



# Utilization of QR Code for Digital Information Media Installation Artwork

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**Abstract.** Sunaryo is one of Bandung's most renowned sculpture artists. His works are phenomenal. One of them is the Wot Batu installation. Wot Batu is an installation work representing Sunaryo's spiritual soul in his life journey, so the existing stone installations have various meanings. Explain each meaning in the artwork installation. A QR code is needed as a digital media that contains information on each rock. The QR code arrangement placed on each part of the stone provides flexibility for visitors to enjoy the installation work independently. The purpose of this paper is to re-read the work process in compiling QR code-based digital information media. The method used is a descriptive analysis of the visit. The analysis is based on qualitative data collected through field observations at Wot Batu, visitor interviews, and literature studies. The results of this search aim to obtain data that can later become a foothold for the use of QR codes in the future in various installation artworks.

**Keywords:** Sunaryo · Wot Batu · Digital Information Media · QR Code

## 1 Introduction

Sunaryo is an artist who creates installation artworks using 135 planted stones, conceptually arranged in an open space area [1]. The manufacture of Wot Batu started in 2012 and was inaugurated in 2015 [2]. Stones taken from various mountains in Java become works that are not limited by time. This installation work is called Wot Batu, which means stone bridge. According to Sunaryo, the word wot is taken from the Javanese language. Wot is intended as a spiritual bridge that connects the human soul and body; besides, the meaning contained in this area is the separation of the right and left brains connected through a stone bridge [3]. Wot Batu was created as a spiritual and transcendental journey through various meanings from every part of Sunaryo's life. Wot Batu is not just an art installation designed and managed as an educational tourist attraction for tourists [4]. Furthermore, previously Sunaryo had created Selasar Sunaryo Art Space which is also an educational tourism place [5].

According to Sunaryo, Wot Batu's installation works need to unite art and technology because Batu is an eternity, and technology is temporary as part of human life. Therefore, each installation work can utilize information technology to make it easier for visitors to get information about the work. The technology used in Wot Batu uses a QR code. QR

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code has potential because smart devices equipped with cameras can easily recognize the QR code [6].

QR (quick response) code is a technology whose function is similar to barcodes. The difference is that the bar code carries one dimension, while the QR code carries two dimensions. QR code create using a QR code generator by specifying the file type, then generated (processed), and the results can be downloaded immediately [7]. QR code consists of a function pattern to make reading easy and a data area where data is stored because it has a search pattern, alignment pattern, time pattern, and quiet zone [8]. Digital information media is an alternative to delivering information efficiently, effectively, and dynamically. The presence of a QR code-Its is currently limited to using black and white colors. The involvement of other colors in QR codes creates a renewable innovation [9].

Digital media can contain a variety of data, including text, audio, video, and images [10]. Digital media can be filled with various information packages on Wot Batu. And distributed in areas around installation works that are easily accessible and safe from the reach of visitors with installation works. The content contained in Wot Batu on each QR code contains information and meaning by providing illustrations and audio. Using this information media provides flexibility for visitors to carry out activities independently [11].

When visitors take a self-guided tour and interact with the works, there will be communication between users and the qr technology media in the exhibition area. The ease of getting information in the form of audio that is inserted in each media and activated through a connection with a QR code is an alternative form of information that is easily accessible in addition to information from the guide.

The use of digital information media considers optimizing the delivery of information [12]. However, the statement's accuracy must support by reliable and current data. This research intends to discuss visitors' experiences utilizing the QR code as an information media at Wot Batu. This article aims to describe and discuss the results of research on the use of QR codes as information media at Wot Batu and to what extent this interactive information media can optimally serve users. So, the research question arises: how are visitors' experiences and impressions in utilizing QR code-based information media at Wot Batu? The hope is that this data can be an evaluation and reflected in developing better QR code-based information media.

## 2 Methods

The analysis method used is descriptive analysis with a phenomenological approach. This approach is used to get the point of view from the position of participants in responding to an artistic phenomenon [13]. This paper focuses more on reviewing the information system of one installation art object called Wot Batu. This installation was created by Sunaryo as a visual artist. Wot Batu is located at Jalan Bukit Dago Pakar Timur No. 96, Bandung. Data was collected through several techniques: observation, documentation study, literature study, and analysis. The observation was conducted on September 18, 2022, followed by an analysis one month later.

### 3 Results

To visit Wot Batu every day, visitors can only come in two-time sessions. The first session is from 10 am to 1 pm. Meanwhile, the second session can be from 2 pm to 5 pm. Wot Batu operates from Tuesday to Sunday. To purchase tickets, visitors can directly visit Wot Batu or can also purchase tickets online. Ticket prices are only valid for ages 12 to 65 years [1].

After visitors enter, they will be given a guide at a predetermined time from Wot Batu. The visit guide conducted by Wot Batu is only done once per session or twice a day. The guide will explain each meaning and information contained in each work. If visitors enter before the guide time, then visitors will be able to enter and carry out independent activities around the Wot Batu area through the entrance to the right to start from the right side of the Wot Batu area.

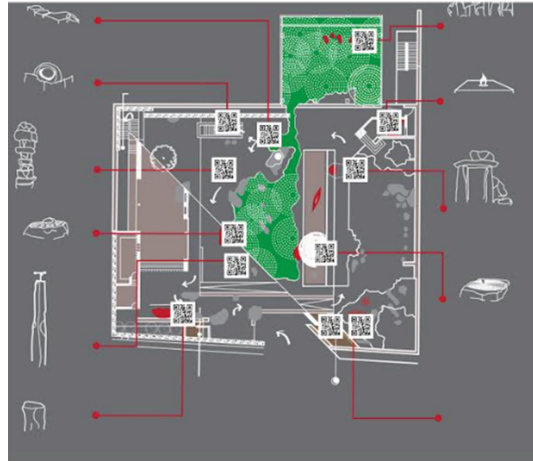
The use of information systems in the form of information media on Wot Batu artworks has benefits for conveying information regarding the works displayed there. Since each work has its own identity and message, an easy, effective, and optimal media for conveying information is needed. QR code-based interaction media has been applied to convey this information more flexibly. For ordinary people, this kind of information media is essential. Not all visitors have sufficient background knowledge of art appreciation. By using the QR code, visitors can simply read the code using their gadgets, and information in the form of audio can be listened to freely. Audio media was chosen not to take away visitors' focus to stare at the work. That way, visitors can freely see the installation while listening to the information behind the work. Users on a self-guided tour expected to experience the technology used for the tour. An experience that makes the user feel the information of the work.

Utilization of current technology by distributing a QR code on each installation artwork. Each QR code contains various information that has been adapted to the artwork. This QR code can scan using a QR reader located on a smart device that will directly send an address containing media in the form of a user interface with illustrations accompanied by audio media as a means of information from the artwork.

#### 3.1 Visitor's Journey at Wot Batu

The visitors' journey in exploring the Wot Batu rides is worth narrating. The reason is that Wot Batu is not just a tourist spot but an art-based tour. Starting from setting foot at the entrance to walking from the right side to the left has its purpose and value. This is done to see the chronology of visitors utilizing the QR code in each installation work. The following is an illustration of the position of the QR code that is placed in each installation work (Fig. 1).

First, walk towards the entrance of Wot Batu, called the gate stone. Visitors are presented with a stone installation that symbolizes a welcome. Right below it, the QR code is placed. It should also be noted that the Wot Batu area is divided into two sides: the right and the left. Sunaryo interpreted that the right side is the right brain, while the left side is the left brain. Here, visitors are invited to explore the right side first. The first stone installation that visitors encounter when entering the right side is the Abah and Ambu Stone. This stone symbolizes two human beings who are opposite but complementary.



**Fig. 1.** QR code distribution map.

The QR code position for this stone installation is next to the work. Visitors are directed to look deeper to see the Mushala Stone. This stone is believed to have been brought by Sunaryo when he traveled to the Holy Land (Mecca). The installation of Mushala Stone is placed around the area so that visitors do not enter the mushala area with footwear. Next, the guide invites visitors to approach the brooding stone. Visitors are also offered to sit on the brooding stone, feeling the sensation that Sunaryo gets when sitting there.

After trying to sit on Batu Merenung, the viewer is taken to three stone installations in one shade, which Sunaryo calls the Stage of Life. To the left, a tree stands upright with a stone as its support, which Sunaryo calls Batu Indung. This stone installation attracts a lot of attention from visitors. Sunaryo's story with his mother is expressed using the trunk of a guava tree, which is very memorable in his mind. In the middle, there is a Batu mandala installation that symbolizes the balance between humans and nature. To its right, the Parahu Stone, with its unique shape, symbolizes the journey of human life, sailing through the sea of life.

After visitors are shown the Stage of Life, the tour guide instructs them to see the opposite installation. The installation titled Antara Bumi dan Langit is quite extensive. Sunaryo interprets the earth and sky as two things that must happen, such as day and night, life and death, male and female. Visitors are directed to walk underneath Lawang Batu, where Sunaryo's fingerprints are visible. The QR code for this stone installation is right underneath it. Thus, making it easier for visitors to access it. Next, step into the dark room where Batu Api is located. Coming out of Batu Api, visitors are presented with a flat expanse of a pond as if it blends with the background of the sky behind it.

In the next section, visitors move to the left side and are connected by a stone bridge called Wot Batu. This section provides meaning as a bridge from the right side, full of abstract themes and intuitive thinking as a symbol of the right brain. It was, furthermore, entering the left side of the brain with more logical and rational themes. Shortly after passing through the section, Batu Peta appears, which tells the story of the raw stone materials obtained from various regions in West Java. Moreover, in front of it, there is a

room down the exhibition area that tells about Stone Space. The room tells the story of the universe through audio-visual works.

After that, visitors will see Batu Sapuluh, which consists of stones arranged in stages to symbolize divine energy that lifts us into the sky toward consciousness. Next to it is Batu Seke, which in Sundanese means spring stone because the stone comes from the river and is placed in the center of the area, meaning the rotation of water as a cycle of life. Subsequent visitors will meet Batu Angin as the highest work that has the meaning of human relationship with the Creator.

Finally, visitors will find the Time Stone, the counterpart of the Space Stone. In this installation, the metal gears of the work rotate and influence each other. Time Stoneworks by using sunlight. The meaning in this work signifies that human time is constantly rotating and is greatly influenced by the sun's rising and setting. On the Time Stone is an inscription from King Galunggung: "Hana nguni hana mangke, Tan hana nguni tan hana mangke," which means "if there is a present, there will be a future." It means that what we do has an impact on the future.

### 3.2 QR Code Use for Visitors

The writer had the opportunity to interview one of the visitors regarding using QR codes as a means of information for work. The visitor is a teacher in Bandung. He shared his experience in using the QR code. According to him, the QR code can make it easier for him to conduct tour activities independently. On that occasion, the visitor could understand each work through the information he did. The visitor got more comprehensive information because he did an independent tour and continued with a group-guided tour (Fig. 2).

The distributed QR code is also user-friendly and makes it easy for visitors to access independent activities. QR codes accessed with intelligent devices will direct to the user interface page. The layout of the user interface consists of several parts. At the top is an illustration of the installation work, equipped with audio waves, a button to play the sound, and a choice of language buttons at the bottom. The sound released on the QR code as an explanatory medium provides a narrative of each work. The sound produced by smart devices owned by visitors can be heard in the Wot Batu area, which is in an open area (Fig. 3).



Fig. 2. QR code in the Wot Batu Area.



**Fig. 3.** User interface.

Visitors enjoy a different experience with easy access to information. Text, audio, and graphics on the user interface are the content contained in each QR code. An aesthetically pleasing user interface can influence the user experience. Aesthetic appearance pays excellent attention to layout, color, and typography [14]. Moreover, the display becomes a unified content that visit participants can enjoy. Content provides experience and can provide messages and impressions to visitors in every visit activity.

Based on the results of an interview with one of the visitors. The use of QR codes at the Wot Batu location is beneficial for visitors in conducting tourism activities. Installation works not labeled with readable information, such as at the exhibition site, has been replaced with a QR code. Visitors get information at the beginning of the visit explained by the officer in the ticket area regarding QR codes that can be used in independent visits. Visitors feel they get complete information because they get information from the guide directly and in the form of a QR code. The user interface is easy to understand. Furthermore, the most important thing is information in the form of audio which is considered easy because visitors only need to listen to it.

After collecting various data, the author can analyze them. Data on the user interface using images and audio can be used as the right solution for visitors because too much information text can affect the visitor experience. Furthermore, information in the form of too much text can reduce visitors' interest in independent activities because using text needs simplified information [15]. The selection of audio in the media used at the location can be difficult for some visitors who do not use earplugs due to outdoor conditions that are very dependent on the natural conditions around Wot Batu.

User interface by displaying audio graphics can be replaced with a display that is easy for users to understand with the use of time duration. Furthermore, the author found that the stone text explanations did not all appear on the complete layer condition. This could be due to the varying size of the user interface layout. Consistency in the user interface is important and can provide a user experience [16].

Moreover, if there is no QR code utilization at Wot Batu, then the information received by visitors only occurs during a group tour with a guide. Moreover, there are various obstacles to group tours, including The lack of focus of visitors in receiving information and the limited and scheduled tour time. For visitors who come without having time to take a tour, it will not be easy to find out information about the installation work.

## 4 Conclusion

Digital information media is an alternative to delivering information efficiently, effectively, and dynamically. The presence of a QR code-based information system is an exciting offer to serve visitors to Wot Batu more freely. The form of audio information makes it easier for visitors to digest information from each of Sunaryo's installation works. The QR code also does not interfere with visitors' artwork appreciation. Visitors can absorb information about each work with two stimuli (audio and visual). By activating other senses to receive information, appreciation activities can be optimized. Visitors feel this statement. This kind of interaction media allows for interesting aesthetic communication. The usefulness of the QR code in the Wot Batu installation can be used as a basis for using technology to convey information in various other installation artworks.

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