

Typology of Grave Forms in Peneleh European Cemetery Area

Case Study: Peneleh European Cemetery Area Surabaya

Yayan Indrayana

Master of Architecture Program, Faculty of Engineering

University of August 17, 1945 Surabaya, Email: 5422400013@surel.untag-sby.ac.id

R.A. Retno Hastijanti

Master of Architecture Program, Faculty of Engineering

University of 17 August 1945 Surabaya, Email: retnohasti@untag-sby.ac.id

Darmansjah Tjahja Prakasa

Master of Architecture Program, Faculty of Engineering

University of 17 August 1945 Surabaya, Email: darmansjahtp@untag-sby.ac.id

ABSTRACK

TYOLOGY OF GRAVE FORMS IN THE PENELEH EUROPEAN CEMETERY AREA

Peneleh European Cemetery in Surabaya is the oldest European cemetery whose existence is very important for the historical narrative of Surabaya City. With an area of almost 4.5 hectares, this cemetery has a large number of tombs, with very diverse shapes. From the diversity of the shape of the gravestone and the shape of the tomb when viewed visually has many similarities and differences, but there has never been a record that mentions the exact number of typological forms of the tomb, so a study is needed that can classify various kinds of typological forms of the tomb. The classification of this tomb shape needs to be done

immediately considering the condition of the tombs in the Peneleh European Cemetery is increasingly threatened by its physical form.

In classifying or researching the typology of Peneleh Tombs, data collection can be done by several methods, especially the direct observation method to each tomb and then measuring, recording and describing its shape. Another thing that needs to be done to determine the typology of these tombs considering that many are no longer intact is the search for old data, both in the form of records, maps and also photos that can be used for comparison or comparison with current conditions. Recording based on interviews, especially with residents in the Peneleh area, is also an important thing to do considering that in memory they have an idea of how the shape and condition of the tombs 10-20 years ago.

Related to the Typology of Tombs, when associated with the development plan of Peneleh European Tombs into one of the Historic tourist destinations in Surabaya City, the determination of Typology is very important because it can be a guide or source of data that can be used for the *preference of the* management in this case the Surabaya City government when going through the process of revitalization and repair of Tombs. In addition, research on the typology of this tomb will be the basis for the development of thematic tourism in the Peneleh Cemetery area.

Research Background

Peneleh European Cemetery in Surabaya is currently the oldest European cemetery whose existence is very meaningful for the historical narrative of Surabaya City with many important figures for Surabaya City at that time. With an area of almost 4.5 hectares, this cemetery has a total of 4,146 graves, with very diverse forms. From the diversity of the shape of the gravestone and the shape of the tomb, when viewed visually, there are many similarities and differences in terms of materials, size, shape of the gravestone and also tomb ornaments. The physical condition of these tombstones is currently in various conditions, ranging from those that are still in good condition to those that are severely damaged.

With these diverse conditions, a direction is needed on what and how the shape of the tomb should be maintained or should be renovated based on the variety of forms, where records that describe in detail the shape of the tomb **type** are still very few, so a study is needed that can classify various kinds of typologies of the shape of the tomb.

Site of Peneleh European Cemetery, source: Surabaya Lidar Map 2019



Based on the search for related data, it can be seen that data collection has been carried out related to symbolic symbols on tombstones carried out by Cahya Ratna Mahendrani in 2019, data collection on who is buried in the Peneleh European Cemetery in the Peneleh Cemetery arrangement workshop by Bappeko Surabaya, and RCE and Icomos from the Netherlands, but research related to the typology of tomb shapes has never been done, even though when viewed from the interests of architectural narratives it is a very important discussion.

Problem Formulation

Typology in the identification of tombs in Peneleh is an activity related to the classification or grouping of tomb shapes with similar characteristics or specificity of the created style. This grouping can lead to the shape, material, size and structural system used to create the appearance of Peneleh Tomb, which in turn can refer to specific and particular conclusions.

Based on its etymology, the word type is an absorption of the English word 'type', which comes from the Greek typos. **Typos means model, matrix, imprint** on a figure that carries an original character that is closely related to universal laws. The Oxford English Dictionary describes type as "**the general form, structure, or character that distinguishes a particular kind, group, or class of beings or things**", as "**a pattern or model after which something is made**", and as "a figure or image of something; a representation; a drawing or imitation."

Related to the type and type of grave classification that has been recorded in Peneleh cemetery, there are several, namely:

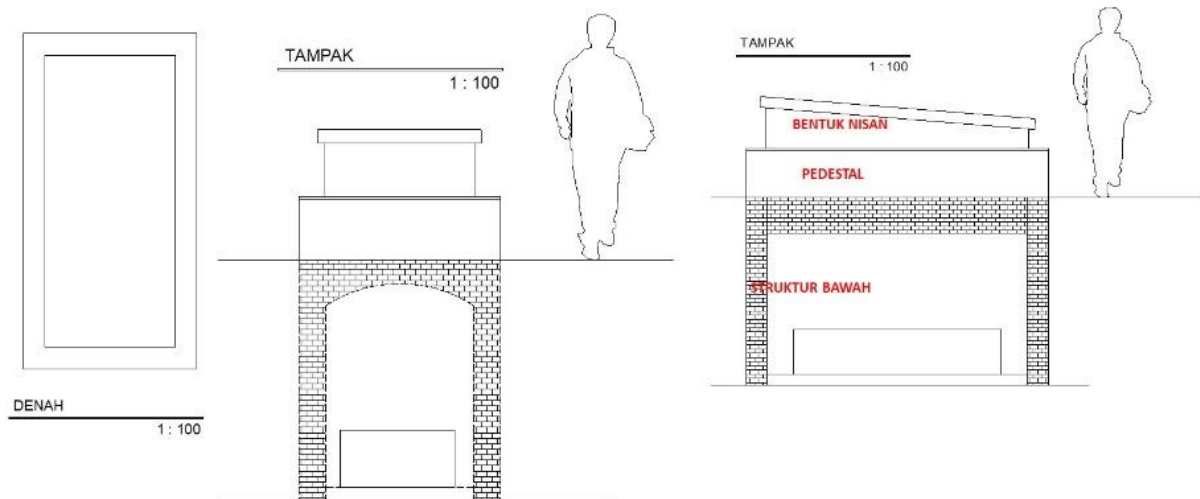
- The type of burial consists of three types, namely *Grafkelder*, *Huurkelder* and *Aarden Graven* (Ginaris. L.S 2019). *Grafkelder* is a type of burial with underground space, where there is a burial pit on the edge covered with a wall of bricks and coated with cement. *Huurkelders* are in the same form or type as *Graafkelder* but the difference is that the bottom burrow area can be rented out. While the *Aarden Graven* type of burial is directly buried in the ground without any room like in the *Grafkelder* type . This type of *Aarden Graven* is found in several graves of important figures such as Pietermaat, PJB Perez and Father Van De Elzen.

- There are four types of *tomb* shapes in the Peneleh European *Tomb* Complex, namely *Die-Base-Cap-Ledger*, *Die in Socket*, *Sarcophagus Tomb*, and *Pedestal* (Ginaris. L.S 2019 - Chicora.Org).
- Based on the shape of the cupola, there are two types, namely the cupola with a pole made of iron and a zinc top cover and the second cupola with a pole and roof made of stone and concrete with the roof shape is mostly a flat roof.
- Based on the decorative variety found in Peneleh cemetery, it is grouped into eight types, namely floral, angels, Christian symbols, service marks, stars, fauna, architectural, and objects (Mahendrani 2013).
- Based on the Nisan stone material, it is divided into two, namely materials from iron and stone. The tombstone contains the name of the deceased who is buried, the place and date of birth of the deceased, as well as the place and date of death of the deceased, sometimes even information about the position and important role when he was alive (Mahendrani 2013).
- Based on the type according to the certificate of the Head of the Regional Parks Office of Surabaya City Government in 1980, (at that time it was called Peneleh Christian Cemetery), the types of existing tombs consisted of earthen tombs, Kelder tombs with red stone masonry with a tomb building on top, reinforced concrete kelder tombs for 2-4 bodies with a tomb building on top, reinforced concrete kelder tombs for 5 - 24 bodies or more (a kind of cave) with a building on top, single tombs of concrete with a steel building on top, reinforced concrete kelder tombs for skeleton tombs with a building on top.

From these notes, the initial hypothesis for the typological classification of the Peneleh European Cemetery Complex is divided into several main classifications:

- **Function**, although the existence of the building is as a tomb but then the elements forming the tomb have several different functions, which is one of the distinguishing elements of the classification of tomb typology.
- **Form**, which focuses on the shape of the display as well as the composition of the Tombs
- **The structure**, in this study, is more emphasized on construction materials and how it is implemented in forming the tomb.

- **Culture**, which in this context considers several cultural backgrounds, history, style trends, representatives of traditions and other things that are the background for the formation of the Tomb Typology.



General arrangement of Peneleh European Cemetery

Source : Author's Illustration

Research Methods

The method used in this research combines quantitative and qualitative methods. In the classification or research on the Typology of Peneleh Tomb Form, data collection is carried out by several methods, especially the direct observation method to each tomb and then measuring, recording and describing its shape, so that typologically it also takes into account the size of various tombs.

Another thing that needs to be done to determine the typology of this tomb considering that many are no longer intact is the search for old data, both in the form of records, maps and also photos that can be used for comparison or comparison with current conditions.

Recording based on interviews, especially with residents in the Peneleh area, is also an important thing to do considering that many things have been lost in the Peneleh European Cemetery Complex, including several tombs that are architecturally unique but now no longer exist.

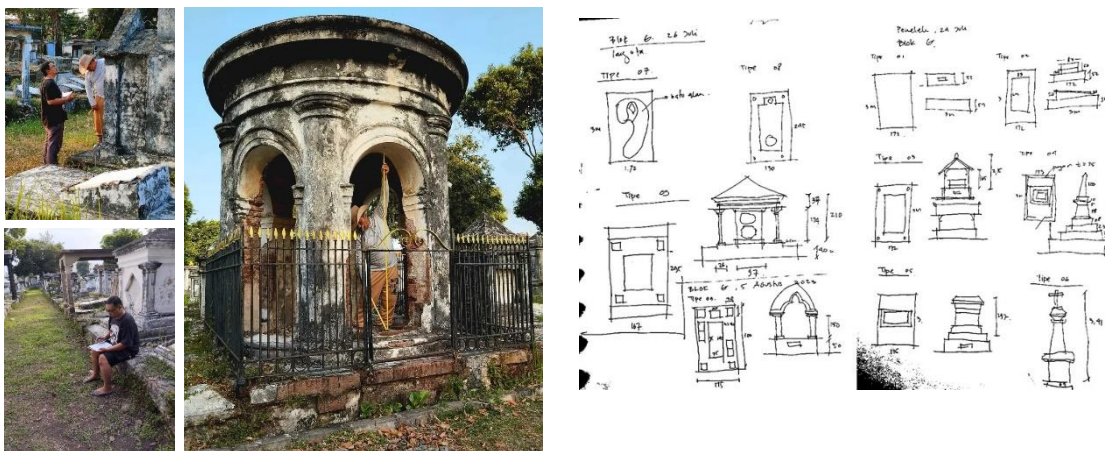


Figure 3. Initial data collection of size and type of tomb, source: author

This research will also use several scientific approaches including; **Archaeology**, because the various forms of tombstones in the Peneleh European Cemetery Complex are a form of artifacts that represent the dimensions of time space and form (Deetz 1967), **Architecture**, an approach related to design patterns and styles that represent technology, building materials and stylistic trends at the time when the tomb was built. **Structure**, considering that from

observations between 2023-2024 the author found several variations of structural systems used, ranging from the type of bracing to the pedestal and roof retaining structural systems. **Culture**, this approach is needed based on several findings about acculturation between European culture and local culture (Java) in several types of tombs, especially tombs that use Cungkup on top.

Research Objectives

One of the things that is of concern in the existence of the tomb structure is its existence that still survives today. Based on information and also observations made periodically by the author from 2023 to 2024, the damage that occurred in the Tomb was more influenced by external factors, especially human destruction. From a resilient point of view, this shows that the Peneleh European Cemetery has the ability to survive for decades. What factors are the main elements of resilience then become one of the elements in determining the typology parameters of the tomb later.

Based on this, the objectives of this study can then be formulated, namely:

- Obtain the parameters that form the typology of tombs in Peneleh that can be used as a reference in the revitalization process of tombs.
- Formulation of the classification of tombs into several main typologies which then become the basis for determining the development of Peneleh Cemetery.

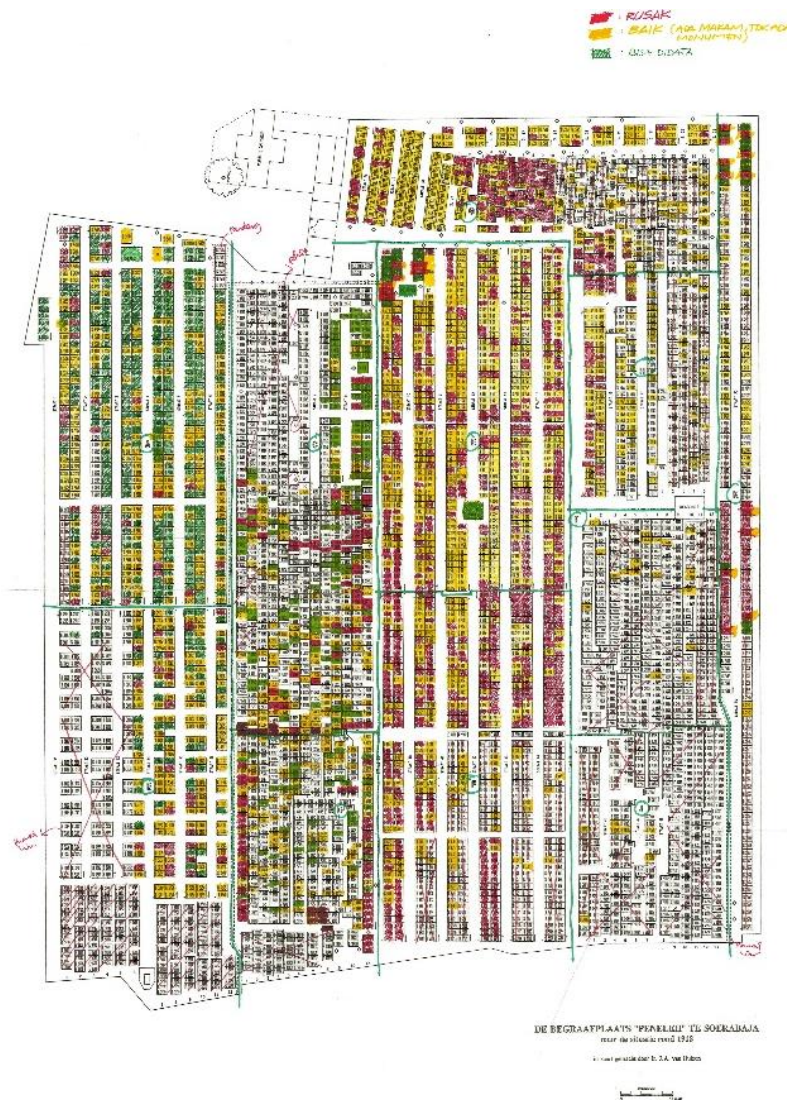


Figure 4. Classification of Tomb Damage, source: data Lab. Settlement
ITS Surabaya

Research Benefits

In the development of physical conditions in the Peneleh European Cemetery until now there are several events that urgently require guidance, especially in the form of a Tomb Revitalization Guideline. Some of these events include the process of development or revitalization of several tombs which are in the process and also the results are not in accordance with the theme of the Peneleh Tomb area as a Heritage area. Departing from this, this research is expected to provide several benefits, among others:

- Data was obtained on the types of tombs that still survive and are structurally still in good condition.
- With this classification, we get which parts can be used for active activities, which tombs must be maintained, which tombs must be restored and others.
- Get how the relationship between the elements that make up the tomb become elements that support each other and show certain characteristics, including the historical background, culture to the development of material technology accompanied by the era of tomb construction.



Figure 5. Various Aristectural Forms of Tombs, source: author

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