aesthetic and technical policies in the works of visual communication designs based on augmented reality in the Pokemon Go Game and Digital Maps (Google Map). Methods of observation and analysis of descriptions are used to dissect various information on material objects. Based on the results of the study, it was concluded that human habits in everyday life have a significant influence on artistic decisions and the design of augmented reality-based user interfaces. This shows that aspects of applied media (light, color, time, motion, sound) are important elements that must be considered in most visual communication design works based on augmented reality. These various technical and artistic decisions were made to bridge the interactivity role between works and users (humans) so that they function optimally. Based on this, the design of augmented reality-based designs needs to consider universal human preferences, characteristics, culture, habits, tastes, and ergonomic aspects.

**Keywords:** applied media, augmented reality

### INTRODUCTION

In everyday life, humans are unconsciously encountered with various forms of art and are required to be involved in various artistic decisions, even on the smallest scale. A simple example is when you want to travel and to choose clothes or shoes with a certain color, model, and shape or when you want to choose to watch a certain series of television shows. These simple things subconsciously require separate aesthetic considerations, because every human being has different characteristics and experiences that influence decisions to achieve a delicacy in daily activities. In the era of contemporary art, various things that occur in everyday phenomena have the strength and potential to be considered as an effort to form an artistic entity [1]. This is converted in the aesthetic concept of applied media.

In the context of applied media aesthetics, the definition of art works is no longer limited to art objects displayed in museums or art galleries. Instead, it refers more to various forms of ideological ideas that are poured into the media and have interconnections or attachments to everyday life [2]. The involvement of art works in everyday life can be

manifested in the form of psychological or social ideas and idioms that have gone through a process of clarification and intensification before being poured into a form of media that can be enjoyed by a wide audience. In addition to daily life as an inspiration in the medium of creating art works, various technologies or participatory engagements that connect art works with humans are also a form of applied aesthetics that is currently widely adapted by contemporary art. All human beings have similarities in thinking and acting as well as undergoing biological activities, consumption, and interactions even though they are distinguished by their respective cultures and psychological conditions [3]. Even nature allegedly has the same characteristics in various places in the world, so when these various elements are repackaged through an intensification process, it will produce an artwork that attracts attention, entertains, and is able to inspire because of the interconnection or attachment that exists with one another. Especially its interconnection with humans, because nature has a structure that can influence human emotions and metabolism [4]. Furthermore, the intensification approach in art is understood as an effort to bring out meanings or forms that are considered attractive in order to produce a more communicative experience for the audience. Before going through the process of intensification, a phenomenon that is present in everyday life must go through a clarification stage, namely a process of interpretation which later becomes the basis for determining the meaning or form that will be repackaged through various approaches to the art works [2]. This process requires sensitivity in capturing phenomena that are present in everyday human life to be extracted in the form of art works that are able to provide a depth meaning for anyone who sees these art works.

In order to get aesthetic experience in everyday life, it is necessary to use applied media concepts and intensification involvement. Since it contains several fundamental aspects that influence the ability of the media to generate insight for the audience, including light, color, time, motion, and sound. These elements are more or less able to enhance the effect presented by the work so that it has an impact on the depth of meaning and the impression felt by the audience. Hence, the goal of designing the visual communication as one part of the interconnectivity effort is expected to be realized properly.

Nowadays, augmented reality technology has developed significantly and is starting to be used massively in several media such as games, architectural devices, advertisements, and entertainment. This is an impressive achievement for the world of technology and art. Because art has an alternative medium that is able to connect humans with virtual reality (virtual). Thus, there is no longer a boundary between real and fantasy space, because everything can be united in the same medium in real time and connected to one another. In particular, visual communication design elements function to form an aesthetic experience through the design of characters, icons, and graphic symbols (colors, typography, images, layouts) both in the user interface display and in the audio-visual aspects of augmented reality. Seeing the importance of visual communication design elements in augmented reality-based media, researchers are interested in expressing how important applied media aesthetics are to form artistic and technical decisions in augmented reality-based works. As well as exploring other aspects such as how elements of humanism and socio-cultural work in enhancing artistic experience when interacting with augmented reality-based works.

## METHODOLOGY

This research is descriptive qualitative research, with observation techniques and literature study as a way to reveal the phenomena of the selected material object [5]. Where augmented reality in visual communication design works (pokemon go game and digital map "google map") becomes a medium used as a material object to be dissected with a descriptive analysis approach. This approach is used to find the relationship between visual phenomena and humanism and socio-cultural aspects. Visual phenomena such as applied media aesthetics which are often used today as an approach to gaining aesthetic experience, are things that need to be elaborated and analyzed in depth so as to be able to form whole new knowledge and can be used for activities in designing visual communication design works based on augmented reality.

## RESULTS

### **Applied Media Aesthetics in Visual Communication Works**

The aesthetic implementation of applied media in visual communication works based on augmented reality is shown through several approaches that generally consider humanism and socio-cultural aspects in the design process. Humanism and social approaches are very important considerations and are often used in various approaches to works of art. The art historian, Erwin Panofsky, defines humanism as an attitude of belief in one's dignity based on rational values, freedom, and knowledge of fallibility and weakness, as well as the achievement of ideals of responsibility and tolerance. The human aspect must be the main mental reconstruction based on other objects and the maker's intentions [6].

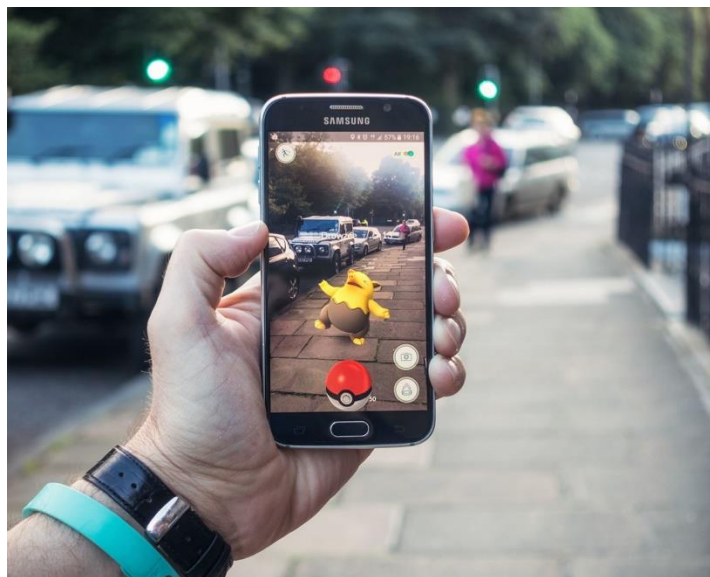
In visual communication works based on augmented reality, the tendency is to be designed by fulfilling elements as media that involve a lot of interconnectivities with human daily life. From the aesthetic point of view of applied media this aspect can be found in the elements of media work which show a lot of the same logical way of working as human behavior in general, such as; communicate, touch, hear, sound, open, close, slide, rotate, see objects from various points of view, and are sensitive to the effects of light and color. These habits become methods of producing aesthetic experiences for users of augmented reality media [7].

These habits are reflected in human behavior which is general in nature and tends to be the similar among humans in various parts of the world. In addition, visual communication works seek to adjust the aesthetic elements contained in the cultural symbols owned by each region in order to produce a deep impression on the user or reveal meaning more explicitly. Although under certain conditions it is possible to generalize styles without emphasizing traditional elements or characteristics of certain regions. So far, one of the methods used by designers is the design thinking method to create effective designs that are considered capable of accommodating various solutions to the needs of their users. This method can be operationalized in stages; first, Empathize (Empathy). second, Define (Determination). third, Ideate (Idea). fourth, Prototype (Prototype), and the fifth stage, Test (Trial) [8].

Augmented reality-based visual communication works such as advertisements, games, digital maps, are digitally designed to be able to respond and to combine real-world

displays via smartphone devices or HMD (a head mounted display). The logic of working, how to move, walk, and the properties of digital model objects will usually be adapted to everyday human experience so that even though digital 3D objects are created in abstract forms, attempts to personify or imitate the properties of nature are an attempt to bring the object closer with social and psychological elements inherent with the humanism character [9].

This study raised one of the games namely "Monster Pokemon GO" which features fictional animals in digital 3D form, where the augmented reality-based game offers a fun experience and an aesthetic experience when playing [10]. Even though it was created as an imaginative object, how the monster walks, acts, carries out organ functions, and its psychological side will usually be in accordance with animal and natural objects in the world. It becomes interesting when humans can interact with characters in the form of monsters that have characteristics like wild animals but are cute and easy to control like pets [11]. Through these efforts, the results of the design will produce imaginative objects that are fun and capable of producing interactions because there are similarities in everyday experiences between users and the objects being played.



**Figure 1.** Augmented reality look at the "Monster Pokemon GO" Game.  
(Source: digitalartsonline.co.uk)

The Augmented Reality in this game has the role of combining visual elements in the real world with the virtual world in two-dimensional and three-dimensional forms that are projected in a real environment at the same time [12]. Efforts to combine real world reality and virtual world are the advantages of augmented reality technology. Besides, in the design of visual communication based on augmented reality, it will present symbols that are agreed upon the social order in the real world. As well as symbols for directions to the right or left, typefaces, button signs, expressions of anger, joy, sadness, and ethics in moving tend to use gestures that are easy to understand and inherent in

human behavior and so on. Following are the results of identification of several aesthetic aspects of applied media that are applied in visual communication works based on augmented reality.

### **Color Features**

Color features, in everyday human life, color is not only a means of identifying an object, but is one of the elements that forms the beauty influenced by visual images that are processed through reason and human psychology. Hence, that color becomes an important component in presenting an aesthetic experience when viewing digital objects with augmented reality technology.

### **The Lighting Control Feature**

The lighting control feature is an important tool that can strengthen the sharpness of the sense of sight in seeing an object virtually. A person's emotional state is also affected by the light that is presented. Just as many negative emotions are represented by a dark and mysterious atmosphere, and conversely positive emotions require much brighter lighting to represent psychological conditions that are open and comfortable interacting with anyone and anything.

### **The Rotation Feature**

The rotation feature allows the user or target audience to see a digital object from a different perspective through smooth and measurable rotating movements.

### **The Angel Feature**

The angel feature makes it easier for users or target audiences to be able to see objects from various sides as desired without any duration limitations. In particular, augmented reality technology uses a bottom-up approach, which is understood as the user's ability to determine what situation or aesthetic experience will occur when interacting with the technology.

### **The Zoom In and Zoom Out Features**

The zoom in and zoom out features, as well as the rotation and angel features, where this feature has also become one of the habits of humans in everyday life who want to see various objects in the world from far and near sight distances so as to be able to access details or the overall form of the shape. which exists.

### **The Swipe Feature**

The swipe feature is a development of the human habit of shifting objects in front of them either because they no longer need them and replace them with other objects that they want to respond to, or simply want to provide an opportunity to see various objects that are presented through a tempo that is not limited by duration.

## Animation

Animation or motion effects are features that give digital objects a motion effect so they do not seem static. Various expressions and gestures displayed are an effort to build interactivity towards its users.

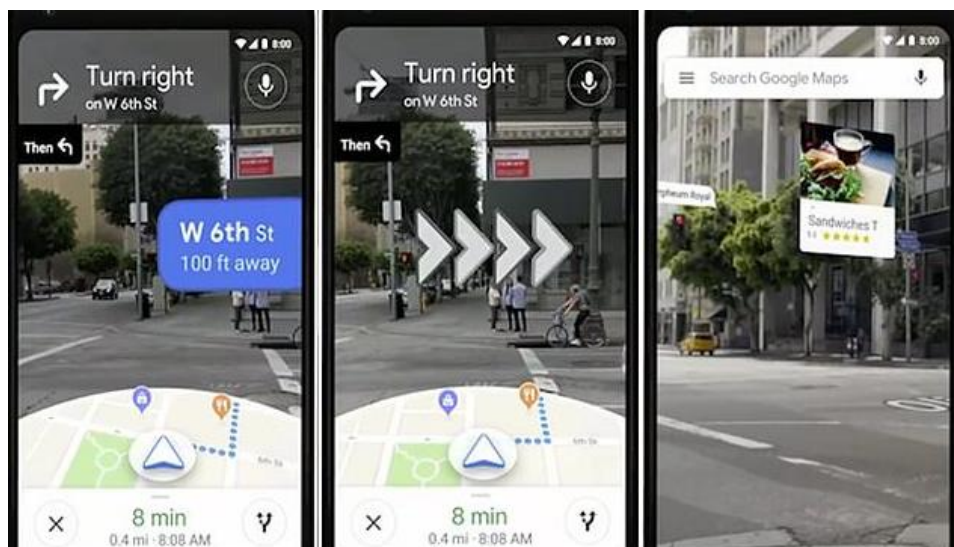
## Sound Effect

Sound effect is also one of the important things, just like color which capture various communication messages through the sense of hearing, sound effect in augmented reality presents precise sound conditions with events that occur and is selected by the user to respond as an aesthetic experience.

## The Touch Effect

The touch effect is one of the working mechanisms of the user interface so that it can connect with existing systems in augmented reality-based visual communication works [2].

Beside “Game Pokemon Go”, another example of visual communication based on augmented reality that uses above features is the Google map.



**Figure 2.** Augmented reality look on Google Map.  
(Source: [www.digitalartsonline.co.uk](http://www.digitalartsonline.co.uk))

By using this technology, the user is able to distinguish rivers, roads, mountains, sea, or text through the displayed color. Apart from being a medium of identification, color is also able to build a beautiful experience in using Google Map technology. In addition, google map technology is also accompanied by a rotate feature to view the map from all

directions and an angle that allows users to see from their walking point of view. So that the user experience of traveling can be felt when opening the Google View feature. In addition to making it easier for users to identify objects factually through their empirical experience, this mode is very helpful for humans to analyze locations before traveling. Zoom in and zoom out features are also present in this technology, namely when the user wants to clarify the identity of either a name or a location, this feature is very helpful in displaying objects that are clearer and more detailed. Apart from being visually, users are also assisted in identifying locations and destinations through sound effects that appear through the existing settings feature. At the end, the swipe feature is used to change the appearance of the user interface which contains other functions. The transfer process uses touch, which is accommodated through the technique of sliding up, down, to the right, left, or pressing [13].

Thus, in any visual communication design based on augmented reality, the above indicators will certainly be involved, in order to produce aesthetic experiences that are affiliated with human daily life. From a social point of view, the presence of visual communication works based on augmented reality is able to broaden the definition of interactivity not only limited to physical encounters. This can be demonstrated by the ability of users to be able to communicate and establish important agreements even though they are only represented by visual symbols such as text in conversations, photos or videos that show someone in a different location. Interactivity is also shown by how digital objects in augmented reality are able to respond accurately to commands given by the user. Executed commands are a form of interactivity capable of producing certain communication patterns. The environment as a social element that already has an order, currently can not only be seen as a dead physical space, and with the existence of augmented reality technology, an immovable physical space or area is able to interact with humans through the symbols that are raised by augmented reality technology. These symbols can be in the form of videos, letters, visual objects, three-dimensional animation effects that can provide interactivity effects or illusions for anyone who sees them.

## CONCLUSION

Based on the above review, visual communication works based on augmented reality are designed to meet the aesthetic elements of applied media. This is implemented through humanism and socio-cultural aspects which are inherent elements in human daily life. How symbols, object designs, and various elements forming aesthetic experiences are designed to be based on everyday human habits bound in social systems that are considered general and acceptable to the wider community.

Applied media aesthetics is operationalized through various tools that are designed taking into account patterns of behavior, needs and habits that have been carried out by humans in carrying out their daily lives such as; color features, lighting control, rotation, angle, zoom in and zoom out, swipe, animation / motion, sound effects and touch. These various elements are features in augmented reality technology and their presence has gone through various considerations which were tested through the design thinking method. So that the various features offered are of course the tools needed by humans, and through symbols that have been mutually agreed upon in the social order that exists in the real world, it makes it easier for users to interact with the interface that is

displayed. So that the process of visual communication can be realized through interactivity that occurs even if only virtually.

## REFERENCE

- [1] Supatmo, "Fenomena Estetikasi Kehidupan Sehari-hari dalam Seni Rupa Indonesia.," *Imajinasi*, vol. 1, no. 2, 2012.
- [2] H. Zettl, *Sigh Sound Motion; Applied Media Aesthetics*. Boston: Cengage Larning, 2015.
- [3] H. Mustafa, "Perilaku Manusia Dalam Perspektif Psikologi Sosial," *Jurnal Administrasi Bisnis*, vol. 7, no. 2, 2011.
- [4] D. Afrilia, "Merasakan Energi Positif Ketika Kita Terhubung dan Menyatu dengan Alam," *Humaniora*, 2021. <https://www.goodnewsfromindonesia.id/2021/05/21/merasakan-energi-positif-ketika-kita-terhubung-dan-menyatu-dengan-alam>
- [5] M. R. Fadli, "Memahami desain metode penelitian kualitatif," *HUMANIKA*, vol. 21, no. 1, pp. 33-54, Apr. 2021, doi: 10.21831/hum.v21i1.38075.
- [6] E. Fernie, *Art History and Its Methods: A Critical Anthology*. London: Phaidon Press Limited, 1995.
- [7] M. A. Yahya and A. Dahanayake, "A Needs-Based Augmented Reality System," *Applied Sciences*, vol. 11, no. 17, p. 7978, Aug. 2021, doi: 10.3390/app11177978.
- [8] I. P. Sari, A. H. Kartina, A. M. Pratiwi, F. Oktariana, M. F. Nasrulloh, and S. A. Zain, "Implementasi Metode Pendekatan Design Thinking dalam Pembuatan Aplikasi Happy Class Di Kampus UPI Cibiru," *Edsence: Jurnal Pendidikan Multimedia*, vol. 2, no. 1, pp. 45-55, Jun. 2020, doi: 10.17509/edsence.v2i1.25131.
- [9] Y. Chen, Q. Wang, H. Chen, X. Song, H. Tang, and M. Tian, "An overview of augmented reality technology," *J Phys Conf Ser*, vol. 1237, no. 2, p. 022082, Jun. 2019, doi: 10.1088/1742-6596/1237/2/022082.
- [10] A. Aluri, "Mobile augmented reality (MAR) game as a travel guide: insights from Pokémon GO," *Journal of Hospitality and Tourism Technology*, vol. 8, no. 1, pp. 55-72, Mar. 2017, doi: 10.1108/JHTT-12-2016-0087.
- [11] A. E. Ramadhana, A. Z. Mansoor, and N. Haswanto, "Kajian Daya Tarik Visual pada Desain Karakter Pokémon," *Wimba : Jurnal Komunikasi Visual*, vol. 5, no. 2, Apr. 2015, doi: 10.5614/jkvw.2013.5.2.6.
- [12] I. Mustaqim, "PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS AUGMENTED REALITY," *Jurnal Edukasi Elektro*, vol. 1, no. 1, Aug. 2017, doi: 10.21831/jee.v1i1.13267.
- [13] R. Juwono, "ANDROID BASED AUGMENTED REALITY FOR DIGITAL VISUAL NAVIGATION," *Computer Based Information System Journal*, vol. 7, no. 2, pp. 67-71, Sep. 2019, doi: 10.33884/cbis.v7i2.1397.



