



## THE FORGOTTEN BARONG KEDINGKLING AND LEGONG TOMBOL AS GREEN FACADE INSPIRATION

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### Abstract

**Purpose:** The purpose of this research and creation is to answer the issue of preserving Balinese traditions such as barong kedingkling, legong tombol dance, taru pramana, the need for green spaces during the pandemic, as well as the implementation of the Bali Provincial Regulation No. 5 of 2005, in the form of a green facade module with a Balinese identity.

**Research methods:** The method used is based on a design thinking approach which is divided into three stages, namely inspiration, ideation, and implementation.

**Findings:** The green facade has a Balinese identity using the form of the barong kedingkling module and the legong tombol dance. The plants used are sourced from taru pramana. This strategy is expected to be able to answer the need for preservation, cultural education, and the application of local regulations in a new, more modern way.

**Implications:** Preservation of traditional arts can continue with a strategy that is in line with the times. There needs to be a creative exploration in line with technological developments. Traditional art must be able to be applied flexibly so as not to be eroded by the times.

**Keywords :** biophilic, barong kedingkling, legong tombol, green facade

### INTRODUCTION

The dynamics of changing times cause cultural shifts [1]. The change in paradigm and mindset between generations is one of the causes. Not to mention the invasion of foreign cultural currents in this digital age, which is accelerating cultural shifts. According to Sumaatmadja [2], the meaning of the shift is an increase in the ability of social systems, the ability of social systems to process information, directly or indirectly. Then the modernization process is by the choices and needs of the community.

Local culture, especially traditional arts, is facing the challenge of modernization. The development of modern technology and science is very rapid, affecting the way of life of people who continue the tradition [3]. The dynamics of changing times have an impact on changes in traditional arts. Traditional art is now required to be able to adapt and not be rigid in an increasingly pragmatic era. For this reason, it is necessary to have a strategy in presenting traditional arts in different forms [4]. With a different approach, there is a chance that traditional art will survive and be seen by the public.



Barong kedingkling and legong tumbol are some of the traditional Balinese arts that have been eroded by cultural dynamics. Barong kedingkling is rarely performed and there is very little written about it [5]–[7], and so far only refers to a book written by Titib [8]. Meanwhile, the legong tumbol dance has been lost and has just been reconstructed [9], [10]. This condition led to the idea of preserving this tradition in another way as a green facade.

This idea arose because of the issue of the need for limited green space during the pandemic [11]. Whereas green space can provide many health benefits, some of which are helping to heal, preventing stress, and relaxation [12]. The need for green space and the above issues are then combined with another issue, namely the decline in Balinese traditional knowledge about taru pramana. According to Suryadarma [13], the knowledge of traditional medicinal plants in usada taru pramana is decreasing. According to him, from a total of 163 medicinal plants, Balinese people now only know 65-96 species.

Then another issue is the application of the Bali Provincial Regulation No. 5 of 2005, concerning the identity of Bali in buildings [14]. This regional regulation states that buildings in the Bali area must reflect local wisdom, both in form and material. However, the buildings have sprung up to use a variety of patch ornaments that appear to just show Balinese identity. Even though there are many ways to present Balinese identity. In this study, one of the proposed methods is a green facade with a Balinese identity. The green facade as the face of the building is ideally used as a promotion of local identity.

The green facade with a Balinese identity combines barong kedingkling, legong tumbol dance, knowledge of the taru pramana tradition, and the need for green spaces during a pandemic. Everything was then wrapped up by the Provincial Regulation of Bali No. 5 of 2005. The aim is to preserve the almost lost traditional arts, educate the public, provide the need for green space in limited areas, and apply the regulation in a new way.

## RESEARCH METHOD

This study uses a design thinking-based method [15]. The stages consist of inspiration, ideation, and implementation. Inspiration provides an overview of the problems faced, as well as the analysis process to the answers in the form of synthesis. After that, the ideation stage is carried out, to provide a visual picture through a sketch of ideas. The last is the implementation that puts the idea into a real form. However, in this study, the implementation was limited to concepts to 3D images.

## FINDINGS

### 1. Biophilic and Green Facade

Biophilic is a term to describe the inherent relationship between humans and nature. This term was first used by Erich Fromm and developed by Edward O. Wilson [16]. Wilson also says, if humans are far from nature, they will tend to appear destructive in themselves which leads to mental damage.

Nature provides many benefits for humans, such as postoperative healing, work productivity, reducing the impact of ADHD, building better social bonds, reducing stress, preventing the spread of viruses, and forming positive moods [12], [17]–[24]. In this case, nature plays an important role in human life.

Nature that is integrated into the building is called a biophilic design [18]. One of the strategies is with a green facade. According to Browning et al. [25], green facades are easier to build human affection for nature. Thus, the green facade strategy is considered the most effective way to evoke the natural atmosphere in a building. The green facade is also a very effective strategy in building green space on limited land.

## 2. Taru Pramana Medicinal Plants

Usada taru pramana is a traditional Balinese medicine script. This manuscript contains about the benefits of plants to treat various diseases. In it, there is a dialogue between Mpu Kuturan and various plants about their respective benefits for the human body [26].

In this research and design, the taru pramana plant used is adapted to the green facade planting module made from rock wool. Vines are the type that fits best with this type of planting module. For this reason, several plants such as sedah, mica, gandola, kangkang yuyu, and myana cemeng are very suitable to be used as plants in this green facade module. The following is a description of the types and properties of plants used in the facade module with Balinese identity.

Tabel 1. Taru Pramana Plants as Green Facade Module Vegetations  
[Source : Arsana [27]]

No	Name	Efficacy
1	Sedah (Piper Betle L)	<i>Sedah/base/betel</i> plants in lontar <i>taru pramana</i> are used as medicine for fainting and unconsciousness. The part used is the young leaves and then used as herbal medicine ( <i>loloh</i> ).
2	Mica (Piper Ningrum L)	In lontar <i>taru pramana</i> , mica/pepper plants can be used to treat headaches. The part used is the leaf by spraying it into the head ( <i>sembur</i> ).
3	Gandola (Basella Rubra Linn)	In lontar <i>taru pramana</i> , the <i>gandola</i> is used as a medicine for vomiting until blood vomiting. The way to consume is using the leaves and make it as herbal medicine ( <i>loloh</i> ).
4	Kangkang Yuyu (Cyclea Barbata)	<i>Kangkang yuyu</i> or commonly known as grass is for treating nausea, fever, and indigestion. The way to consume is processing the leaves into a drink.
5	Myana Cemeng (Coleus Scutellarioides)	The <i>myana cemeng</i> plant in lontar <i>taru pramana</i> is used as a fever medicine. The part used is the leaves. These leaves are used as a paste ( <i>boreh</i> ) and herbal medicine ( <i>loloh</i> ).

## 3. Design Process

In the design process, the green facade with a Balinese identity is designed in the form of barong kedingkling and the legong tumbol dance. The modules will be filled with plants from taru pramana and rock wool planting media. After

getting the shape of the facade of the building as a case, then sketches of ideas are made to help develop ideas. The sketch of the ideas made can be seen in the figure below.



Figure 1. Sketch Ideas  
[Source : Research Team, 2021]

The figure above shows a sketch of ideas in making the green facade module for barong kedingkling and the legong tombol dance. Both poses of the module are made while dancing, which aims to make it more dynamic. In each of the clothes in the barong kedingkling and legong tombol modules, a plant from taru pramana is attached.



Figure 2. 3D Image  
[Source : Research Team, 2021]

In Figure 2, the implementation of the barong kedingkling and legong tombol dance modules looks clearer. The color of the plants from taru pramana also looks more realistic. The design shows the use of vertical space on the building's facade as green space. The green facade system used is in the form of a double skin facade (DSF). This system provides the advantage of reducing solar glare and heat radiation in buildings. The existence of a green facade will help reduce the use of air conditioning, as well as help the movement of sustainable design. Furthermore, the green facade module with a Balinese identity seems to blend with the organic elements of plants. Thus, the rigid building facade looks softer with the implementation of the green facade.

## CONCLUSION

The green facade design with a Balinese identity, which combines the art of barong kedingkling and legong tombol as well as the value of knowledge of lontar taru pramana, has been able to answer the use of limited space as green

space as well as the application of the Provincial Regulation of Bali No. 5 of 2005. With this design, preservation, and education of the value of traditional arts, Bali can continue in the future. In addition, the government needs to think of other ways to implement the regulations more creatively.

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