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# The Potential of Art Development in the Present Era: A Case Study of the 'Nggusu Waru' Leadership Philosophy

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# Abstract

This investigation was motivated by the Eight Characteristics of Leadership in the Bima community called Nggusu Waru which means octagon, this can be seen in the shape of the Crown of the Bima Kingdom and lare-lare or the entrance gate to the Asi Mbojo Museum. This what inspired me, the Nggusu Waru form found in the Royal Crown shows 8 points of good leadership philosophy. On the one side, many Bimanesse people do not know about the Eight Characteristics of Nggusu Waru's leadership. A Bimanesse humanist and author of the book "Petuah Tanah Bima" whom I interviewed, Mr. Alan Malingi, said that currently what is happening in Bima society is almost not fulfilling towards Nggusu Waru, then our task is how to revitalize the values that exist in Nggusu Waru. I also observe that the trend of the current generation in using technology is very advance. The collaboration of the medium of art and technology can be an alternative to convey the meaning of Nggusu Waru's presence in the present era. The data collection process was carried out by interviews, field observations and literature studies. In general, the method I used was a qualitative method, then I classified the potential of new media from the point of view of art, and technology, and then determined the novelty. Thus, what I hope from this writing is to be able to provide an overview of the potential meaning of Ma Nggusu Waru in the present era with the collaboration of art and technology collaboration so that it can become a medium for contemplating the philosophy of Ma Nggusu Waru's leadership.

#### Keywords

Nggusu Waru's Leadership Philosophy; Development of Art and Technology



# **I. Introduction**

I started this article by saying that uniting existing traditions can be done by modifying them, then adopting new good habits. Nggusu Waru has attracted me to discuss the creative efforts of the meaning of Nggusu Waru in the Present Era.

As a Bimanesse myself, I understand the meaning of the word Ma Nggusu Waru or abbreviated Nggusu Waru is a square of eight. Nggusu Waru is a symbol of eight leadership characters in Bima culture. Nggusu Waru is a philosophy is a concept, ideal, hope that a leader should be able to uphold the eight characteristics of Nggusu Waru.

We can find Nggusu Waru symbols on buildings in Bima, such as the one at the entrance gate to the Asi Mbojo Palace which is currently used as the Bima Sultanate Museum, besides that the shape of Nggusu Waru can also be found in city parks. , mosques and so on.



*Figure 1. The Crown of the Bima Kingdom with the octagonal shape (Malingi, nd)* 



**Figure 2.** Left: Ma Nggusu Waru at Kodo City Park, Bima City, Right: Lare-lare Asi Mbojo (Sultanate Museum) with the concept of Ma Nggusu Waru or Nggusu Waru (Rustaman, 2022)

The eight philosophies of Nggusu Waru according to (Dr. Ahmad Badrun, 2008) consist of; (1) mato'a di Ruma labo Rasu. (who is obedient to `Allah and the Messenger), (2) maloa ro bade (who is clever and intelligent), (3) mantiri ngahi kalampa (who is honest in carrying out his duties' means the same as being honest), (4) mapoda nggahi paresa (who is able to uphold the truth), (5) mambani ro disa is the same as fair and responsible mambani ro disa, who is brave, willing to take risks, (6) matenggo ro wale 'physically and mentally healthy and strong' is as being physically and mentally healthy, (7) mapisa ro Guna' the same authoritative and powerful' is the same as having authority or influence, and (8) londo dou *taho* 'offspring of good good men' is the same as good morals.

A leader who meets the eight criteria of Nggusu Waru is an extraordinary, but amid the temptations of the current hedonist era, it is enough for a leader who fulfills four elements, namely a spritual (god fearing person), knowledge, populist and consistent (Malingi, 2022).

The character of leadership during the sultanate, nggusu waru at that time there was a concept, ideals, philosophy was a hope, that this was how it was. However, the reality in society does not fulfill that at this time, so it is our duty to revitalize the values that exist in the nggusu waru.

The Creative Efforts of the Meaning of *Nggusu Waru* in the Present Era are interesting to study as a treasure trove of collaboration between art and technology. The projection of the planned presentation will provide an overview of the involvement of art and technology to convey the presence of Nggusu Waru in today's trends. I observe that the tendency of generation Z in the use of technology is very advance, therefore the medium of developing the art of meaning Nggusu Waru in the Present Era, I will describe in the form of an extimation example of development.

In accordance with the title of this article, the projection development of leadership virtualization of "Nggusu Waru' Bima Culture in the Present Era. So this paper focuses on related references that become the author's reference in developing future creation research.

# **II. Research Method**

Related materials in this writing are visual, verbal sources (interviews), written sources from literature related to Ma Nggusu Waru's philosophy and the potential of new media offered. Meanwhile, the method I generally use is qualitative with grouping seen from the point of view of art and technology. So I can determine Novelty or the novelty that is presented, whether it is built based on driven by art (tendency of art/body) or driven by technology (tendency of technology).

### **III. Results and Discussion**

#### 3.1 Ma Nggusu Waru's Leadership Philosophy

My reading of philosophy here means the noble values of culture. As described in the introductory section above, Nggusu Waru's philosophy has eight characteristics, namely obedience to Allah and the Messenger, clever and intelligent, upholding honesty, being able to uphold the truth, being fair, responsible and brave, the same as having the courage to take risks, physically healthy. and spiritual, authoritative or influential, and have good moral. The eight philosophies were adjusted after Islam entered the land of Bima, meaning that before religion entered the land of Bima, the eight philosophies already existed but the values that were carried out were an invitation to imitate the eight characteristics of nature, namely tabe'a dana or being patient, the nature of the land, tabe. 'a oi or the nature of fire that is hot and if misused will be dangerous, tabe'a angi or the nature of the sea that accepts anything, tabe'a ura or the nature of rain soaking the earth without any strings attached, tabe' a liro or the nature of the sun appears during the day and tabe'a wura or the nature of the moon appears at night (Malingi, 2022).

Meanwhile, in textual terms, the Nggusu Waru that became the constitutional etiquette in the Bima sultanate were, Dou Ma Dei Ro Paja Ilmu (a knowledgeable person), dou ma dahu di ruma (person who is fear of God), dou ma taho ruku ro rawi (people who have a good behavior), londo ro mai (descendants from a good family), dou ma dodo tando tambari kontu (people who look forward and look back, who is looking forward about the future and care about history), dou ma mbeca wombo ("wet, full of water under their house" meaning that they are rich), dou ma sabua ngahi labo rawi (one who's stick to what they said), dou ma disa kai ma poda (brave because it's true). This is contained in the book of Al Ma'rif jawharah which was translated by Muhlis and Dr. Hj. Siti Maryam Salahuddin, entitled Jewel of Wisdom from the Ancient Manuscripts of the Bima Jawharah Al Ma'rif Sultanate.

This is a basic reference that became my basis for positioning the points that will be metaphorically used as works to invite (participants/people) to reflect on the meaning of Ma Nggusu Waru. The eight characteristics that represent Nggusu Waru can be metaphorized as earth, water, fire, wind, sea, rain, sun and moon. However, this is only an initial estimate, because the metaphor will be continued for further observation or study in the next research.

#### 3.2 Potential of New Media for Art and Technology Collaboration

I imagine some new media such as virtual reality, this technology concept can make time, space and exhibition design information bigger. Some things that cannot be shown in reality can be displayed in a VR system. According to the type of technology, the application of VR technology in exhibition design mainly includes aspects of panoramic image technology, 3D visualization technology, stereo audio visual technology and interactive design technology (Liu, 2012). Another form that can also be an alternative to work is interactive installation art with technology, here I will also give an example of how to estimate installation art with technology.

### **3.3 Panoramic Image Technology**

Panoramic image technology is a new visual arts wizard that is rapidly developing and gradually gaining popularity. It is a type of panoramic photography based on image processing. It is a camera surrounded by a group of photos taken at 360° or using a variety of photos taken by fisheye combined into a panoramic image by computer technology to achieve a full interactive view of the real scene to restore the mode view. Panoramic image technology is not a true VR technology. But it can bring real impression of interactive scene and feel to people. The technology is simple to implement and relatively low cost. This technology is applied in many scene displays.



Figure 3. Panoramic photos 360<sup>0</sup> (Mahany, 2016)

Novelty that plans to be built in the development of the art of nggusu waru philosophy by utilizing panoramic image technology is very possible to make metaphors of works such as land, water, fire, wind, sea, rain, sun and moon can be presented to bring a real impression with interactive nuances for users, and it can explain or display multiple scenes.

#### 3.4 3D View Design

The presence of stereoscopic 3D viewing is at the root of virtual reality (VR) to create a realistic sense. It is also one of the core technologies of virtual reality. In order to realistically simulate visual functions, this concept relies heavily on three-dimensional display, image processing and comprehension technologies. This three-dimensional display technology includes two kinds. One of them is the production of 3D software based on three-dimensional images based on flat panel views. In addition, a device is prepared to display 3D images. The first technology as software with processing using 3dsmax, Maya and other 3D modeling tools to produce 3D images.

The second technology is hardware technology, such as multi-channel projection technology, aerial imaging technology. Multi-channel projection technology can realize the surrounding screen image display. Stereoscopic glasses can enhance three-dimensional images. Aerial imaging technology is a relatively advanced piece of hardware developed in recent years. It ables to display three-dimensional images in the air, and has sensitive interactive touch.



Figure 4. Simulation of using Virtual Reality (Amanta, 2021)

This novelty that plans to be built from 3D visual design will bring out bodily emotions that are closer to the object, trigger responses to touch, movemengte and so on and we can see this as driven by art. Of course, if we compare it with the previous visual panorama, this 3D VR technology has further improved the technology, namely using Ocolus glasses.

# **3.5 Stereo Audio Visual Technology**

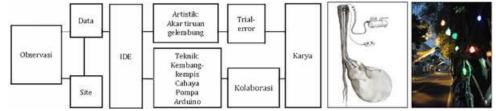
Sound production is an important link in the pursuit of realistic virtual reality. Virtual reality sound is not just an ordinary stereo, but more than a stereo is a more complex 3D sound technology. This is realized through head recording technology. It is a highly realistic virtual reality environment technology for simulating the physical characteristics of real world sounds. The virtual 3D sound environment allows users to distinguish their distance, and determine the location of the sound source. 3D sound in virtual three-dimensional space can be reflected on the surface of the 3D model. It will also be blocked by obstacles. This will provide a bodily experience for participants because it involves the listener's senses directly to feel the sensation of playing emotions. Of course this is also a novelty that will be presented. Driven by art is very close to the user.

# **3.6 Interactive Visual Design**

The pursuit of modern exhibition art is no longer a one-sided audio-visual presentation, but rather an interactive one. So, interaction design in virtual reality technology is very important. This is also the most interesting place. Currently, interactive technology includes three kinds: spatial location interaction, environmental change interaction and three-dimensional behavioral interaction. Interactive technology elevates life and soul to the VR world. Novelty which is built from interactive visuals, of course there is the involvement of users to interact with the art objects that are presented.

# **3.7 Interactive Art Installation**

Some of the previous creation developments used VR technology, unlike what was done by (Suryanto, 2021). The project that Suryanto is working on is the installation of artwork on a banyan tree using Arduino board technology. Trees are one of the living things that humans are not aware of other than the awareness of the growth of trees. It is understood in terms of its function. We never have the awareness that the trees are also eat, drink and breathe like other living things like animals and humans. The purpose of creating artwork on a particular site is to visualize the concept of living in a tree by creating bubbles that can be inflated and deflated (driven by art) in this process involving the emotions of the user at the time of pumping. To enlarge the movement of the bubbles, a visual illusion is applied by including light that accompanies the movement (driven by technology). For synchronizing the motion of the bubbles and the lights, it requires a technological device that can cope with such things. The process of creating a work of art at a particular site requires observation. The method of creation is done by trial and error, collaboration, practice -based research by involving other disciplines , especially technology to operate the workings of art.



*Figure 5.* The method of creating the breathing tree, pictures and photos from the installation (Suryanto, 2021)

Furthermore, in research conducted by (Ignes Rutama, 2021). This project is to display 3D objects using a *Hologram Fan* which is controlled from a PC or laptop. Analysis of the development carried out by Ignes on learning media of human anatomy using 3D Fan Hologram.

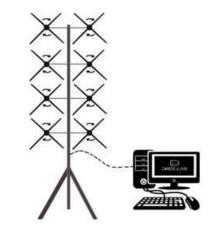


Figure 6. 3D Hologram Fan Prototype as Learning Media (Ignes Rutama, 2021)

This project is not dominantly based on art because its design is more directed towards functional science. I see potential here as an alternative to the development of Nggusu Waru art creation, where the involvement of Participant's emotional development in controlling the anatomical content needed by participants, thus *driven by art* can stand out more than *driven by technology*. You can also add an *Arduino board* that is programmed as a substitute for the PC or laptop so that the presentation method can be simpler.

# **IV. Conclusion**

The philosophy of Ma Nggusu Waru or Nggusu Waru is a leadership philosophy of the Bimanesse community which consists of eight characteristics, namely obedience to God and the Apostles, clever and intelligent, honest, able to uphold the truth, fair, responsible and brave, willing to take risks, physically and mentally healthy, authoritative or influential, and of good morals.

This philosophy emerged long before Islam entered Bima, and Nggusu Waru's leadership values were imprinted in the properties of nature such as earth, water, fire, wind, sea, rain, sun and moon. Art metaphors will refer to these objects in addition to referring to physical forms such as crowns, buildings and symbols of the manggusu waru in Bima.

The potential for new media as a trigger to bring out the novelty or novelty of the art that I want to create, which I have described above are panoramic image technology, 3D display design, stereo audio visual technology, interactive visual design, and interactive art installations.

This paper is only a stimulus for me to be taken into consideration in conducting further research on creation. But also to add references from readers related to the development of art by involving technology in it.

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