

GUIDEBOOK
2nd INTERNATIONAL BOROBUDUR FIELD
SCHOOL

Saujana (Cultural Landscape) Heritage Conservation

Organized by :



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(Center for Heritage Conservation)
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University, Japan

**BOROBUDUR
Field School 2005**

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1. FIELD SCHOOL PROGRAM

1.1. BACKGROUND

Cultural landscape (*saujana budaya*) is the various manifestation of the interaction between human invention and natural environment. Since 1980s, the issue concerning culture and nature interaction became a global point of perspective of the various branch of science, especially in heritage conservation field.

Indonesia, from Sabang to Merauke, is the world's largest mosaik of cultural landscapes that needs attention from many disciplines and sectors. However, the comprehension about *saujana budaya* has not been developed, and is hasn't even become a study material in educational programs. This condition calls for immediate conservation and management of *saujana budaya*.

Meanwhile, the Borobudur UNESCO Expert Meeting which was held in June 2003 stated that there was a need to conduct studies on the Borobudur *saujana budaya* which has never been conducted before. Because of that, this Field School program takes place in the region of Menoreh – Borobudur as its case study. This region, which has world class heritage diversity, will give many important information and lessons to participants, as well as benefits for the local community continuously as time goes by.

1. 2. THEME

The conservation of Borobudur Cultural Landscape Heritage.

1. 3. OBJECTIVES

In general, the objective of Field School programme is :

- To bring understanding to the participants on the subject of conservation and management of cultural landscape heritage, which includes historical buildings, activity and setting, living culture, and other natural environmental components.
- To enhance the ability to implement the concept, method, conservation and management process of the cultural heritage
- To develop the awareness in the conservation of cultural heritage.

- Giving experience to participants in conducting studies of cultural landscape conservation on the heritage site.

In particular, the objective of the programme is :
To develop the proficiency of the participants in the cultural landscape conservation system.

1. 4. TIME

The Field School Program is emphasized in the relationship between concept and reality. For that purpose, the program is designed to thoroughly involved the participants in the study. The participants will learn about the region and deeply study the conservation of cultural landscape, assisted by locals.

For the length of the program on 12 – 18 September 2005, participants stay in Desa Candirejo in order to recognize closely the study object. Apart from receiving activity material from facilitators, participants also can obtain data and information directly from other resources especially the local community.

To broaden the understanding and the experience on heritage region, several field trips will be arranged, including field trip to Menoreh-Borobudur region, country region and several heritage areas in Yogyakarta.

In brief, the activities will consist of::

- Lectures
- Field study/observation
- Field Trip
- Discussion with local community
- Presentation

1. 5. ORGANIZER

The Field School is organized by **Center for Heritage Conservation** Architecture Engineering and Urban Planning Studies, Faculty of Engineering, Gadjah Mada University, Yogyakarta and **Jogja Heritage Society**, in cooperation with **Takada-Kanki Laboratory**, Housing and Environmental Design, Graduate School of Urban Environmental Engineering, Kyoto University, Japan, **Miyagawa Seminar**, Dept. of Environmental System, Wakayama University, Japan

1. 6. FIELD STUDY OBJECT

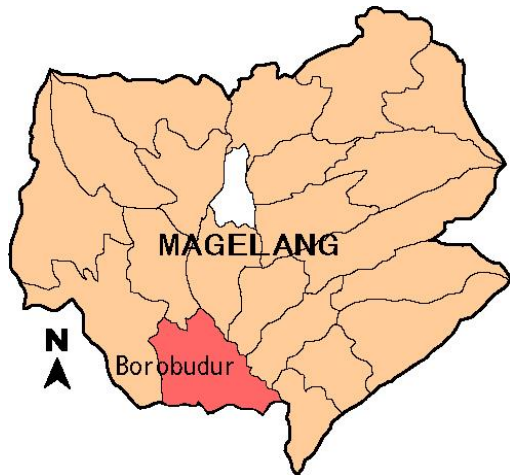
The field study will take place in the Menoreh-Borobudur region with focus on Karanganyar Village. Administratively, it is located in *Kecamatan* Borobudur, *Kabupaten* Magelang, Central Java Province.



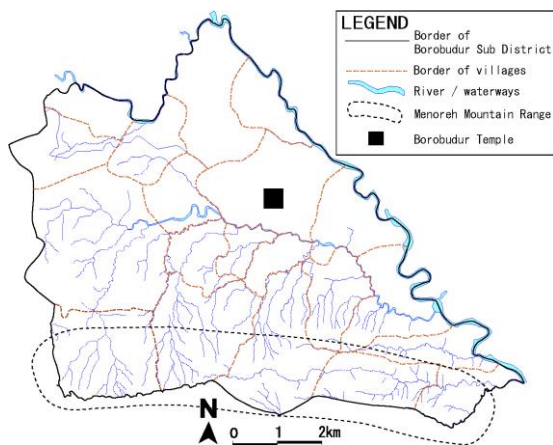
Graphic 1
Central Java Province
Source : Bakosurtanal, 2001

1.7. PARTICIPANTS

The Borobudur Field School 2005 is opened for anyone who is interested in the conservation of landscape heritage; government, associations, culture and heritage experts, environment experts, researchers from Indonesia and abroad from different backgrounds that relates to the program's theme, and students from universities in Indonesia and abroad that is interested in the field of cultural landscape heritage conservation.



Graphic 2
Magelang Location Map
Source : Bakosurtanal, 2001



Graphic 3
Borobudur Location Map
Source : Bakosurtanal, 2001

2. GENERAL DESCRIPTION MENOREH- BOROBUDUR REGION, BOROBUDUR REGENCY

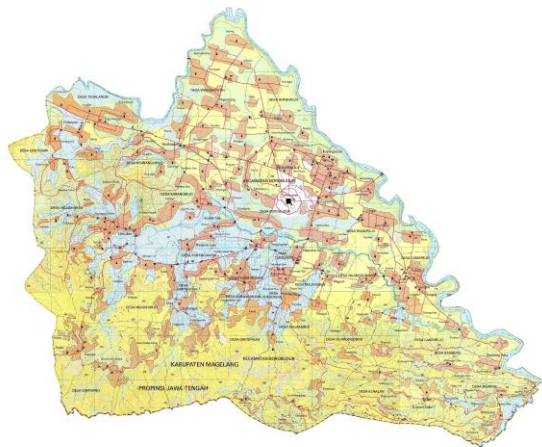
Menoreh-Borobudur region is situated in Magelang Regency, with Menoreh Mountain range as a buffer zone in the south. The region has a beautiful landscape with Borobudur temple as the main attraction.

Kedu Plain surrounded by hills and mountains. In the east by Mt. Merapi and Mt. Merbabu, each 2911 m and 3142 m height; in the southwest by Mt. Sumbing and Mt. Sindoro; in the west and south by Menoreh Range, a chain of small hills and mountains.

Kedu Plain is cut by both the Progo River and Elo River. The almost-parallel two rivers flow from north to south. In the south, they converged into one, and continued their journey to the south sea as Progo River.

2.1. GEOGRAPHY

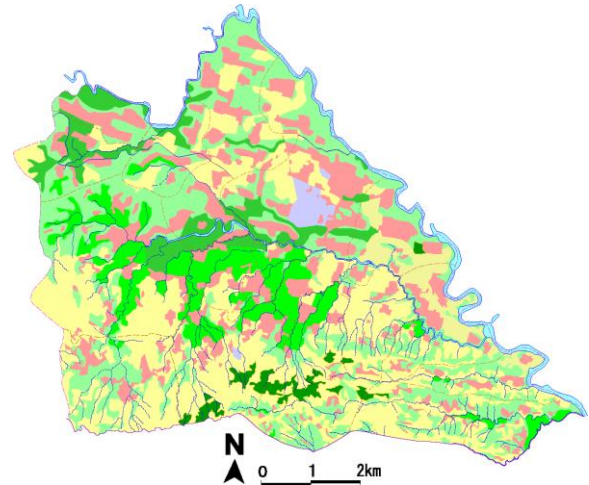
Borobudur District is located in the southern part of Magelang Regency. Its capital is 235 meter above the sea level. Borobudur district is divided into 20 villages. Most of the villagers are farmer with their own farming field.



Graphic 4
Administrative Map of Kecamatan Borobudur
Source : BAPEDA Kab. MAGELANG, 2003

2.2. LIVELIHOOD

Farming is the main livelihood on this area. However, most of the people also has side jobs such as trading, home industry, and craftwork. During clove harvest, which develop in the region, many farmers commence the drying of the clove, which are then sold to cigarettes factory or agents.



Graphic 5
Land Use Map of Kecamatan Borobudur
Source : Bakosurtanal, 2001

2.3. SOCIAL CULTURE

The various cultures and traditional arts of the people of Borobudur complement to the existing cultural landscape heritage, such as traditional rituals, dances, shows, and others, but not all can be found in each villages. Some of them are:

A. Customs PERTI DESA

Linguistically speaking, *perti* or *merti* means to take care of. Hence, *perti desa* means to take care and to look after the village to make it a better place for larger benefits.

Perti desa or usually called as *Saparan* is held once a year, which is on the 15th day of the *Syafar* month (of the Javanese calendar).

This purpose of this ritual is to express gratitude to God The Almighty for the harvest that has passed and also express hope for the success for the next harvest.

The form of the ritual varies. The most popular rituals are *Selamatan ruwat bumi* or *sedekah bumi* and *wayang kulit* all night long.

PERTI DUSUN

Perti Dusun is performed by every dusun (the smaller classification of the desa) on every month except in the month of *Syawal* and *Bulan besar*. The form of Perti dusun is also associated with *ambeng*. The rituals order begins with the cleaning the graves in every dusun in the morning, and in the evening, the *ambeng* is collected at the house of the head of the desa and prayers are commenced by the Kaum (modin) while also collecting compulsory money to be used for social activities and the improvement of infrastructure.

TINGKEBAN atau MITONI

A ritual that is performed for pregnant mothers of their first child which is held on the 7th month of pregnancy.

SURAN

Performed once a year, which is on the 10th day of the month of *Suro* (Javanese calendar). The main location of this ritual is at *Watu Kendil*, and the performing art being performed are *shalawatan* which arrives from the islamic culture, or *wayang kulit* performance all night long.

B. Performing Arts

Several of traditional performing art include :

JATHILAN

Jathilan is a Javanese specific performance art that has existed since the 1900's. The Jathilan is a dance that describes a story originating back from history and using traditional Javanese music as an accompaniment. It also uses the *Jaran Kepang*, a small and flat horse-shaped weaved bamboo. This dance has been around by the time of the Dutch occupation. It is not clear when it first existed and performed, but several versions states that Jathilan originated from the age of the Kahuripan Kingdom. This dance is an adaptation from *wayang gedhog* which at first illustrates the story of the Kahuripan kingdom after King Erlangga and the love story of *Panji Asmara Bangun* dan *Galuh Candra Kirana*. This dance has developed into many different versions. Nowadays, jathilan is modified with many new creations that differs from before. The modification is not only limited to the story but also the music that accompanies it, its accessories, and also its music players.

The story of the dance itself varies, some dances incorporate the theme of the *Journey of Pangeran Diponegoro* in his struggle for the rights of the people of Indonesia against the Dutch occupation.

GATHOLOCO

Gatholoco is a performance art in the form of a *rodad* which incorporates simple dance and music which contains the story of many ancestral knowledge. Gatholoco has been around since the 1920's.

KUBROSISWO

Kubrosiswo is a performance art originating from Kabupaten Magelang that has been around since 1965. Kubrosiswo is an islamic-influenced art. This can be identified from its dialogues that contain teachings of Islam. Usually, this dance is a children dominated performance. This dance is performed by many performers that create a certain pattern with the accompaniment certain religious songs. Linguistically, Kubro means big/large while Siswo means a grown-up student. This dance is usually performed by males.

Kubro siswo performance entered dusun Bejen around 1965. It originated from an place in the Mendut area, which was then brought in to Muntilan area and then entered Wanurejo. In this performance, there is also some other accompanying attractions to get the attention from the audience, some of them include unicycle attraction, glass eating, boxing, cutting open a coconut with teeth, and laying down on a stac of needles, and others.

TONG-TONG LEK

Tong-tong lek is the traditional music performing art. It comes from the words meaning "hitting the *kentongan* while staying up late". This art apart from becoming entertainment for the community, it is also as a means for the village security night watch to refresh their eyes so that they can make it awake through their night duty. There is no special costume worn in this performance, only the bamboo which is used as an instrument must use a bamboo of a sufficient age, one of good sound resonance.

nDAYAKAN

nDayakan is a name for a specific dance of the Barepan *dusun* which is a new creation dance. The origins of the movements to this dance are the moves of the martial arts that has been introduced by Pangeran Diponegoro to its soldiers, which are now more attractive by further enhancing the more simpler movements, and accompanied by several song that have been adapted to the Javanese gamelan music. Even though the nDayakan dance is performed by most young males in Barepan *dusun*, many children are also interested and join in. The main characteristic of this dance is its attractive costume.

SEKAR DYU

The Sekar Dyu jathilan performing arts group was founded in 1 Mei 1952 in Tigal Wetan *dusun*, Wanurejo. Starting off as a jathilan group, today it has developed and renewed (in 1980) to become a *kuda lumping* performance art. The name Sekar Dyu comes from the word 'sekar' which means flower and 'dyu' which means 'butho' (giant). Hence Sekar Dyu means a *butho* that is not wild and can be tamed.

The villages near and around Borobudur temple has certainly developed, especially as a result of the existing tourism development. One of the developed villages that has become a tourism village is Candirejo Village, located 3 km east of Borobudur Temple, Giritengah Village, located 5 km from Borobudur and Wringin Putih Village, which is 2 km.

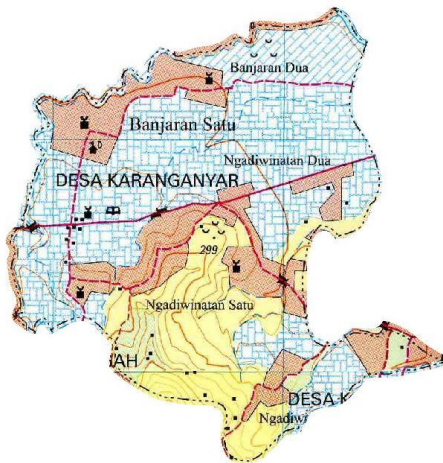
These villages still have the strong countryside atmosphere, regarding its natural environment and cultural traditions of its inhabitants. The tourism activities starting to develop can be seen from the transformations of several village houses into tourist lodges, the production of hand made arts and crafts, and performing arts at certain times for tourists.

FIELD STUDY OBJECT

4.1. KARANGANYAR VILLAGE

A. Geography

Karanganyar village is the field study focus of Borobudur field school. Administratively, it is located in *kecamatan* Borobudur, *kabupaten* Magelang, Central Java Province and geographically located on the foot of the Menoreh Hills and approximately about 5 km from Borobudur Temple. The village shares borders to the north with Karangrejo village, east with Tanjungsari Village, South with Giritengah Village and West with Ngadiharjo village.



Graphic 6

Land Use Map of Karanganyar
Source : Bakosurtanal, 2001

Covering a region of 156525 km², this village has a quite dense population of about 1872 people, consisting of 426 families. The religious majority is Islam. Karanganyar Village is divided into 4 dusun, Dusun Banjaran I, Dusun Banjaran II, Dusun Ngadiwiinatan I and Dusun Ngadiwiinatan II.

The people of the Karanganyar Village are mainly farmers, who depend on the farming and plantation of tobacco. But it has been a while that the people have skills in the field of pottery, *tahu* (tofu) industry, bamboo carvings, and vendors at the Borobudur Temple Park. The pottery craftsmen are mostly located in *dusun* Banjaran.

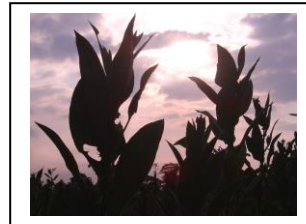


Graphic 7

Map of Karanganyar Villages
Source : KKN, UGM, 2005

B. Natural Environment

Karanganyar village has such amazing natural environment. From this village we can see the sunrise with the scenery of Borobudur in its foreground from the tobacco fields in Karanganyar village before entering Dusun Banjaran I from the south.



Graphic 8

Sunrise Borobudur 'Karanganyar'
Photo: Andika - Rully, 2004

Another potential element is that we can enjoy the fields of paddy ripe yellow like a carpet in the rainy season and green carpet of tobacco plantation in the dry season.



Graphic 9
Paddyfields

Photo: Rully, 2005

C. The Potentials of the *Dusuns* of Karanganyar Village

1) Dusun Banjaran I - "KLIPOH"

Karanganyar village consists of 4 dusun. Dusun Banjaran I is the center of the pottery craft activities and the residence of pottery makers. The houses in this area are still dominated with traditional houses and the characteristic of this village as a craft center is the *tobong* or the pottery burning area located not far from its workshops.



Graphic 10
Tradisional House in Dusun Banjaran I
Photo : Rully, 2004

In 2002, the pathways in Dusun Bajaran I have been upgraded to cement blocks, which its residents think that this project would be appropriate to create a much cleaner and nicer village, since there are impressions that this area is still economically undeveloped. Above all that, Dusun Banjaran I has the potential of its local architecture and natural environment.



Graphic 11
Pathways in Dusun Banjaran I
Photo : Rully, 2005

1.1. The History of the Pottery Village

Karanganyar Village has been renowned with its pottery craftsmen for a long time. Usually these crafts products are used as daily household equipment like *kendil* (for placing food), *tempayan minum* (for drinking), *kuali gerabah* (for cooking) and others.

The pottery village has been around since centuries ago according to folklore, it has a connection with the erection of the Borobudur Temple. According to the stories, in the times of the Borobudur temple construction, pottery households from Karanganyar were used for eating by the constructors.

1.2. Pottery Making Process

The process of pottery making becomes daily activity done by each of the families. The pottery making process starts with the smudging of the clay by rolling it or by stomping it in order to be easily used in the next step. After that, the clay is placed on the spinning table, ready to be shaped according to the design. After being shaped, to obtain the maximum result, it is dried first under the sun before it undergoes burning which is done at the *tobong*. Wood, dry leaves and coconut skin (*sabut kelapa*) are used for the fire to burn the pottery to obtain the ideal heat. The final product sometimes are polished or painted.

The cratsmanship of making pottery has been done hereditary for generations, and becomes a culture activity, from parent to child, from the elder to the youth. This activity becomes a characteristic of the Karanganyar village, even though some of the people consider that the skills that they own are out of date and cannot give sufficient financial income.



Graphic 12
Proses Pembuatan Gerabah
di Desa Karanganyar
Photo : Ratri, 2005

JAVANESE TRADITIONAL HOUSE

The raw material of clay is obtained from the village owned land, a part of the *tanah bengkok* head of village. This natural resource is what makes the people become close to the pottery craft.

2) Dusun Banjaran II - “Kragilan”

Dusun Banjaran II is the exit point of Karanganyar Village. Several higher class houses are located here. Public facilities such as football field and mosque can be observed here. The tourist potential in this area is the fresh water spring that comes from the Suroloyo Mountains which the locals believe can cure many diseases.



Graphic 13
Lapangan Sepakbola & Perbukitan Menoreh
Di Dusun Banjaran II
Photo : Rully, 2005

3) Dusun Ngadiwinatan I – “GUNDEN”

Dusun Ngadiwinatan II has natural beauty, one of them is the wonderful sun rise viewing spot with the foreground of Merapi and Merbabu mountain.

4) Dusun Ngadiwinatan II – “Dukuh, Tegal, Ngasem”

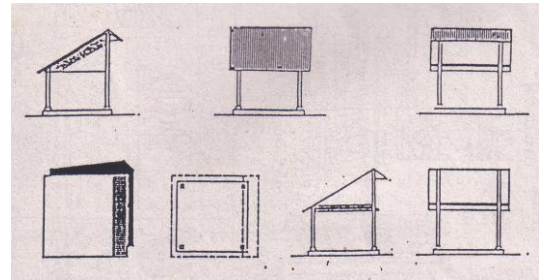
Dusun Ngadiwinatan II consists of 93 families whom are mostly occupied in the home industry sector of *tahu* (tofu) making with traditional methods.

4.1 TYPOLOGY

The Javanese houses are not classified by the shape of its plan, but classified by the shape of its roof. There are five basic types of Javanese Houses:

1. *Panggung-Pe*

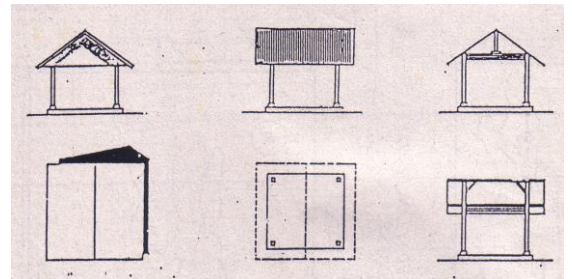
Mostly used for temporary shelter, this type of building are often used for storage and animal shelter.



Graphic 14
Panggung Pe Type
Source : Indartoro, 2000

2. *Kampung*

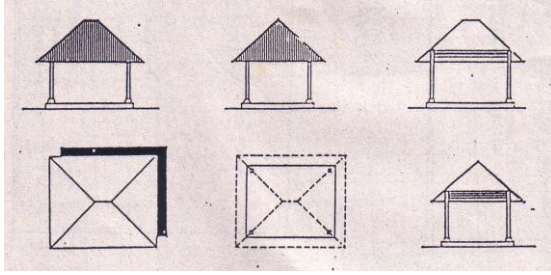
Kampung comes from the word ‘*ketepung*’ which means ‘tied’. It is used as housing for lower social status.



Graphic 15
Kampung Type
Source : Indartoro, 2000

3. *Limasan*

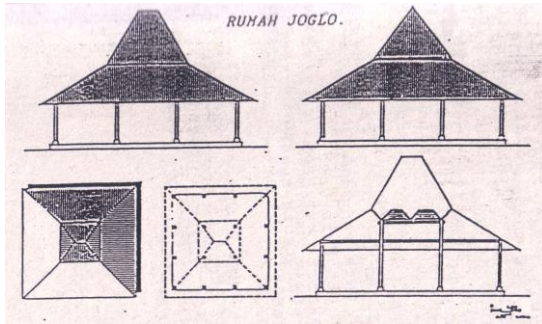
Limasan comes from the word ‘*liman*’ which means ‘double skeleton’. This type of house is used by the people with a higher social status.



Graphic 16
Limasan Type
Source : Indartoro, 2000

4. *Joglo*

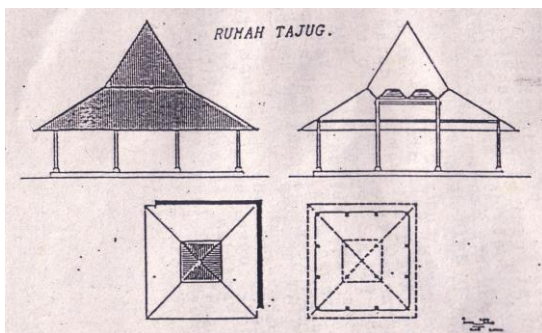
Joglo is the type of house mostly used by the noble class with its characteristic of its four main supporting columns called 'saka guru' and its stacked wood blocks ceiling called 'tumpang sari'.



Graphic 17
Joglo Type
Source : Indartoro, 2000

5. *Tajug*

Tajug is the type of building used for religious functions such as Mosques. It also has the 'saka guru' and 'tumpang sari'.



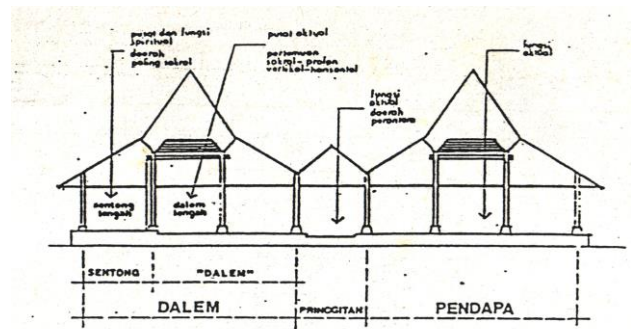
Graphic 18
Tajug Type
Source : Indartoro, 2000

Each of these house types are sometimes modified, and sometimes are a combination of two or three of these forms to create many more variants, which vary in different regions of Java.

4.2 ROOM CONFIGURATION

The main part of a Javanese house is known as 'Omah', which is the smallest unit that is compulsory to have in a house. The *Omah* is usually near-square shaped, and usually has a north to south axis.

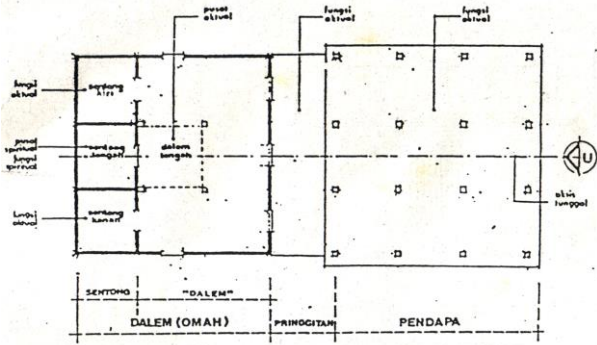
The rooms inside can be classified into the front part (outside), known as the *Emperan*, and the back part (inside), known as the *Dalem*. In the *dalem* part of the house, there are three rooms, *Sentong Tengen* (Right Sentong), *Sentong Tengah* (Central Sentong), and *Sentong Kiwo* (Left Sentong) that functions as activity centres.



Graphic 19
Section of the house showing the *dalem*,
pringgitan and *pendopo*
Source : Indartoro, 2000

Besides the *Omah*, higher status people consider a house more ideal if it had a *Pendopo* (a part in front of the house for receiving guests and other social activities) and *Pringgitan* (the space between *pendopo* and *dalem*).

5. FIELD TRIP



Graphic 20
Plan of the house showing the three *sentongs* in the *dalem*.
Source : Indartoro, 2000



Graphic 21
An old *pendopo*.
Photo : Satrio, 2004

4.3 MATERIAL AND STRUCTURE

Most of the material used is wood, except its foundation, called the *umpak* which is made from stone. The walls are made of wood and from weaved bamboo. In higher social class houses such as *Joglo* and *Tajug*, the main supporting columns usually consists of four columns, and they are called *saka guru*. Above the *saka guru*, a stack of wooden beams forming in the shape of stairs are called *tumpang sari*.

4.4 ORNAMENTS

Many of the ornaments and decorations are inspired from shapes of flora, fauna, and Arabic calligraphy. These ornaments and decorations mostly take the form of wood sculptures on the main structure, especially in the *saka guru* and the *tumpang sari*.

5.1. CANDI BOROBUDUR

A. Location

Borobudur temple is located on the south side of Magelang Regency, approximately 15 km south of Tidar Mountain.

B. History

It is said that in the past, Java Island was floating freely in the sea. The floating island should be nailed to the center of the earth so the human could live there. The 'nail' is now known as Gunung Tidar, a small hill in the south of Magelang City.

The area around "The Nail of Java", widely known as Kedu Plain, is a fertile area inhabited by hard-working people. The area is also named "The Garden of Java". Borobudur temple is situated in this "garden".

Kedu Plain is cut by two rivers, Progo River and Elo River. The two rivers are almost parallel, flow from north to south. In the south, they converged into one, and continue their journey to the south sea as Progo River.

The confluence area of the two rivers was considered as a holy place. In fact, most of the temples in Kedu Plain are lies within a radius of three kilometres from the confluence area.

One of the temples is Borobudur Temple. It was built around the 700 – 850 AD, during the Golden Age of Syailendra Dynasty, a Buddhist ruling dynasty.

Since no room was found inside the massive temple, it is possible that Borobudur was not intended to be a worshipping place, but a pilgrimage site. The pilgrims were guided and enlightened by the reliefs in the temple walls.



Graphic 22
Borobudur Landscape
Source : internet

Many scholars made hypothesis on how the temple was planned. One of them, Nieuwenkemp, said that the south part of Kedu Plain was once a huge lake. Borobudur was built on an island in the middle of the lake. He said that Borobudur was a portrayal of a lotus floating on water. Lotus is a place of birth of the yet to come Buddha.



Graphic 23
Borobudur Landscape
Source : Bu Sita

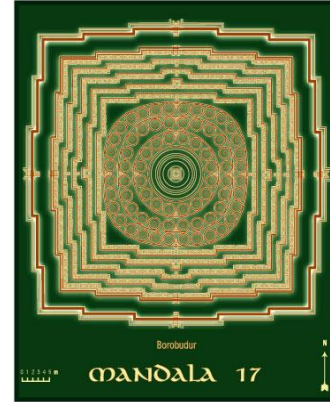
C. Temple Architecture

Borobudur Temple was built on a natural hill stretched from east to west. The hillside was leveled into flat plain. On the top, the temple was built. The flat area in the west was allocated for monastery building.

The plain rises 15 meters above its surrounding area, with the peak rises 19 meters above the plain. The temple itself was built wrapping the peak. Borobudur consists of nine stack of terraces, each is smaller than the previous one.

Main material of the temple was 55.000 m³ stone from nearby rivers. The stones was arranged without mortar or other adhesive material. Bird-tail shaped pegs are used to reinforce the vertical joint.

Horizontal connections between rocks are only held by bird tail shaped pegs, while vertical connections are reinforced by dents on each of the rocks, so that the rocks fit each other. Another way to reinforce both horizontal and vertical connections is to make a bump on one rock and a dent on the other rock, hence they can fit into each other.



Graphic 24
Plan of Borobudur
Source : internet

The lower part of the Borobudur temple, which becomes the 'feet' of the building has a square shaped plan with extrusions on the center parts of its sides. If measured by its sides, the plan is 123x123 meters. The 'feet' of the temple itself is in the form of a platform more than 4 meters high, while its lower part is further toughened by a 1,5 meter high and 3 meter thick wall.

The central part of the temple is its body, comprising of 5 levels that grow smaller as it gets higher. Each of these levels are also square-shaped.

The top part of the temple, is in the form of a 3 level platform which gets smaller as it gets higher. Its plan is no longer square-shaped, it is circular, so the three levels are actually three layers of circles with the same center. The 3 circular row of *stupas* surround a large stupa that soars in the air with a height of 35 meters from the stupa base.

To reach the top of the candi, there are stairs in the four sides of the temple. These stairs seem to cut through the square-shaped pathways on each level. The eastern stairs are the main stairs which can be identified because of the relief on the temple that always start on the eastern side.

The relief and carvings was done after the temple had been erected. The walls were carved with reliefs and ornaments were refined.

Borobudur temple is a pilgrimage building because the levels, pathways and reliefs can be identified as means to direct the pilgrim to the top. The levels as written in the teachings of the buddha religion which are represented by the relief are as follows:

KAMADHATU

The lowest realm or “realm of desire” where human is bound to and ruled by desire. This realm is depicted in the relief on the base. However, 60 fragments of the relief is currently covered by 12.750 meter cubic of reinforcing stones.

RUPADHATU

Rupa realm is a realm where human has renounced his desires but still bound to name and form. The realm, depicted in five galleries on the temple, narrated in 1300 frames of relief with total length of 2500 m. Also, there are also rows of *simbar-simbar* (a kind of plant relief) that decorates the frames. There are 1476 of these.

ARUPADHATU

Arupadhatu, the formless realm, is the highest level of realm. In this realm, name and form are no longer exist. Human has reached perfection. The realm is represented by the three circular terraces and the main stupa on the top.

Different from the other leves, the circular terraces are made of plain stone without any ornaments or decorations. Seventy-two stupas stand on the terraces in a circular form. Each stupa stands above a lotus-shaped pedestal. The stupa is hollow and its walls have holes. Statue of Buddha sit inside each stupa, making it look imprisoned. The main stupa is supported by a circular terrace 10 m wide and a lotus-shaped pedestal 50 cm thick.



Graphic 25
Scenery from Arupadatu
Source : internet

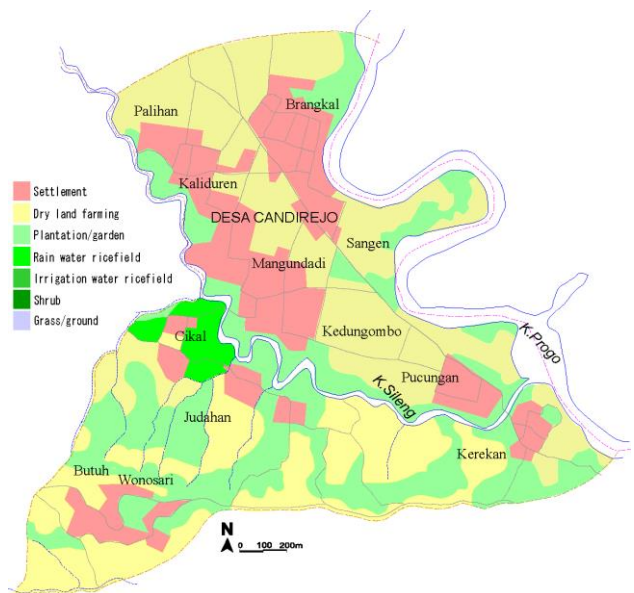
5.2. DESA CANDIREJO

A. Geography

Candirejo Village is one of three villages selected as a study case. Administratively, Candirejo Village is located in *kecamatan* Borobudur, *kabupaten* Magelang, Central Java, and geographically located on the foot of the Menoreh hills. It is approximately 3km from Borobudur Temple.

Its population of 4056 people live in an area about 366,250 km². The majority of the villagers are Moslem. Candirejo village is divided into 8 *dusuns*, 9 RWs, and 20 RTs.

Its natural environment, farming and plantation resources are the objects presented as agricultural tourism objects. Candirejo is an agricultural society that depends on farming and plantation.



Graphic 26
Land Use Map of Candirejo
Source : Bakosurtanal, 2001

B. Natural Characteristic

Candirejo Village holds various natural landscapes and potentials, some of them are explained below.

Tumpang Sari (Intercropping)

A farming system to grow several crop in the same field. In one block of field, the types of crops being interlocked are peanuts, *empon-empon*, chili

and orange, with corn and *singkong* in between or on the edge of the blocks as separators.

Progo River

Progo River runs through Candirejo Village. The river has a medium to fast current. It has a large volume of water, sufficient for carrying objects. This river is also used for transportation and for tourism such as rafting and canoeing. The flora that can be found along the river are local bamboo trees, farming crops and fruit plants.

Tempuran

In Javanese, *tempuran* means collision, encounter. Tempuran is an area where three small streams, Pabelan river, Sileng river and Progo river, merge into Progo River. This area is located 200 m from the main road.

Sendang Kapit Kuburan Spring

The everlasting spring is situated between two cemeteries in Brangkal *dusun*. According to local myth, the water can bring happiness and youth.

Watu Tambak

Watu Tambak can be found in Progo River. Watu Tambak is a natural dam, created by the natural formation of the rocks. In the dry season it can be used as a means of crossing the river.

Banyu Asin Spring

The salt water spring is situated in the south of Kaliduren. It never dries even in the dry season. Locals believe that the spring can be used for traditional medication.

Gunung Mijil

Gunung Mijil is a small hill in the north of Palihan *dusun*, in the border of Palihan and Brangkal *dusun*. Named after Kyai Mijil, who was entombed here, the hill resembles a small mountain.

Watu Kendil

Situated on Butuh *dusun* at 650 meters above the sea level, Watu Kendil is the highest site in Candirejo village. Named after its resemblance to kendil, traditional flask. In this place, one can enjoy beautiful scenery of Borobudur temple and the surrounding mountains.

C. Human Resource Potentials

Bamboo Carvers

The ability to create bamboo carvings is one of the human resource potentials of Candirejo Village, which is located in *dusun* Gedungombo. Bamboo stem that has been crafted into wall ornaments and flower pots and even bamboo weavings with a painting of Borobudur has become a famous souvenir that tourists usually buy when they visit Borobudur.



Graphic 27
Bamboo Craftsmen
Photo: Guide Map Borobudur, 2005

Making of Karah

Visiting *dusun* Pucungan does not feel complete if you haven't visited the home industry of *Karah* making, a small snack made of *singkong*. Apart from tasting it, we can also see the production process. The process of making *Karah* is as follows:

1. grate the *singkong* then spice it with salt and onion.
2. the dough of grated *singkong* is then boiled.
3. after it is cooked it is then rolled / flattened.
4. the flattened dough is then shaped like a ring which in Javanese is called the *karah*.
5. the ready to eat *karah* is then packed into plastic wrappings ready to be sold and consumed.



Graphic 28
Karah Making Industry
Photo: Guide Map Borobudur, 2005

Kobra Siswo

The village has art performers as well as a Kubro Siswo group which are performed by local youth.



Graphic 29
Kobro Siswo
Photo: Rully, 2004

D. Architectural

A number of families form a living environment along with the culture and rules within which binds one another into a village. Kampung is more visible as a cluster of houses with diverse backgrounds of owners and levels.

In Candirejo village, traditional houses can be found in Kedungombo, Mangundadi, Kaliduren, Pucungan, Butuh and Sangen *dusuns*..



Graphic 30
Homestay
Photo: Rully, 2004

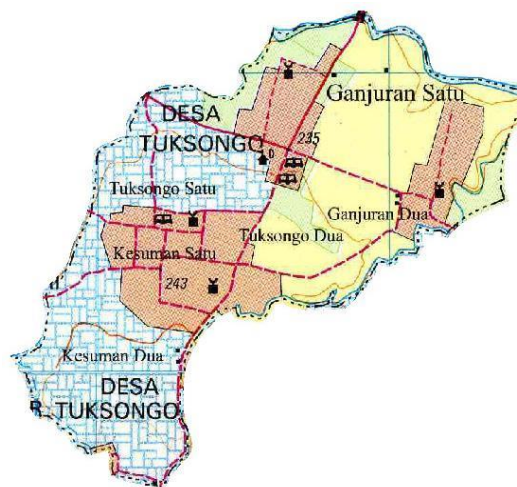
5.3. TUKSONGO VILLAGE

A. Geography

Tuksongo Village will be one of the three villages that will be the object of our field trip. Administratively, Tuksongo Village is located in the *kecamatan* Borobudur, *kabupaten* Magelang, Central Java and geographically located on the foot of the Menoreh hills.

This village covers an area of 228,44 sqkm with a population of 3552 people. The majority of the people are Moslems. The village is divided into 7 *dusuns*, 6 RW and 18 RT.

75% of the people in Tuksongo village are farmers, and the rest are merchants of noodle glass. The process of producing noodle glass which can be then processed into *mi so'un* and *cendol* becomes part of their main source of income, which also has the potential of packaging it into a tourist attraction.



Graphic 31
Land Use Map of Tuksongo Village
Source : Bakosurtanal, 2001

B. Natural Resources

The pathways in Tuksongo are still preserving the natural village scenery. The Menoreh hills become a part of the natural scenery with the paddy fields and the tobacco plantations.

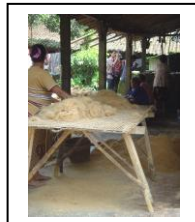
C. The Process of *Mie So'un* Production

The process of making *mie so'un* takes a long time. It is usually done in the morning as a home industry. The raw material comes from the Aren tree which can be obtained in Purworejo.

The process of *mie so'un* production is as follows:

1. the fibres of the aren tree are obtained one by one from the stump of the tree.
2. after it is collected, it is dried in the sun .
3. the flour from the fibres are separated and mixed with water and then dried again.
4. the water from the flour of the aren fibre is dried to get the juice.

5. this process done in a large scale is then left to create a sediment and it is then once again dried under the sun.
6. the dried sediment is then cooked inside a large bowl.
7. the cooked result is pressed with a special machine that creates the strings of glass noodle ready to be dried.
8. the noodle that has been dried is then packed and ready to be distributed.



Graphic 32
Process of Mie' Soun Production
Photo : Rully, Guide Map Desa Mandala, 2005

5.4. TANJUNGSARI VILLAGE

A. Geography

Tanjungsari Village will be one of the three villages that will be the object of our field trip. Administratively, Tanjungsari Village is located in the *Kecamatan Borobudur, Kabupaten Magelang, Central Java* and geographically located on the foot of the Menoreh hills.



Graphic 33
Land Use Map of Tanjungsari Village
Source : Bakosurtanal, 2001

B. Natural Environment

The natural atmosphere of Tanjungsari Village is bordered by Silang River. It is one of the potential natural resource in this area.

One of the natural environment potentials can be seen in *Dusun Gopalan*. This road that crosses *Dusun Gopalan* has a very spectacular view where you could see the top of the Borobudur Temple sprouting out of the trees with the yellow fields of paddy and coconut trees in the foreground.



Graphic 34
Panoramic Landscape Dusun Gopalan
Photo: Rully, 2005

C. The *Tahu* (Tofu) Home Industry

The advantage of the home industry in *Dusun* Nampan is the *tahu* (tofu) production which is still done traditionally.



Graphic 35
The making of tofu
Photo: Ratri, 2005

6. HERITAGE CONSERVATION

Heritage and Conservation

The Indonesian Heritage Conservation Charter, established in 2003, stated that :

- a. The heritage of Indonesia consists of natural heritage, cultural heritage and landscape heritage. Natural heritage is an extraordinary natural formation. Cultural heritage is the outcome of creativity, wisdom, spirit and creation of each ethnic groups in Indonesia, as the result of their interaction with other culture along its own history. **Landscape heritage** is the combination of natural and cultural heritage in time and space unity.
- b. Cultural heritage consists of tangible and intangible heritage;
- c. Heritages, as a inheritance from generations, are essential foundation and resources for the development of the future generation. Therefore, heritage should be preserved and passed to the next generation in good condition.
- d. Conservation is the effort to manage the heritage by means of research, planning, preservation, protection, and/or selective development, to maintain its sustainability, harmony and support in an attempt to respond to the ever-changing age and to develop a better living quality.

Objectives

Heritage conservation is not a mere romanticism of the past, but it is actually for the development of a future that can synchronize many potentials of the past with selected later developments. Specifically, conservation is aimed to:

- a. With the basis of old heritage assets, it generates a better living quality for the community, creating more interesting, creative and sustainable programs, planning participatory programs by calculating economic estimations in order to generate revenues and the increase of income, and a friendly utilization of the environment.
- b. It becomes a tool in process the transformation and revitalization of a historic environment, and also to create future heritage.
- c. Keep taking care of identity and natural resources and develop its aspects to fulfil

modern economical needs and a better living quality. (the total system of heritage conservation). Hence, the change does not happen dramatically, but naturally and selectively. (Adishakti, 1997).

- d. Conservation also means "*preserving purposefully giving not merely continued existence but continued useful existence*" (Burke, 1976 in Asworth, 1991). Hence, function as well as form both becomes primary consideration, and its purpose is not to maintain the growth of a city, but managing the change. (Asworth, 1991).

Heritage diversity and the purpose of conservation demands for the involvement of many elements including the community and even together (share holders).

7. LANDSCAPE HERITAGE

As mentioned above, landscape heritage is the combination of natural heritage and cultural heritage in time and place unity. Landscape heritage is a relation between nature, human (society), social system and how the society manage their living space. Landscape heritage is a complex phenomenon incorporating the tangible and intangible heritage. Intangible heritage is closely related to some factors that can influence the environmental and landscape management system, such as beliefs, values, human behavior and thinking pattern.

Indonesia is a piece of mosaic of world's landscape heritage. Cultural landscape is a combination between natural heritage and cultural heritagewhich makes the problem more complex. Landscape heritage is dynamic, it is always changing. The scope of heritage is extended to region, village, or city with distinguished historical value, and even its boundaries can extend out of administration area, like the Menoreh Hills which cross through several regions and provinces.

Its important to conserve our heritage!

8.
PROGRAM
BOROBUDUR FIELD SCHOOL 2005

8.1. Organization Committee
Borobudur Field School 2005

Chairpersons :

Laretna T. Adishakti, Ir., M.Arch., DR.Eng,
Titi Handayani, Ir., M.Arch.,

Head of Committee :

Dwita Hadi Rahmi, Ir. M.A

Secretary and Treasury:

Sinta Carolina, Ssi

Public Relations, Guidebook, Materials :

Kusumaningdyah. N.H, ST

Programs & Tools :

Titin Fatimah, ST

Indah Sulistiana

Wijanarko

Transportation :

Satrio Utomo Drajat, ST

Documentation :

Dimas Dwihardiyanto, ST

8.2. Programs

First day

Monday, 12 September 2005

WAKTU	KETERANGAN	TEMPAT
07.00-09.00	Gather and registration in Dept. of Architecture UGM	Dept. of Architecture UGM
09.00-10.00	Departure to Candirejo Village	
10.00-10.30	Opening Ceremony and Orientation	Homestay Kembang Setaman
10.30-12.00	Lecture 1: Laretna "Introduction to Cultural Landscape"	Homestay Kembang Setaman
12.00-13.00	Lunch, room division	
13.00-14.30	Lecture 2: Jack "Borobudur"	Homestay Kembang Setaman
14.30-17.00	Field Trip: Borobudur Temple	Borobudur Temple
17.00-18.00	Rest and Shower	
18.00-20.00	Dinner	Homestay Kembang Setaman
20.00-22.00	Lecture 3: -Kanki -Amiluhur Budaya"	Homestay Kembang Setaman
22.00-05.00	Night Rest	

Second day

Tuesday, 13 September 2005

05.00-07.00	Majaksingi Sunrise Trip	Candirejo Village
07.00-08.00	Breakfast	
08.00-10.30	Field Trip : Villages surrounding Borobudur	Villages surrounding Borobudur
10.30-12.00	Lecture 4: Dwita "Conservation Techniques"	Homestay Kembang Setaman
12.00-13.00	Lunch	
13.00-14.30	Lecture 5: Titi Handayani "Design Guidelines"	Homestay Kembang Setaman
14.30-17.00	14.30-17.00 Candirejo Field Trip (Hiking)	Candirejo Village
17.00-18.00	Rest and Shower	
18.00-19.00	Dinner	
19.00-22.00	Lecture 6: -Miyagawa -Hashimoto	Homestay Kembang Setaman
22.00-23.00	Group Division & Survey Preparation	Homestay Kembang Setaman
23.00-06.00	Night Rest	

Third day

Wednesday, 14 September 2005

07.00-08.00	Breakfast	
08.00-12.00	Field Survey: Karanganyar "Pottery" Village	Karanganyar Pottery Village
12.00-13.00	Lunch	
13.00-17.00	Field Survey: Karanganyar "Pottery" Village	Karanganyar Pottery Village
17.00-18.00	Rest and Shower	
18.00-19.00	Dinner	
19.00-22.00	STUDIO: Group discussions	Homestay Kembang Setaman
22.00-06.00	Night Rest	

**Fourth day
Thursday, 15 September 2005**

07.00-08.00	Breakfast	
08.00-12.00	Field Survey: Karanganyar "Pottery" Village	Karanganyar Pottery Village
12.00-13.00	Lunch	
13.00-17.00	Field Survey: Karanganyar "Pottery" Village	Karanganyar Pottery Village
17.00-18.00	Rest and Shower	
18.00-19.00	Dinner	
19.00-22.00	STUDIO: Group discussions	Homestay Kembang Setaman
22.00-06.00	Night Rest	

**Fifth day
Friday, 16 September 2005**

07.00-08.00	Breakfast	
08.30-10.30	Visit to Office of Borobudur Conservation	Balai Konservasi Peninggalan Borobudur
11.00-12.00	STUDIO: Preparation for presentation	Homestay Kembang Setaman
12.00-13.00	Lunch, Friday Prayer	
13.00-15.00	STUDIO: Preparation for presentation	Homestay Kembang Setaman
15.00-17.00	Field Trip: Tuk Banyu Asin & Tempuran by Bicycle	Tuk Banyu Asin & Tempuran
17.00-18.00	Rest and Shower	
18.00-19.00	Dinner	
19.00-23.00	-STUDIO: Preparation for presentation -Bakmi Party	Homestay Kembang Setaman
23.00-06.00	Night Rest	

**Sixth day
Saturday, 17 September 2005**

07.00-08.00	Breakfast	
08.00-09.00	Presentation in Candirejo Preparation	
09.00-10.30	Presentation "Group 1"	Homestay Kembang Setaman
10.30-12.00	Presentation "Group 2"	Homestay Kembang Setaman
12.00-13.00	ISOMA Siang	
13.30-15.00	Presentation "Group 3"	Homestay Kembang Setaman
15.00-16.30	Joined Group	Homestay

	Presentation	Kembang Setaman
16.30-18.00	Rest and Shower	
18.00-19.30	Dinner	
19.30-23.00	Closing Ceremony: Hospitality and Cultural Night with local community KUBROSISWO Art Performance	Candirejo Village
23.00-06.00	Night Rest	

**Seventh day
Minggu, 18 September 2005**

07.30-08.00	Breakfast	
08.00-09.00	Check Out	
09.00-13.00	Field Trip Sendangsono Romomangun Architectural Pilgrimage Site	Sendangsono
13.00-14.30	Lunch	
14.30-16.30	Return to Jogja	

8.3. Rules

1. Every participant is required to participate in every activity scheduled by the Borobudur Field School 2005
2. Every participant is responsible for every assignment and the work division in field trips.
3. Every participant is responsible for their own and their groups luggage and personal accessories and belongings.
4. Every participant is to bring the needed stationary and other tools for observation according to their own assignments.
5. Participants and officials leaving the location for urgent needs must require a permit from the head of officials.
6. If in need of photograph, slide, video for observation, please confirm first with the documentation official.
7. Every participant must be able to coordinate and work together with any other participant.
8. Every participant must act polite and respect daily customs of the local community.
9. Every participant must keep the environment clean.
10. Every participant is to attend the activities on time.

8.4. Customs of Village Community

1. If you meet with locals, it is polite to greet them. Greetings can be done by smiling, saying “monggo”, “nderek langkung”, “kulo nuwun” or just nod your head.
2. Dress appropriately. According to local customs, women usually wear long cloth, dress and clothing that cover the shoulders. Men usually wear clothes/shirt with trousers or shorts. The village people still have taboo values.
3. Control you emotion. Protests are better expressed in a gentle manner, or better expressed whilst joking.
4. Always say “kulonuwun”, “asalamualaikum” or “permisi” if you wish to become a guest of a house while knocking the door. If the person is home he will answer with “monggo” or “waalaikumsalam”
5. The Village people are not accustomed with time punctuality, since they usually tell time by observing the natural weather or the environment.

Daftar Pustaka

- Badan Pusat Statistik Kabupaten Magelang, Kecamatan Borobudur Kabupaten Magelang, Dalam Angka Tahun 2001, 2001, BPS Magelang
- Indartoro, 2000, Sejarah Arsitektur Nusantara, Jurusan Teknik Arsitektur FT UGM
- Piagam Pelestarian Pusaka Indonesia 2003
- Soekmono, Dr, 1976, Candi Borobudur, Pustaka Jaya
- Suryono, 2002, Desa Candirejo, Yayasan Patra-Pala & JICA

APPENDIX

List of Contact Persons:

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