Changes in Rural Settlement to Improve Ancient Villages Conservation Quality in Bali-Indonesia

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Abstract This article is aimed at examining the changes in rural settlement and status of maintainable and developable unique values in accommodation or house buildings in Sukawana village, Kintamani Sub-district, Bangli Regency. This research includes a research with phenomenology paradigm. Data obtained were in the form of the local theory of traditional values in the home stays through interview with some residents in the garden and utilization of relevant theories. The results showed that conservation concept of Sukawana settlement are divided into two concepts, such as physical concept and nonphysical concept. Changes in physical concepts occur in the use of roofing materials, wall construction, and the formation of house-building phenomena in the midst of plantations and in modern homes that serve as permanent residences in cities that do not tend to apply patterns in village halls. Some leading factors to this change are the manifestations of the mindset and behavioral changes that lead to modern life. In addition, changes in non-physical concepts include aspects of spiritual beliefs and joint cultural activities or social activities. The community's belief in life is symbolized by the tree of life in Sanggah Pakurenan, whereas in death is symbolized by building materials or trees that have been

1. Introduction
The form of culture is divided into three systems, namely: the system of ideas/ideas/values/norms/rules, social system, and physical system [1]. These three manifestations become a unity, that is, the idea system will regulate and give direction to the social system and will then produce the physical system. Instead the physical system will form a certain life environment that is increasingly dropping the human from the natural environment, so that it can affect the social system, and even it affects the system of ideas. The ideas, values, and concept of people who live together in society, give the soul to that society. Anthropologists and sociologists call this system a cultural system or a custom, the plural form.

Many experts claim that the villages in Bali are divided into two types: Bali Aga village which is mostly located in the mountains, and Bali Dataran village which mostly located in South Bali plain area. The village of Bali Aga is, in terms of age, older and fewer in numbers, but is more physical variation. The main physical feature of the Bali Aga village is that it has a wide open space and extends from north to south (kaja-kelod) to South Bali; it divides the village into two parts. The open space is generally coated with stones, rising toward the mountains or hills. Type of Bali Dataran village is the latter type and is the most dominant village type in Bali. Its main characteristic is that it has two main roads across the village, from east to west and north to south and forms the center of the village at its meeting. This
type of village is usually called the *Pempatan Agung* type; where *banjar* (*part of community group in the village*), village temple, and occasionally noble houses exist in the area.

The physical characteristics of a prominent mountain village is the existence of a longitudinal open space in the direction of *kaja-kelod* (sea-mountain) separating the village into two parts. The open space uses a stone pavement and rises to the mountains or hills [2]. Initially, it has been based on the fact that society never stays silent, but always changes and develops. In relation to that Rapoport (1969: 46-49) states that what is produced by humans is formed because of the social background of human culture or human social conditions [3]. Apparently it is seen from the process, which begins from civilized society "primitive", then developed into a civilized society "vernacular". Furthermore, "vernacular" civilization is divided into "pre-industrial vernacular", and "modern vernacular".

According to Baal in Solomon and Fadjar, cultural change can be caused by two processes, namely the process from the inside (endogenous) and the process from the outside (exogenous) [4, 5]. The process from the inside (endogenous) starts from the activities of the culture of society which will gradually experience various variations on the right to change. That change can have an effect on changes in other sectors, and when it comes to the increasingly complexity of differentiation symptoms, it is called development. Exogenous processes include industrialization, contact with other cultures (tourism) that not only positively impact, but also the negative impact experienced by people who are in contact with outside cultures.

2. **Method**

Data of this research is mostly in the form of primary data obtained directly in the research location. In addition, the study also features relevant secondary data obtained from recent journals or previous research books. The content of research used are maps, pictures, photos and social life of empirical culture of society. This research involves a paradigm of phenomenological research that focuses on the influence of changes in ancient Balinese settlements in the village of Sukawana.

In accordance with the characteristics of the object of study (research problem), the paradigm used in this study is phenomenology. The research process consists of three stages. The research procedure describes the sequence of steps of observation, presentation and data analysis. In essence the research conducted following a procedure in the form of network of three gradations of scale. Research techniques include research strategies, methods, and accuracy. The way in which research is used puts pressure on qualitative techniques, in which researchers or human factors play an important role. Qualitative research relies on interviews, observations, and participant observations (participation) in data collection in the field.

3. **Results and discussion**

Sukawana Village, located in Kintamani Sub-district, Bangli Regency, Bali-Indonesia, is one of the old/ancient villages in Bali and has a very wide area. The distance between this village and the provincial capital is approximately 74 kilometers. This village still has a residential area with the physical structure of a typical traditional village, so as to produce a cool and beautiful rural faces. Structuring the physical structure of such a village is inseparable from the results of the mind and power (culture) of society that has been valid for generations [6].

Another potential of Sukawana village is its relatively uniform "longhouse". The topographic shape of the village is arranged in such a way that it rises to the south (*kaja*), where in the preferred area (highest) the holy place (temple) is laid, and so on down to the area for the housing area, and the lowest is *Pura Dalem, Prajapati*, grave. Sukawana village which has a population of 4,628 people, the livelihood of the population is mostly farming.
The condition of this village is relatively quiet and in every house rarely found residents. This is due to the behavior of people who daily carry out all activities in the garden which is ± 4 km from the village. Only when it's a good day or holiday they go back to the village. To facilitate their daily activities, they also make a house in the garden. The garden, other than as a citrus farming place (figure 6), raising cattle, and mowing grasses; it is also used as a container for domestic activities such as cooking, eating, sleeping and making offerings. If the feast (kajeng kliwon, full moon, tilem) arrives, they immediately bring the offerings to the house in the village. Thus, it is clear that the main activity of Sukawana residents is in the garden.

Family members who often do activities in the garden mostly come from men (head of household). Housewives, who still have school children, usually return to the village every 3 days. It aims to check household and financial needs for children's education. Sukawana residential architecture design has a linear pattern or lined up as if it were a long house. In one housing unit there are 8 to 12 heads of households. This can be seen from the number of entrances in each housing unit. Each door shows one head of the family. Each of the heads of households has a sanctuary of pakurenan, which is adjacent to a sanggah or a large family sanctuary at the end (the highest part of the topography) of the housing area.

The large number of Sanggah Pakurenan in a shared shrine area can be used to determine the number of families in the housing unit. Sanggah Pakurenan can be dismantled if one of the owner's couple died. The main ingredient of Sanggah Pakurenan is a live dadap tree or an endongan tree. In one residential unit there are very complete facilities such as bedrooms, kitchens, agricultural warehouses and agricultural storage warehouses; firewood and sanggah or holy place complete with means of praying. The prohibition is that if one family member is "absent" (the woman who is menstruating); they are prohibited from entering the argument. The purpose of putting a holy place (sanggah) in the room is to worship the Betara Reka (the god who created the universe in the belief of the Hindu people in Bali) that provides protection or keep the inhabitants in the house to be safe and serene. The function of the holy shrine is to worship Betara Kemulan, (‘holy spirits source place’). When viewed from the layout of each sanggah or holy place, the village of Sukawana oriented towards Mount Writing.
3.1. Social system in Sukawana Village

The social life of the community of Sukawana is bound by the Sukawana government institution. The institute is managed by the Village Head who is assisted by 16 traditional village administrators and 8 banjar adat officials, complete with awig-awig or order for the community. To accommodate all social activities of the community, Sukawana village has 8 units of Banjar Adat (‘traditional Banjar’), Banjar Suka Duka as many as 3 units, and Banjar Dinas (‘official government Banjar’) with 8 units. The structure of Sukawana Village Government Organization can be seen in the diagram below.

Housewives are joining the Family Welfare Movement (PKK) group and already have a work program, known as the 10 Basic Programs of the PKK. The ten programs are the appreciation and practice of Pancasila, mutual assistance, food, clothing, housing and household management, education and skills, health, developing cooperative life, environmental sustainability, and healthy planning. In the religious field, most of the people of Sukawana are Hindus.

3.2. Pattern and form of traditional settlements of Sukawana Village

Geographically the traditional Sukawana settlement area is very wide as it is contained in the Kebo Parud Inscription (1222), with village boundaries covering Madenan Village (north), Tukad Balingkang (east) and on the west and south side of Bantang Village. At first settlement Sukawana Village was formed by seven householders commonly called Krama Pitu Sikawana. The next development became 12 families with the title Peduluan, Kubayan, Bahu, Singgukan, Penakoan, Penyarikan, and Pengelian. Further this was developed into 45 KK Purchase Kraman that form Ulu Apad system.

Figure 2. (a) Traditional house plan, (b) stages of building construction.

Traditional Sukawana Village settlements use a linear pattern (jajar wayang), where on the high side (upstream) sacred buildings are laid. In the middle is a row of houses that initially in a yard consists of 4 (four) residential buildings. The composition of houses facing each other and in the middle is a joint facility of building for ceremony (sakenem) and street or yard (natah) as the center of mass orientation of the building.

The residential building is called umah gede saka roras (pole 12) consisting of 6 mandalas namely Pekaja (South Kaja) functioning as a holy place, Lubangan Gede for parents' beds, Trojan holes for children's beds and or ceremonial preparations, South Kelod (Selatan Seh Belus) to store treasures, Paon, and Geladag in the central courtyard as a dining or function room. Outside the building is also equipped with a seating room or undagan at the time there is a traditional ceremony. Thus, on the outer
side of each building added a roof that supported by four pillars. The pattern used is the centering pattern, where Geladag is the center of orientation.

3.3 Settlement changes
There are several variations of settlement changes in Sukawana Village with regard to function, shape, and materials. South Kaja, sacred functioning turned into a sleeping space, while the sacred room is manifested in the form of one-handedness with the bedroom. The empty room in the middle of Bale Saka Roras's formerly private residential building, now functioned as a living room. In this residential building there are additional functions in the form of bathroom/WC. The layout of the bathrooms/WC is varied, there is placed in the building near the Trojan Hole, on the amben, and behind/side residential buildings. Bale Adat Sakanem previously functioned for customary activities together in the yard (public function), now changed the function to put firewood.

Residential buildings in the village of Sukawana have changed a lot to imitate buildings in urban areas. The facade, which is formed from a series of poles and uniform walls, is now changing with touches of artistic ornaments in the form of carvings and/or focal point touches at the entrance into the house, and some are equipped with trellises. The shape of the roof of the building was originally a saddle shape, now turned into five sans. The most prominent change of material use in Sukawana village is the change of roof cover material, originally using bamboo shingle material replaced with zinc or tile. The walls of wooden buildings are replaced with massive materials in the form of brick or brick finishing with pc plates, ceramics, rocks, natural stone, and brick rub.

The phenomenon of prominent change is the establishment of residential buildings in the midst of permanent and modern plantations such as residential houses in cities that tend not to use spatial patterns as in the mother village. This happens because the livelihoods of the villagers are mostly farmers and their daily activities are mostly in the garden. They return to the mother village only when performing ritual activities (Kajeng Kliwon, Purnama, and Tilem). In the parent village everyday tends to be empty, only inhabited by elderly parents and pet dogs.

![Figure 3.](image_url) (a) Traditional house building, (b) change of house form in garden and (c) change of house form in Sukawana parent village.

The essence of mandala under one roof is still fixed but it has been adjusted to the current condition. This is manifested by more massive spatial blocks of brick, brick, or wooden walls to maintain strict privacy in line with behavioral changes. Thus the dimensions of the home stay tend to be greater.

There are several factors that cause changes as described above that is the change of mindset and behavior that lead to modern life. This is evidenced by the addition of bathroom and WC in the dwelling house, forms and materials that adopt urban settlements. Sakenem traditional building/bale which serves as a public building in a residential neighborhood (Bebanjaran), no longer functioned for customary activities as a place to sit for the invitation of traditional figures such as Jero Bayan 2 people and Jero Bahu 4 people. The change occurred because in the customary activities not only invite the customary leaders, but also invite people around even the acquaintance from outside the village Sukawana so that
the home yard became congested. To overcome these difficulties, they tend to move their customary activities to existing houses in the relatively wider condition of the garden so that they are freer to carry out traditional activities. *Bale Sakenem* is no longer established in the garden, so instead of tents to accommodate all invitations at the time of the ceremony. In addition, there are some variations of settlement/residential changes, of course there are still some aspects that do not change that is the pattern of settlements/dwellings, spatial values, functions, forms, and materials for *Sanggah Pakurenan*, and maintain *Pekaja* in the house.

Non-physical concepts include aspects of spiritual belief and shared cultural activities. Their belief that the survivors are inflicted with the living tree on *Sanggah Pakurenan*, while the dead are caused by building materials/trees that have been felled on *Sanggah Paibon*.

### 4. Conclusion
In general, the concept of preservation of ancient village settlements is divided into two, namely physical concepts and non-physical concepts. Physical concepts cover aspects of the embodiment of public buildings/joint and residence, whether it is the layout and layout of the building. Non-physical concepts include aspects of spiritual beliefs and common cultural activities or social activities.

The most prominent change in the use of materials in Sukawana village was the change of roof cover material, originally using bamboo shingle material which tended not to be maintained. Instead they use a roofing material of zinc or roof tile. The walls of the original which initially made of wood, now mostly made of brick or brick finishing with PC planter, ceramics, *padas* stone, natural stone, and brick rub (*pripihan*).

The essence of mandala under one roof is still fixed but it has been adjusted to the current condition. This is manifested by more massive spatial blocks of brick, brick, or wooden walls to maintain strict privacy in line with behavioral changes. Affecting factors of the change is the change in mindset and behavior that lead to modern life. Non-physical concepts include aspects of spiritual beliefs and common cultural activities or social activities. Their belief that the survivors are inflicted with the living tree on *Sanggah Pakurenan*, while the dead are caused by building materials/trees that have been felled on *Sanggah Paibon*.

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