Preserving village culture, identity, and sense of belonging through visual identity design for public children playground (case study: Mekar Bakti village, Panongan regency, Tangerang)

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Abstract. Mekar Bakti, a village in Panongan regency, is located beside Citra, a more modern urban housing complex. This contrast engenders a threat to Mekar Bakti, as their more traditional culture and identity are getting eroded as modern culture invades the daily lives of its residents. In a tangible sense, it brings misunderstanding on the function and ownership of the public facilities such as the children playground, as some of the residents think that it belongs to Citra. The reason for this is because there is no strong visible spatial identity on these facilities, and it affects Mekar Bakti resident’s perception and sense of belonging towards these facilities. Using Participatory Action Research method, combined with Design Thinking and narrative approach, the design team conducted a research and design solution to this visual identity problem. This method allows both the qualitative aspect (visual innovation) and quantitative aspect (improving social life) to be investigated. In the end, a visual identity based on the culture and local wisdom of Mekar Bakti village residents were created for the public children playground in that village. This strategy and result could be used as a model towards a similar problem in other villages.

Keywords. The Narrative approach, Visual Identity, Children Playground, Participatory Action Research, Design Thinking, Local Wisdom

1. Introduction

Mekar Bakti is a village in Panongan regency, Tangerang city, Banten Province, in Indonesia. It is located right beside a more modern Citra housing complex. Influenced by the urban life, the society in Mekar Bakti became more developed, especially in its social life and environmental order. Although there is still a hint of traditional lifestyle through tight-knit housing complex design, 40% of its residential houses influenced by urban housing complex design with order and isotype designs. Public facilities such as soccer field, mosque, public clinic, and children playground are provided.

With its location close to Citra housing complex, a problem arises in Mekar Bakti village in regards of its public spaces. Even though the existing children playground legally and rightfully belongs to Mekar Bakti village, with the lack of recognizable visual identity and identifiable name of the playground, there are confusions among its residents whether it belongs to Mekar Bakti or Citra. Some residents even call the playground with Citra Playground. This confusion creates apathy towards the condition of the site. Through direct observation and confirmed with an interview with the village head, there is a lack of care towards the cleanliness and the facility from its residents.
Another issue of Mekar Bakti village caused by being so close with its neighboring Citra housing complex is the issue of slowly losing its local culture identity caused by modern globalization. Mekar Bakti is a village with a rich culture of bamboo plaits craft and automotive workshop community. This unique cultural identity could be lost if not being consciously preserved by its people.

![Image](image_url)

**Figure 1.** The condition of the children playground on Mekar Bakti village in October 2018, before design solution deployment.

A good and interesting visual identity of a location could give a strong sense of belonging to its residents. Well designed signage design could inform the residents of the name of the children playground, and it adds to the identity of the site. A strong sense of belonging towards a public space from its residents could build empathy and sense of community. A grounded approach of visual identity design through human-centered design and participatory approach could produce a genuine design solution that is based on the existing local culture.

This paper will report how the team of Visual Communication Design department students, with the guidance of their lecturers, tried to tackle the problem of identity of Mekar Bakti Village children playground through design thinking method, with participatory action research, human-centered design and narratology approach to produce a signage system and visual identity design that could build a sense of identity for its residents [1]. The team formulate a hypothesis that a well designed, grounded visual identity design based on local culture could raise the residents’ awareness and sense of belonging towards the children playground. In the end, a pre-test and post-test survey and analysis were conducted to measure the awareness escalation on how the residents of Mekar Bakti village identify the children playground after the visual identity design is deployed.

2. Method

The methodology used to solve the societal problem is using the Design Thinking method [2]. The aim of this method is to solve complex problem systematically through product or service. Design Thinking method involves people intersected with said problem, and then it will be analyzed and defined to be effectively solved through a solution that is implemented and evaluated for the best solution. There are five phases of *Design Thinking: Empathise, Define, Ideate, Prototype, and Test*. These phases are not linear as sometimes reassessment of previous phases might be needed based on the latest phase evaluation result. This kind of system is necessary to iterate the solution to the problem. In solving the issue presented in this project, the phases are modified into: *Empathise, Define, Ideate, Prototype, Pre-test, Deployment, Post-test.*
2. Define

Define means summarise the data gathered in empathise phase, and analyze them. In this phase, we are looking for the human-centered key problem. The design team defined the problem as to how could we preserve the eroding village culture, identity, and sense of belonging through visual identity design for public children playground. Through defining the key problem based on participatory action research, the design team could produce a communicative and well-designed solution on the ideation phase.
2.3. **Ideate**
In this phase, the design team explored the design alternatives to find the best solution based on the data analysis on previous phases. Design theory and principles such as typography, visual semiotics, and color theory are being used to inform, communicate, and persuade the intended target audience effectively. Mind mapping method was being used to produce keywords as a guideline to create visual alternatives through design sketches. From the design alternatives, the design team chose a design solution with the best potential to solve the key problem based on the data analysis provided. Next, the design sketch was configured, developed, and revised digitally to create a design blueprint for building a prototype.

The chosen design was created with narrative approach using Don Norman's Three Layers of User Experience theory [3]. This approach is designed to create an emotional bond between the design and human interacting with it through a specific narrative experience. There are experience three levels of consuming narrative experience: visceral, behavioral, and reflective. Through these steps, the target audience would be instantly pulled to the site through visual means, persuaded to be responsible on the cleanliness of the site through the visual call to actions, and provided a space and time to reflect, recall and associate on the visual design with their cultural identity and sense of belonging.

![Figure 3](image)

**Figure 3.** The visualization of Don Norman's Three Layers of User Experience theory.

2.4. **Prototype**
This design blueprint then used to build a design prototype. This prototype will inform the village residents a representation of the final design solution. Through their response on this prototype, the design team could gather feedback to iterate the design for the ultimate design solution. After that, the design team created the prototype in three-dimensional model with 1:150 ratio in scale. The prototype then was presented to the village head of Mekar Bakti for feedback. The design process that resulted in the design prototype was conducted by the team from March to April 2019.

2.5. **Pre-test**
Before final design deployment, a pre-test was carried on the residents of Mekar Bakti to measure and determine their understanding of the children playground and their cultural identity. The pre-test was conducted through a survey on residents regularly visiting the children playground and residents living nears the site. Through the test, the design team could get feedback from the users, experts, and even from the designers themselves when testing the prototype. Feedback is an important aspect in the design thinking method because the purpose of the test is to find a solution based on the result of the test. A survey was also conducted on the residents to generate alternative names for the playground. As with participatory action approach, the village head as the stakeholder chose the final naming based on the survey which is “Taman Sayang Barudak”, which means Loving Children Garden in Sundanese.
2.6. Deployment

The final visual identity design that are consists of signage created from bamboo materials are then produced by the design team in collaboration with Akademi Bambu Nusantara, a pilot project community development institution in which expertise on bamboo as the design material. Tires were also used to create sustainable trash cans, with paints applied to the media used to represents a visual identity that is based on the village children drawings and plaits design. The final design then was deployed on site, involving the village administrators and residents in placing and painting the signage, trash cans, and corn blocks. The final design deployment was done on May 25th, 2019.

Figure 4. Photos of final design deployment by the design team and the residents of Mekar Bakti

2.7. Post-test

Finally, a post-test was conducted two weeks after final design deployment to gauge the response of the target audience. This phase was very crucial where the final design from the empathize, define, and ideate process was being tested by the design team in its ability as the solution to the key problem. Then the data would be compared and analyzed with the post-test data result to determine and measure the impact of the design solution on the residents of the village. Through comparing the pre-test and post-test result, it could then be concluded whether the design solution succeed in solving the problem.

3. Results and discussions

3.1 Pre test & post test result

Table 1. Chart comparing the pre-test and post-test result on what the village residents call the children playground.

Table 2. Table comparing the pre-test and post-test result on how the residents acquire the information for the name.
Passing by the garden     46.6%  66.6%
Friends/relatives        23.3%  30%
Odong-odong              30%   3.3%

Table 3. Table comparing the pre-test and post-test result on the village residents’ opinion on the comfort of the children playground.

| Variables                | Pre Test | Post Test |
|--------------------------|----------|-----------|
| Waiting for children playing | 20%      | 35.4%     |
| Picnic                   | 11.4%    | 32.2%     |
| Playing                  | 37%      | 22.5%     |
| Passing through          | 14.2%    | 6.4%      |
| Studying                 | 14.2%    | 3.2%      |
| Dating                   | 2.8%     | 0%        |

Table 4. Table comparing the pre-test and post-test result on the village residents’ awareness that the playground belongs to RW 03.

| Variables | Pre Test | Post Test |
|-----------|----------|-----------|
| Know      | 40%      | 40%       |
| Do not know | 60%     | 60%       |
Table 5. Table comparing the pre-test and post-test result on the village residents’ awareness that the village is child-friendly.

| Variables   | Pre Test | Post Test |
|-------------|----------|-----------|
| Know        | 43.3%    | 73.3%     |
| Do not know | 56.6%    | 26.6%     |

Table 6. Table comparing the pre-test and post-test result on the village residents’ opinion on the condition of the children playground.

| Variables     | Pre Test | Post Test |
|---------------|----------|-----------|
| Comfortable   | 22.7%    | 25%       |
| Tidy          | 25%      | 21.1%     |
| Maintained    | 15.9%    | 15.3%     |
| Not comfortable | 9%   | 7.8%      |
| Messy         | 6.8%     | 9.6%      |
| Not maintained | 20.4% | 19.2%     |

Table 7. Table comparing the pre-test and post-test result on the village residents’ opinion on whether the playground is children friendly.

| Variable    | Pre Test | Post Test |
|-------------|----------|-----------|
| Child-friendly | 76.6%    | 90%       |
Table 8. Table comparing the pre-test and post-test result on the village residents’ awareness that bamboo plaits are Panongan regency’s unique identity.

| Variables | Pre Test | Post Test |
|-----------|----------|-----------|
| Know      | 40%      | 60%       |
| Do not know | 60%     | 40%       |

3.2. Analysis of pre-test & post-test result

Based on survey result on 30 respondents of Mekar Bakti village residents in the form of chart and tables comparing the Pre-test to Post-test result above, there are notable increase especially in the awareness of the residents on the new name of the children playground, the comforts in the playground experience, the child friendliness of the playground and village as a whole, and the awareness of bamboo plaits as part of the cultural identity of the village. There was no increase on the residents’ awareness that the playground belongs to the village, but this might be attributed to the lack of the information of the said issue on the main sign of the site, which means that this feedback could be useful for further design iteration. The decrease of the playground’s tidiness and increase of messiness could indicate that there is increased crowd between the two weeks or the visual identity design deemed too messy for the residents’ taste, in which it needs further tests to find the definitive problem to be solved.

4. Conclusions

In conclusion it could be said that generally, the visual identity solution created by the design team on the children playground give positive impact to the Mekar Bakti village residents, where it increases their awareness of their own cultural identity while also developing the child friendliness and the sense of comfort inside the playground.

Having a visual identity on Taman Sayang Barudak could make the local community identify and starts to build a sense of belonging on the public facility, and it reminds them of their own cultural identity. The visual identity design, in this sense, works as a catalyst for the people of Mekar Bakti to preserve the environment and their culture. This project is just a start of the many structured, systematic, and continuous effort needed to further develop a local community with a strong sense of cultural identity that cares about their environment. Nevertheless, this human-centered design with participatory action research approach using design thinking method could be used and tested as a model to other similar cases of cultural identity needs through spatial visual design on other villages.

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