Geographical context and natural environment preservation in local culture (A study on the ritual of Penti in Manggarai, Flores NTT)

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Abstract. Indonesia has a great number of local cultures. Such local cultures exist along with the values, norms, and thoughts of society. One of the local cultures in question is Penti ceremony that is conducted annually by Manggarai people in the west of Flores. This study was an attempt to reveal the geographical context found in the ritual of penti ceremony. To collect the data, interviews and observations were carried out and were analyzed in some stages, namely data reduction, data display, and verification. The results have shown that the geographical context in the penti covers both natural spatial and social aspects. The natural spatial aspect is concerned with the selection of the locations where the ritual of penti is carried out. The selected locations were regarded as media for communication and reflections of interpersonal relations and the cosmological view of the Manggarai community towards nature. Meanwhile, the social aspect regulates the community's social relations, manifested in the form of norms, ethics, and prohibitions. In conclusion, the geographical context in the ritual of penti is closely related to natural environment preservation and social life sustainability.

INTRODUCTION

The results of previous studies have shown that the values contained in the local wisdom of a community are very useful in the efforts to maintain and protect the natural environment (Aruda and Krutkowski 2017; Daes 2001; Dahliani 2015; Iswando et al. 2015; Halim 2015; Taylor and Lennon 2011; Thondlana and Vedeld 2012). This is supported by the results of other studies, which found that people's behavior in managing the natural environment is closely related to people's understanding of customary provisions and philosophies that contain norms, rules, and prohibitions that regulate people's behavior with nature (Chennells 2013; Sartini 2006; Suparmini et al. 2015; Siswandi et al. 2011). Likely Thomas (2016); Pujiastuti and Sudarmin (2013); Hamzah et al. (2015); Wibowo and Dewi (2012) emphasized that local wisdom is the foundation and source of community ethics in carrying out their interactions with nature. This is also confirmed by Bauto (2013); Ellison (2017); Mungmachon (2012); Sen (2018); Tanui and Chepkuto (2015); Tamalene and Almudhar (2017); Zhang and Wang (2013) and that local wisdom has soft skills and ethical values that regulate the behavior of the certain community.
In general, the previous studies above confirmed that each region essentially has local wisdom that is upheld as a value and becomes a way of life. The results of these studies have shown that there is a significant relationship between local wisdom and environmental conservation. As such, local wisdom practices have contributed to saving and preserving the natural environment. Yet, regarding the existence of local wisdom, almost all previous researchers found that local culture is almost in extinct condition as it has been eroded by the progress of time and technology.

In the context of Manggarai, several researchers have been conducted. The local culture in Manggarai is mostly regarded as media of communication and a vehicle for the maintaining sense of solidarity and togetherness (Ngare 2014; Raru 2016; Sardi et al. 2019; Jebaru and Tejawati 2019). In addition, based on the perspective of sociology and ethnobotany, Kelling (2016) and Iswandono (2015) found that the Manggarai community still maintains ancestral traditions and various philosophies of life. This is reflected in their activities and social relations with nature and others. In this regard, the studies only examined local culture in relation to the social life of the Manggarai people and their cosmic view of nature and the creator from a sociological and communication perspective (Ngare 2014; Raru 2016; Sardi et al. 2019; Jebaru and Tejawati 2019), economics and ethnobotany (Kelling 2016; Iswandono 2015). However, a study on the local culture of Manggarai related to the management and use of nature from a geographical perspective is not done yet. As such, the study is very important as the geographical perspective is closely related to the concept of nature and space where Manggarai people routinely interact physically, socially, and cosmologically.

Therefore, this study attempted to fill the discrepancy in question by examining the geographical perspective on Manggarai local culture focusing on penti ceremony. In this respect, Penti is related to geography. The forest and space philosophy in Penti have a close relationship in the context of human interaction and interrelation with the environment socially and culturally, as highlighted in the perspective of geography. More importantly, this study would be beneficial for maintaining or even reviving the meaning and values of local culture, which, in turn, lead people's lives.

**METHOD**

This study belongs to the qualitative approach. The data in this study consisted of primary data and secondary data. Primary data were obtained directly from the indigenous people. Meanwhile, secondary data related to existing data were obtained from institutions, documents, literature, and videos on penti. To obtain the data, the researcher conducted observation and interview with the informants who have good knowledge on penti. In addition, the researcher also relied on the data from some documentation such as literatures related to penti and videos (youtube) on the ritual of penti.

To analyze the data, steps proposed by Miles and Huberman (1994) were employed by the researcher. The steps are data reduction, data display, and conclusion drawing. Since this study belongs to qualitative paradigm, each step were conducted during the process of research. As such, the steps were conducted flexibly following the data got from the field and not necessarily waiting until the end of the data collection stage. Standards for checking the validity of qualitative data are important to ensure the validity of research data. Checking the validity of data in this research was carried out to overcome doubts or concerns about the validity of information obtained from the field. In this regard, the researcher conducted triangulation by cross-checking data from observation and interview to lead her in drawing a proposition and final conclusion toward the findings.

**RESULTS AND DISCUSSION**

**Results**

Penti is a traditional ceremony of the indigenous people of Manggarai has several stages in its practice. The stages in question are the preparatory stage (pre-penti), the core (whilst), and the final stage (post-penti). As a local traditional ceremony, penti is closely related to the concept of geography. In addition to the time
(post-harvest and pre-planting), the selection of space and the involvement of residents at each stage are also related to the study of geography. Both of these things (location and community participation) are included in the aspect of the Geography study, namely the spatial aspect and the social aspect.

The spatial aspect of the penti ceremony is more about choosing the place or location for its practice. This is closely related to the philosophical view of the indigenous people of Manggarai, who interpret nature as a cosmic unity that integrates with human life as living beings. This unity is formed by a strong philosophical interpersonal relationship in all traditional ceremonies performed including penti ceremony. Pushing further, the locations of the ritual of penti are in the lodok (the center of communal land), wae teku/ulu wae (springs/water source), boa (graves) compang (traditional altar) and mbaru gendang (traditional house). These places are still tightly maintained today. The existence of these locations, as a form of respect for the sacred ancestral heritage, cannot be replaced, changed, or even moved to other places. This is inseparable from the belief of the local community that the locations in question have meanings and values that also influence the lives of the surrounding community covering socio-physical environment and religiosity.

Along the line of the above explanation, Penti is performed every year, and its practice is inseparable from the community's characteristic as agrarian. Most of the indigenous people of Manggarai are farmers. In this regard, they, working as farmers, encourage themselves to carry out the penti ceremony every year which is at the end of the harvest season or before the next planting season. The community's perspective regarding the existence of individuals, others, nature, and the creator is also the basic foundation for conducting such a ceremony. Moreover, in practice, penti describes a complete relationship with others, the natural environment, and the creator. This relationship is reflected in the existence of an important philosophy and important behavior that Manggarain has. Penti is used as a moment to express gratitude for the harvest or the results of natural community management as well as to organize it for the next harvest season. This is reflected in the important cultural stages which show the existence of essential unity and symbolic interaction showing the harmony of life with nature, others, and the creator. This is a logical consequence of the agrarian characteristic of Manggarain community wholly.

There are some important aspects to conducting penti. In this respect, the involvement of people, traditional-poetical words, and the selection of the location are related to the study of geography. Simply words, both of these things (participation and location) are included in the aspect of the Geography study, namely spatial and social aspects.

| Stage | Location |
|-------|----------|
| Whils | Lodok (cummunal land) |
|       | Wae di hutan adat (spring in customary forest) |
|       | Boa (cemetery) |
|       | Compang (traditional altar) |
|       | Mbaru gendang (traditional house) |

The data in Table 1 shows that the concept of space, especially physical geography, is found in the penti ceremony. The selection of the five locations in the Table is a reflection of the spatial and natural integrity of the Manggarain people in the entire order and harmony of their lives. These locations are regarded as a deep belief and cosmic view of the Manggarain community about nature as a source of life which should be preserved and its integrity. Implicitly, each location is inhabited by guardian spirits who are in charge of maintaining the preservation and integrity of nature for the life of the Manggarai community, and it is an obligation for them to jointly care for and preserve the nature in question.

The data in Table 2 shows that all elements of society and all existing members and kinship systems are actively involved in the implementation of the penti. The attitude of brotherhood and sense of belonging as a member of the community is built with a strong relationship, close collegial spirit, and intimacy. This
awareness makes them grateful for what they get from nature, and they are highly committed to a cultured forum and social interaction to maintain chivalry and sustainability.

Table 2 Social aspect (context)

| Stage             | Social context | Ritual               | Participants                                           |
|-------------------|----------------|----------------------|-------------------------------------------------------|
| Pra Penti         | Bantang        | Lonto leok           | Villagers                                             |
| Reke Penti        | Adak reke penti |                      | Villagers                                             |
| Whilst            | Libur          | Libur Kilo           | All member of the clan                                 |
| wewa              | Tudak penti/libur kilo | Villagers, clans, anak wina, anak rona (marriage relation)government and religion institutions |
| Rahi              | Tudak penti/libur kilo | Villagers, clans, anak wina, anak rona (marriage relation)government and religion institutions (representatives) |
| Wali urat di’a    | Tudak penti/libur kilo | Villagers, clans, anak wina, anak rona (marriage relation)government and religion institutions (representatives) |
| Dangku            | Dere dangku    |                      | Culture leader, clan leader, government and religion (representatives) |
| Pasca Penti       | Cepa           | Cepa penti           | Villagers, clans, anak wina, anak rona (marriage relation)government and religion institutions (representatives) |

Table 3 Traditional lyrics (spatial aspect)

| Lyrics                                      | Referential        | Meaning                                      |
|---------------------------------------------|--------------------|----------------------------------------------|
| Mboas wae woang, kembus wae teku           | Water/spring       | Bountiful harvest                            |
| Tewar wua, wecak wela                      | Fruit and seeds    | Bountiful harvest                            |
| Cawi neho wua, rao neho ajo                | Fruit and trees    | Bountiful harvest                            |
| Cing teke sili, wela teke pe’ang           | Seeds              | Bountiful harvest, breeding                  |
| Uwa nggari eta, mese nggari pe’ang         | Size               | Bountiful harvest, breeding                  |
| Uwa haeng wulang, langkas haeng tana       | Moon and stars     | Bountiful harvest, breeding, a dream to achieve |
| Wua raci weri, lebo kala pe’ang            | Betel nut          | Bountiful harvest, breeding                  |
| Tela galang peang, kete api one            | A place for piq to eat and fire | Prosperity, bountiful harvest, breeding |
| Pateng wa wae, worok eta golo              | Tree               | Life sustainability                           |
| Cokang neho tana                           | Land               | Prosperity, bountiful harvest, breeding      |
| Ahir neho laing lau tacik                  | Sand               | Prosperity, bountiful harvest, breeding      |
| Duat ali gula, we’e ali mane               | Time               | Work                                         |
| Neka nggoko du golo, neka pa’e du pate     | Hill and street    | Free from obstacles                          |
| Na’ang lanta, lesing linga                  | Empty space        | Action for a reboisasi/                      |
The data in Table 3 clearly indicates that the traditional lyrics used in the ritual of *penti* refer to the physical context of nature and are used as conservation efforts, hopes, and commitments to maintain the sustainability and preservation of nature and to live socially.

| Lyrics                          | Reference | Meaning                      |
|---------------------------------|-----------|------------------------------|
| *Penti weki peso beo*           | Villagers | Brotherhood, togetherness    |
| *Pa’ang agu ngaung*             | Villagers | Brotherhood, togetherness    |
| *Ulun le wa’in lau*             | Villagers | Brotherhood, togetherness    |
| *Pang olo ngaung must*          | Villagers | Brotherhood, togetherness    |
| *Kuling luji, lime lengkut kole*| Hand      | Good manner                  |
| *Neka behas kena koas kota*     | Fence     | Brotherhood, togetherness    |
| *Labar cama elor neki*          | Play      | Brotherhood, togetherness    |
| *Nai ca anggit tuka ca leleng*  | Heart     | Brotherhood, togetherness    |
| *Bantang cama reje lele*        | Words     | Brotherhood, togetherness    |
| *Neka manga pedeng nggete po’ong jogot* | Attitude | Good manner                  |
| *Bolek loke baca tara*         | Physical condition | Healthy |
| *Etan bisa wan cucu*           | Villagers | Brotherhood, togetherness    |
| *Lonto torok loces neki*        | Seat      | Brotherhood, togetherness    |
| *Padir wai rentu sa’i*          | Seat      | Brotherhood, togetherness    |
| *Nggewit weki wanta raja*       | Words     | Brotherhood, togetherness    |
| *Sapo gu likang wing agu dading*| Kinship   | Brotherhood, togetherness    |
| *Na’ang lanta, lesing linga*    | Conduct and manner | Request for reboisation |
| *Neka poka agu tapa puar*       | Conduct and manner | Prohibition to keep the forest |

In general, the data in Table 4 shows that the use of traditional lyrics in the context of the *Penti* contains a desire, commitment, and a request or hope of togetherness. All of these things lead to membership as a united community. In addition, the lyrics are related to requests and prohibitions that regulate people's behavior to place themselves in the natural environment properly.

**Discussion**

Etymologically, *penti* means rejuvenation, conservation, and restoration. As such, the ritual of *penti* is not only related to the conservation of the natural environment but also to the restoration of the relationship between humans and the God as the creator of this universe. Yet, broadly speaking, *penti* is means of expressing gratitude for the harvest and other God’s graces for a year that has passed as well as a marker for the start of the new planting season. Thus, it has deep and broad meanings both etymologically and contextually.

The results of interviews and observations found that the rituals of *penti* were closely related to the geographical context. As such, the geographical context deals with both spatial/location and social aspects. The former is concerned with the choice of location/space where the ritual of *penti* is held (Table 1). The places referred to are *lingko* (communal garden centers), *mata wae* (water sources/spring), *boa* (cemeteries), *compang* (altar), and *mbaru gendang* (traditional houses). These five places are sacred places and become locations for the ritual of *penti*. They must be kept sacred as their function and role are meaningful philosophically for the indigenous life.

In its practice, *penti* is closely related to the philosophical expression of *lingkon pea’ang, gendangn one* as shown in the following abstract.
Thus, the ritual of penti is the embodiment of the expression in question. It reflects in the cultural behavior of the indigenous people in its practice in both the stages and places chosen.

Meanwhile, the consideration of time and location also shows the powerlessness of humans in carrying out life. They are required to unite and establish a harmonious relationship with the creator, nature, and others manifested in requests or hopes, gratitude, and cultural behavior. This is in line with Ratzel's view of determinism, in which nature determines the life of the indigenous people. They are powerless and have to depend entirely on nature. The real thing in the context of penti is the selection of time and place (five sacred places), which is very dependent on climatic and weather conditions such as the harvest season and before the planting season. Furthermore, the use of traditional lyrics (Table 3) has confirmed the spatial aspect of penti. As such, the lyrics implicitly inform that the indigenous people of Manggarai put nature and its space (living and unliving things) as a unified aspect of human life. In this regard, human is very dependent on the existence of nature.

To date, the symbolic interaction between the indigenous (Manggarai people) reflects a possibilist, determinist, and adaptive cultural behavior. Cultural behavior is a reflection of ideas, natural conditions, and social life of the community (Kutanegura et al. 2014; Liliweri 2014; Halim 2015; Uhi 2016; Tengberg et al. 2012). Essential interpersonal relationships are built on an awareness of the importance of nature, others, and the creator. In short, the location and the traditional lyrics are an embodiment of the meaning and value of people's lives, both personally and communally, for their existence with nature and the creator.

In addition to the physical environment (location), the ritual of penti also reflects the socio-interpersonal relations of the community. These relationships include relationships with people still alive and those who have died. In this respect, the social context in the penti is closely related to the concept of togetherness as an indigenous community that is jointly involved in the penti. Social relations are also built with all people (family, relatives) who have died by visiting the cemetery (location) as a form of respect for fellow human beings. Socio-interpersonal relations are built on the basic principle of togetherness as human beings, both living and dead. Besides, the participations taking part in penti; old, young, and the children of the indigenous also highlight togetherness in one parrot (village) and form the solidarity and harmony of life among human beings. The concrete manifestation of such sense can be seen in the lonto leok/banntang rites, adak reke penti, libur kilo, tudak penti, and cepa penti. This moments form a brotherhood and togetherness both in a clan kinship system and in the communal togetherness of the Manggarai people.

Another concrete form of togetherness (social geography context) is also found in the use of traditional lyrics. The lyrics (Table 4) express brotherhood and togetherness. Besides, they contain hope for the safety, and comfort conditions of the villagers. The nuances of prohibiting the prohibition from living socially, properly, and ethically with forests and the natural environment also often appear. Shortly, they are really ‘something’ for the indigenous people of Manggarai to live socially.

The nuances of social- geography context are also found in the participants involved (Table 2). People believe that all thanks and requests to the creator and spirit in penti must be witnessed by several parties. The witnesses were the villagers (pang olon ngaung musin), relatives (ase kae), fathers family (anak wina), person who was in charge of communal land (tu’a teno) and the anak rona (the mother's family), government and religion institutions (Table 2). Their presence is a form of togetherness and is regarded as the spirit of brotherhood, along with the symbols used, such as tuak wono, tuak kapu, and manuk kapu (Table 2). These symbols are presented and preceded by kepok, wewa according to context, intent, and purpose. This is in line
with the view of Mead (Ritzer and Smart 2012), saying that humans are motivated to act based on the meanings they give to other people, objects, and events. In this context, the meaning is created through language and symbols used by humans in the interaction process.

The context of social geography in *penti* is seen in the choice of traditional lyrics along with the employment of symbols. This regulates and controls their actions and behavior in managing relationships with fellow humans while still aiming to maintain a harmonious life with nature and the creator. So, the social-geographic context found is very useful for maintaining and preserving the natural environment and the social environment for the sake of sustainability. Saying it differently, the concept of natural sustainability of indigenous people of Manggarai is based on three main aspects, namely spirituality, material and social. This is in line with Naes (Ritzer and Godman 2008) who said that indigenous peoples or traditional communities prioritize spiritual and material bases as their cultural identity, which is always maintained as a unique relationship in their traditional areas from generation to generation. This implies that through togetherness, the indigenous people of Manggarai indirectly instill and pass their culture on to the next generation through their behavior and direct involvement of the surrounding community.

Pushing further, the implementation of culture is carried out based on traditional principles and knowledge. Principles and knowledge are used to establish relationships with nature and others. The principles and knowledge are not only based on the physical concept of nature (nature as an object), but also on the dimensions of people's social behavior. This concept has an influence on the behavior of individuals with their spatial environment (Bauto 2013). Traditional knowledge in determining the location of ceremonies and symbols always goes hand in hand with the capacity of the community to determine their own lives and their social factors or conditions as a communal environment formed in togetherness.

More importantly, the indigenous people of Manggarai not only view nature as a subject that determines their life (determinism) but also take advantage of their own abilities (possibilism) and is even conditioned by their needs and social conditions (probabilism) in responding to nature. This has an implication that nature can be both the subject and the object of view. This is in line with Naes' deep ecology concept. Ritzer and Smart (2012) and Sen (2018) emphasize changes in people's perspectives and lifestyles in the natural environment. The natural environment has value and does not place the natural environment as a moral object but as a moral subject which, therefore, should be treated equally with humans.

Moving to the values ahead, *penti* has three core values: religious, social, and nature conservation. Religious value is a belief of the indigenous people that everything in the universe has been created, regulated, maintained by the highest being, whose presence is revealed through an attitude of respect and appreciation for the spirits and ancestral spirits. They are assigned the task of protecting and protecting the universe. They believe that when there is an effort to care for and manage nature properly and sustainably, they are indirectly presenting God's divinity and realizing the duties and missions of the spirits and ancestors.

The social values contained in the *penti* are the embodiment of their existence as a communal society. The stages of *penti* ceremony reflect a spirit of close and intact brotherhood as a community that has the same responsibility following their goals, functions, and roles in preserving nature. In addition, social relations are also built not only with fellow human beings biologically but also internally with the spirits and ancestors who are fellow creations of God.

Ecological value is also contained in the *Penti* ceremony. This perfect universe must be cared for and should be well-managed in a full of responsibility. Each stage and location of the ritual of *penti* make them aware of the importance of willingness, work and action to protect the natural environment for their survival. All of these are the place where they belong, in the past, now, and in the future. Therefore, they must be maintained and managed properly. *Lodok* (communal land center) and *wae teku* (springs/water source) are sources of life that must be preserved. *Boa* (cemeteries) must be cared for properly because of ancestors protection and as the ultimate goal of their life in the future. Meanwhile, the house and the village environment as a whole must be kept clean, beautiful and comfortable as the ritual carried out at the *compang* (traditional altar), which is a symbol of the existence and dignity of the village. Thus, *penti* is an embodiment of the social,
ecological, and theological concepts (socio-eco theology) of the Gendang Mano indigenous people, which are interpreted in their actions and behavior as well as the norms they have.

Regarding the implementation in real action toward the values contained in penti, the Manggarai community deeply interprets them in the context of preservation. With a deep belief in the protection of the spirits and their ancestors, they make efforts to preserve nature by planting trees and rejuvenating seedlings, not cutting down trees carelessly, especially in springs or water sources, and maintaining cleanliness in the village and cemetery areas by holding cattle and building beautiful yards and doing not litter. Prohibitions and village regulations are enforced regarding the conservation of the environment and their plantation lands.

More importantly, there should be an effort to generate the penti values for the next generation. In this context, the indigenous people of Manggarai have actively collaborated with the local government. As such, nowadays, the local government has paid great attention to the existence of penti values. Government policies are not only limited to spatial aspects and important socio-cultural aspects. The collaboration in question is an effort to preserve nature that does not only touch the surface, such as maintaining the physical appearance of culture, but also a continuous collaboration in order to maintain the meaning of important penti values. This is done through concrete actions, such as the establishment of a local wisdom-based social forum that involves all elements, especially traditional leaders and young people who independently play a role in determining the direction and policies of the local government. In addition, the indigenous people of Manggarai really support the formation of human character which is done by integrating penti values in the context of teaching and learning. Exploring and re-instilling local wisdom through learning is a movement to go back to the basics of local cultural values.

The perspective above is designed as practical ethics. This ethics reflects and corroborates Zhang and Wang (2013), saying that all the moral principles of environmental ethics are practiced in a real and concrete way. The moral principles in question will later regulate life in harmony with nature as a household in a universal sense with full wisdom. This wisdom is transformed into a lifestyle or way of life that is in harmony with the environment. This is translated by maintaining and caring for the natural environment as an inseparable and interconnected unit by means of spatial and social so-called geographical context found in the ritual of penti.

CONCLUSION

Referring to the findings, the geographical perspective found in penti includes the context and content as well. The context is concerned with the selection of location or space where penti is held. Meanwhile, the content is related to sense, meaning, and values found. The sense, meaning, and values are the philosophical basis for the sustainability and further existence of nature. The philosophical basis was born from a thought that the universe and all of its creations are a unified whole (entity) that must be kept in balance, as highlighted in the perspective of geography.

Besides, the values found in penti highlight adaptive, interactive, and sustainable cultural behavior of Manggarain people toward nature. Conservation of nature does not only refer to humans but all living things in their entirety. Living things and other abiotic objects are related to each other. The existence of moral obligations and responsibilities is not only limited to living things but also applies to all ecological realities. The existence of interrelated relationships for all living systems on earth indicates that everything that exists is not only understood as a unique and distinctive creation but also is an integral thread in the fabric of life; structured understanding changes to network understanding. This is very relevant to the effort or concept of preservation and sustainability of the natural environment found in the ritual of Manggarain penti, viewing the universe and its contents as an interconnected network. Simply saying, the ritual of penti contains values triggering the indigenous people to preserve the natural environment and social and religious life sustainability.
This study suffered from some limitations. First, the locus of this study was only some traditional villages. Further studies might be more veritable if researchers involve more villages to strengthen the data. Second, this study was only viewed from a geographical context. Further studies can be done from other views, such as linguistics and pedagogical point of view.

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