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RODOLFO A. GIAMBELLI

Working the Land
Babad as Forest Clearing and the Analogy between Land and Human Fertility in Nusa Penida (Bali)

Introduction

Nusa Penida is a dry island of 191,462 square kilometres lying off the southeastern coast of Bali. The majority of its inhabitants are subsistence farmers dependent for their livelihood on corn-growing. Rain-fed agriculture is at the core of their social organization.

While in most of Bali the main crop is rice grown on irrigated terraces, in Nusa Penida this is not the case. Rice is cultivated only in a few dry areas, and the main crop is corn. Agricultural yields tend to be less abundant than in central Bali, and in the past the island has been subject to food shortages.

In order to reduce the threat of famine, farmers need to have highly diversified gardens. Hence intercropping and polyculture should be practised if a
level of subsistence is to be achieved and hunger avoided. In Nusa Penida the greater part of the produce of the gardens is destined to support the families of the farmers and the landowners. Very few of these products are sold, and they tend to be consumed within the boundaries of the banjar (village, see below). In this kind of environment the relationship between man and land is of crucial importance.

At the beginning of the 1990’s there were about 40,000 people living on the island. The inhabitants of Nusa Penida regard themselves as Balinese. The island has in fact formed part of the Balinese regency of Klungkung since the 16th century. Although there are some differences between Nusa Penida and Bali, for the purposes of the present paper the cultural and social differences between the two islands will be disregarded as being negligible.

Nusa Penida is divided into small village units of between 100 to 2,000 inhabitants. Although there are some larger centres, these rarely have a population exceeding 2,000. These villages tend to be made up of walled residential compounds, a variable number of temples, and a communal area, generally with a banyan in it. The areas surrounding the villages comprise cultivated land and, to a lesser degree, secondary forest. Villages of this type are little akin to the western concept of village. Thus, in this article a village, here referred to as banjar, is to be regarded as comprising the complex of hamlets or residential compounds that are perceived by their inhabitants as forming a single, well-defined and recognizable geographical unit.3

The typical settlement pattern in the island, then, is of a village in some central position surrounded by gardens. Given the hilly terrain, the aim is to live as comfortably close to the gardens as possible. For example, the people of banjar Sakti, the village where I lived, have to walk on average from one half to one hour between their houses in the banjar and their gardens. The usual pattern for them is to live in the village and to walk to and from the gardens every day.4 However, a small proportion of the banjar population, between 10% and 15%, live almost permanently in their garden plots.

Balinese life has been described by A. Duff-Cooper (1986:207) as a totality of extensive relations between different elements. Of this totality, I wish to consider in this paper the particular relations of people from Sakti in Nusa

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3 The word banjar as used here does not bear any reference to the social function or internal organization of the village, but only to the village as a place in the landscape. I am aware of the debate about the concepts of banjar and desa in Bali and about the respective functions of these in the Balinese social organization. However, this is not a point at issue in this article.

4 This reflects the practical farming situation throughout Indonesia. In this connection R. Ellen has noted that: 'The location of residential areas concerns the relationship between productive resources and units of consumption. In view of this, the ideal settlement layout should involve a minimization of the distance between the totality of all residences and the totality of all resources.' (Ellen 1978:26.) What Ellen says about Seram also applies to Nusa Penida.
Penida with selected aspects of their natural environment. This will on the one hand reveal the basic principles of classification vis-à-vis the natural world and throw light on the distinction between forest and cultivated areas as an aspect of the domestication of land by humans. On the other hand, it will help us understand the concept of person in Nusa Penida, as the definition of a human being in this society appears to depend also on the kind of relationship of both society and individuals with their natural environment.

Individualistic ideologies, with their emphasis on the contrast between the self and other beings, have radicalized the distinction between humans and nature. In traditional societies characterized by holistic ideologies, such as Nusa Penida and Bali, the division between man and nature is less pronounced or tends to be ignored. Barraud has argued on the basis of Dumont's work that:

We are [...] confronted here [...] with the contrast between individualistic and holistic ideologies (Dumont 1980). In the former the individual as the ultimate reference is distinguished from everything else and particularly from nature and things. Referring to Louis Dumont: 'Our idea of the individual is accompanied by a break between man and nature, which leads nowadays to considering society itself as only an instrument in the fight of man against nature' (Dumont 1973:102, our translation). (Barraud 1990:215.)

The social ideology of Nusa Penida appears to be characterized by a holistic perspective, in which there is no clear-cut separation between man and nature. Moreover, not only are human beings imagined as being part and parcel of the natural environment, but some aspects of the natural environment are spoken of in human terms (for example, the fertility of the land and the fertility of humans are regarded as being analogous to each other).

As a first step towards understanding the relevant notions, I will give a brief description of the spatial organization of the village in relation to the surrounding gardens. Next I will consider the relevant concepts and the relationship between the people of Nusa Penida and the forest and cultivated and uncultivated land. In this context, I will examine the forest clearing process referred to here as babad. Where in scholarly analyses up to now the term babad has been used mainly to refer to a literary genre comprising historico-genealogical chronicles or narratives that is common throughout Bali and Java, I shall argue, on the basis of the findings of fieldwork in Nusa Penida, that the word also refers to the process of clearing forest. In this same

5 Although the distinction between the individual and the world is central to Western philosophy, the interdependence of the two, especially from an ecological and holistic perspective, is now more widely accepted. The clear-cut distinction between man and nature has been challenged especially by 'green' thinking.
context, I will consider the significance attached by the local people to the
spirits inhabiting the forest, as well as newly cleared land.

In the framework of the analysis of the relationship of human beings to
their environment, I will further examine agricultural activities, in particular
that of planting. Finally, I will discuss the analogy between the fertility of the
land and of humans and the resultant parallel drawn between the products
of the land and the progeny of humans in this agricultural society.

Although the paper will concentrate on the ideological aspects of forest
clearing and land cultivation, it will in no way disregard the practical aspects
or dismiss these as being less relevant for an understanding of this farming
community.

Forest cover

Although most of the land on the island is cultivated, there are still some
pockets of forest left. According to historical sources, the island was former-
ly covered with primary forest and marshland, which was cleared step by
step in the process of the island’s colonization by convicts as part of their
punishment (on this topic see Sidemen 1980:95-6, 120).

A basic distinction is drawn between cultivated and uncultivated land,
and it is assumed that all uncultivated land belongs, to various degrees, to
the realm of the forest. In local (Balinese) usage, forests are designated by the
terms alas and bet. These two categories appear to be distinguished on the
basis of:

1. size of the area;
2. the presence or absence of large trees;
3. the density of the trees and/or other vegetation in the area;
4. whether the growth in the area is primary or secondary.

The term alas, for the first of these categories, refers to all forests and areas of
wild growth. In particular, it indicates areas covered with primary growth,

6 Alas is also an Old Javanese word, which Zoetmulder and Robson (1982) gloss as 'wood; for-
est; quantity of plants growing in a thick cluster.'
surrounding Pura Saab in the centre of the island. This pura is one of the principal temples in Nusa Penida and the alas surrounding it is thought to be particularly tenget (that is, endowed with potentially dangerous powers), so much so that no one is allowed to cut any of the trees growing in the forest or kill any of the animals inhabiting it, for the local gods are said to punish those contravening this rule.

The word bet, for the second category, designates a small forest, or more commonly, bushland or vegetation in a ravine. Bet areas may be fallow areas characterized by secondary forest growth. The differences with the alas category thus are:
(a) the size of areas covered with this type of forest is limited, and in principle is considered not to exceed two hectares;
(b) the vegetation of bet areas, although also wild, may comprise any kind of plants excluding large trees;
(c) the growth in bet areas, though it may be abundant, is not considered to be as dense and lush as in alas areas.

Forest clearing

Formerly, the legal right to clear an area of forest or uncultivated land not already owned by someone could be granted by the village head (probekel, jero mekel), as the local representative of the central authority. Permission to clear land could only be given to members of the desa community. Nowadays permission to clear or exploit any patch of free, uncultivated land or residual primary forest is granted by the head of the local subdistrict office (Camat). Moreover, the right to this is no longer confined to inhabitants of the desa or subdistrict, but is also open to outsiders.

The concept of forest, broadly covering all alas and bet, is quite important insofar as it is in the forest that particular supernatural beings are said to live. All kinds of land, but especially primary forest and uncultivated land of the types outlined above, are believed by the people of Nusa Penida (and Bali) to be inhabited by different kinds of spirits. Known variously as wong gamang, memedi, or isin bet, these spirits guard and protect the land and its flora and fauna against all external interference or intrusion. The forest is generally considered to be a magically dangerous place (tenget), not to be approached or crossed at night or alone. The lord of the forest is the fearsome Banaspati Raja, generally known as Barong. Thus, the clearing of forest is never a per-
sonal, private matter but one that involves relationships between human beings and spirits who are understood to have occupied the particular piece of uncultivated land prior to these humans. Any clearing of primary vegetation must therefore include as a first step a ritual that specifically addresses these spirits. The entire process of preparation of a new patch of land for cultivation, from the ritual opening it to the first sowing, is called *mababad* (from the root *babad*).

Before proceeding to an analysis of this *babad* process, it is pertinent to the development of the argument as a whole to discuss the broad meaning given to this term in Balinese. The word *babad* appears to be related to a similar word in Old Javanese, where, according to Zoetmulder and Robson (1982: 182), *babad* denotes a clearing. From this stem are derived the forms *ababad* 'to clear (a piece of forest)' and *ambabad* 'to begin (a narrative)'. The word is cognate with Old Javanese *babak*, glossed as 'split open, laid bare, clearing (of wood and underbrush)' and as 'a section or a scene of a song or a performance' (see Zoetmulder and Robson 1982). In Balinese, the word *babad* still has some of the Old Javanese meanings, again associated with specific contexts. Thus, while in traditional agriculture it designates the clearing of land, in the literary tradition it refers to a genre of historico-genealogical chronicles. Furthermore, the term is cognate with *babak* or *babat* in referring to the reclaiming of a new patch of land, or, as indicated above, to a section or scene of a theatrical performance (see Kersten 1984). More specifically, in *wayang kulit* plays both terms may be used to indicate the division marked by the appearance of the *kayonan*, particularly at the opening of the play (see Zurubuchen 1987:269). What appears to link all these elements semantically is the idea of transformation: the emergence of a new situation from a given existing situation - its opening and manifestation through the removal of obstructions - thus in a forest, a clearing, and in a *wayang* play, a change of scene.\[10\]

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see Giambelli 1995 (chapter VI). The idea that land was inhabited by spirits before humans is not confined to Nusa Penida. Forth (1981:105), for instance, describes a similar belief in Rindi, Eastern Indonesia.

9 The *kayonan* or *gunungan* is a leaf-shaped figure used in the Balinese and Javanese shadow theatre. It is a finely carved piece of leather which at the beginning and at the end of each part of the performance of the Javanese [and Balinese] shadow-play is placed in front of the screen between the two groups of puppets. It has the shape of a leaf [leaf] and is decorated with the design of a big tree, populated by birds and other animals, [...] standing on a mountain or some other kind of elevation.' (Bosch 1960:179.) *Kayonan* refers to a tree (*kayon*) and *gunungan* to a mountain (*gunung*).

10 For the sake of completeness I should mention that the *Kamus* (1990) gives yet another meaning for *babad*, namely the intestinal membrane of an animal. According to Bartlett (1961:14-7), drawing on Van Asbeck, Feith, and Van Unen (1915) for his information, the term *babad* was used all over Java to denote all the stages in the process of clearing, while it was especially common in the Banjune, Pasuruan, Surabaya, Purworejo and Semarang areas.
Babad as clearing process

In my examination of the process of clearing, I will deal only with farming in dry fields, insofar as there are no irrigated rice terraces in Nusa Penida. In Bali, however, the process of babad may result in the creation of both dry fields and wet rice terraces. As can be seen from the table below, the creation of dry fields and that of irrigated terraces have the same starting-point – the babad process – but a different outcome. For the terms used here, see Kersten 1984.

Table 1. Differences in outcome of the babad process in Nusa Penida and Bali

<table>
<thead>
<tr>
<th>Dry fields</th>
<th>Paddy fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearing of forest and creation of dry fields in Nusa Penida and Bali called: babad/mababad</td>
<td>Clearing of forest and creation of irrigated terraces in Bali called: babad/mababad or bakbak/makbak bakbakin/makbakin</td>
</tr>
<tr>
<td>new land destined for use as dry farmland called: tegal/abian/nel/abasan</td>
<td>new land destined for use as paddy fields called: carik/uma/sawah</td>
</tr>
</tbody>
</table>

The babad process in Nusa Penida is divided into two phases: an initial phase consisting of an opening ritual in which the patch of forest to be reclaimed is defined and then cleared, and a subsequent phase in which the newly reclaimed land is sown for the first time.\footnote{For analogous designations for forest and forest clearing in a swidden farming and dry-rice-growing context in West Java, see Adimihardja (1991:34-6). This author describes all the rituals which punctuate the clearing of forest, the reclaiming of land, and the planting of rice and other crops among the Kasepuhan. These rituals, though designated by different names, appear to be similar in scope and function to that outlined in this paper. Stuart-Fox (1987:233 ff.), though he does not refer to land clearing, does mention the former importance of dry-rice rituals in shaping the ritual cycle of the Pura Besakih temple complex in Bali. In particular I should mention in this connection the aci mungkali (from bungkali, ‘to open’) as the ritual opening the agricultural cycle, in which ‘farming families carried agricultural tools (parts of ploughs, hoes) to the temple, where they were blessed (prayascita) and then proceeded to their fields to use them ritually for the season’s first turning of the soil’ (Stuart-Fox 1987:239). Unfortunately we do not know if any ritual was actually performed in the field itself, as what was crucial here was the correct ‘opening’ of the soil, which was in itself considered dangerous. A similar situation obtains with regard to burials (nanem sawa) and the exhumation of bones of the deceased (ngebet) preceding the rites of cremation. Throughout Nusa Penida and Bali, precisely the ritual conducted before ngebé is called mungkali. In this ritual the tools to be used for the actual exhumation are blessed, as well as the people who will perform this task. In addition special offerings, among other things, are presented to the spirit(s) (isin sema) controlling the land or the graveyard where the dead lie.}
The first phase opens with a ritual performed by a *jero dukuh sakti*. In the area where I did my research, this was the specialist responsible for any ceremony relating to land and land clearing, or, to be more exact, to the spirits inhabiting the land and the forests. An appropriate time must be chosen for this ritual, and this is fixed in accordance with the lunar calendar. Generally, the period chosen is that at the end of the dry season, before the rains begin (*sasih katiga*). The period spanning the months of August and September is held to be the most appropriate time for the ceremony. In addition, an auspicious day may be chosen according to the Balinese *wuku* calendar. In Nusa Penida, and in Bali at large, the period preceding the arrival of the westerly monsoon rains (*sasih katiga*) is believed to be the best period for any work involving the reclamation of land, including the exhumation (*ngebé*) of corpses as a prelude to the performance of cremation rituals. It is generally said that any ‘opening’ of the earth for ritual purposes or preparation of land for the agricultural season must be carried out before the start of the wet season. The choice of the appropriate time is also influenced by practical considerations, as the dryness of the vegetation at this time facilitates burning and the imminence of the rains makes it the best time to plant the first crop.

The ceremony as a whole is called *mapuun*, from the root *püu*. The Balinese word *püu* denotes something burnt (as, for example, in *umahé ento püu*, 'that house is burnt'), while at the same time being a classifier for single-stem trees (for example, *punyan biuu a püu*, 'a banana tree'). The word *mapuun* thus is derived from the word for the outcome of the ceremony, which ends with the ritual burning of the forest to be cleared by the *jero dukuh sakti*. The latter will fix the limits (*wates*) of the area to be cleared together with the person who will clear the particular patch of forest. The boundaries of the area are marked with bamboo or coconut-leaf stalks (*papak*) with a bunch of grass (*ambengan, IMPERATA CYLINDRICA*) tied to the top. This

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12 In support of the meaning of *püu* as the act of burning, I would cite the phrase *sena pumui*, which in Sakti denotes a cremation ground. In Balinese a verb may be formed by joining the prefix *ma* to a noun. This is particularly pertinent in ritual contexts, where the name for a ritual is usually a verb derived from the word for one particular aspect or element of that ritual. Thus the name *macaru* for a sacrifice to demonic deities, for example, is a verb derived from Balinese *caru*, denoting the sacrifice in question. The same is true for the name *matatali*, derived from *tatali* (chisel), for the tooth-filing ceremony, being a ritual involving the use of a chisel. Hence where *püu* may refer both to the act of burning and to the end product of that act (for example, a burnt-off patch of land), the ritual leading to this particular state is called *mapuun*. The present active form of *püu*, *muunami* (as, for example, in *tiang muunami umah ento*, 'I am burning this house'), is never used in the above-named context in Nusa Penida. On the use of the prefix *ma* in Balinese see Kersten 1984:45 ff.) According to Guermonprez (personal communication), the word *püu*, traditionally written as *pohn*, is very likely a cognate of the Malay word *pohot*, not to mention cognate words in other Austronesian languages. Moreover, the words *püu* for the act of burning and *pöön* as tree classifier may not be derived from the same Austronesian proto-lexeme.
device, intended as a sign that the land is held by someone and that entry is forbidden, as a whole is called sawén (related to Old Javanese sawi, see Zoetmulder and Robson 1982) and the process of marking land that is to be cleared is called nyawénin, from sawén. The area may later be fenced with wood and bamboo palings, this fence being called pagehan. The nyawénin process encompasses the first part of the ritual performance.

The jero dukuh sakti then invokes the spirits of the forest (nedunang, nurunang). Once the spirits arrive, he ritually cleanses their bodies by offering them the pabresihan, a set of minute devices to cleanse the body of whoever is the subject of a particular ritual. After the cleansing, the spirits are required to wear new, clean clothes, towards which end the ritual specialist offers them a set of séh or rantasan. This is a pile of garments that should never have been used before and which are supposed to be worn by the subject of the ritual after the cleansing phase. After being properly dressed, the spirits are sprinkled with tirta panglukatan (ceremonial purifying water) to purify them of any undesirable substances. They are then presented with five short pieces of white thread (tebus) as the visible sign of their state of renewed ritual cleanliness. Subsequently, the ritual specialist wafts toward the spirits of the forest the essence (sari) of a dish of white and yellow cooked rice (ajengan putih kuning) as a food offering. The jero dukuh sakti then addresses the spirits in ordinary language, as they are thought to be inferior to humans. He asks them, on behalf of his client, permission to clear the land, saying:

*Sang Mangku Bumi,*
*né jaizi (I anu) lakar mabian dini*

*Ja la jakar ngarap tanahé ené*
*angguna tegallabian.*
*De ngelaga ia, ajak ia patuh*
*bareng-bareng magae dini.*

Gloss
You who rule over this land, now (this person) will start using it as farming land.
He will work (transform) it into arable land.
Do not harass him, remain friends with him and invite him to join [you] in the work here.

If the spirits are believed to live in the centre of the area to be cleared, the jero dukuh sakti asks them to change their residence from the tree they are dwelling in to a tree closer to the boundary of the clearing, in the following words:

*Jani kisidang iban cané uli dini,*
*kema laku maumah di punyan*
*puuhé ané bet di bucu kaja-kangin*
*disamping tegalé ené.*
*Orahin panak somahé pada*
*makejang kisidang ibané uli dinané ené.*

Gloss
Now I ask you to leave this place and take up residence in the puuhé tree standing in the kaja-kangin corner of this field.
Tell your children and wife also to move from here as from today.
The request for permission is essential for the future peace of the new owner in his cultivation of the patch of land. After his request has been put forward, the jero dukuh sakti sets fire to the area to be cleared by means of a bunch of dry coconut leaves. Generally, the area is never all burnt off at the same time, but this is done in stages.

The first to be burnt are shrubs, grass and twigs. Then tree branches are cut and the trees covering the inner part of the area to be cleared are felled. After some time, when the cut trees have become sufficiently dry, they are dealt with in a second burning-off. The ashes produced by the fire are spread over the ground.

This process and its rituals are analogous, as far as their order and pattern are concerned, to other clearing processes and rituals throughout the Indonesian archipelago. Similarities, both ideological and practical, are found among the Sikka (Flores), the Atoni (Timor), the Nuaulu (Seram), the Iban (Borneo), the Punan (Borneo) and the Kasepuhan (Java).13

It should be noted that in Nusa Penida not all the trees covering the area to be cleared are, in fact, cut. The rule is that at least one tree, generally the largest one close to the boundary of the clearing, must be left standing, as that is the place where the wong gamang, memedi or other forest spirits formerly inhabiting the whole of the area will now reside. It is interesting to note that not only is the largest tree left intact, but a patch of the original wild growth surrounding it within a radius of about five metres must also be left unspoilt, so as to represent a miniature forest with a large tree in the middle. It is said that the shrubs and undergrowth surrounding the tree act as a fence separating the realm of the spirits from the realm of man. The tree and surrounding area are known as umah memedi, the central tree being regarded as a house for the memedi (umah = 'house'14). The area left uncleared thus also is a house with its compound. What is perceived in the immediate sense as a small patch of forest represents at the same time, on a different level of cognition, a house with its compound, bearing a close resemblance to a house and compound inhabited by humans. To clear a patch of forest without performing the appropriate rituals or without reserving a suitable area for the umah memedi is considered a grave offence to the spirits of the forest. Such

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14 To avoid possible misunderstanding for those unfamiliar with Balinese, I wish to underline that the word umah is glossed as 'house', while uma means 'irrigated land' and is the equivalent of the Indonesian word sazāw.
inconsiderate, disrespectful behaviour is said to be punished by the spirits by
inflicting life-threatening illnesses on the persons intending to cultivate the
land. The whole of the umah memedi area is reputed to be tenget, or magically
powerful, and dangerous for human beings. It is forbidden to all to enter
such a wild patch or, for that matter, to pick fruits from the tree, if the tree
produces any. It is believed that anyone bold enough to violate such a taboo
will incur the wrath of the memedi. This complex of beliefs also leads people
to assert that no stone should be thrown in the direction of the umah memedi.
For if a stone should fall on the house of the memedi, even by accident, and
break any of the tiles of its roof, the memedi would rise in anger and punish
the person responsible, who as a consequence would fall seriously ill at some
future point.

**Mapuun** is crucial to our understanding of the attitude of the local people
to the spirits of the forest and to the forest itself. During the performance of the
rite, the spirits are treated like human beings, the ritual pattern being exactly
the same as that of any other Balinese rite. This is especially true of the life
crisis rituals, in which the subject, before entering a new phase in his/her life,
is ritually cleansed, dressed, blessed and then presented with food offerings.
In the taming of the forest this ceremony marks the encounter between
human beings and spirits, who are here invited to join in a common event. In
this process the spirits are humanized and the distance between them, as repre-
sentatives of the realm of the forest, and humans is reduced. However, only
momentary contact is possible, as each of the two groups must retain dom-
inance in its respective domain.

Stuart-Fox (1987:236) mentions a ritual called _mapuun_, which is performed
in a special enclosure in a field called _pepuun_ in which particular plants and
flowers are grown, in the context of the rituals performed in connection with
the planting of rice in dry fields in Bali. In Sakti there is no such special sacred
enclosure in connection with corn-growing. Nonetheless, the offerings for the
various rituals performed in connection with corn-growing are always set
out in what is held to be the middle of the field, although this area has no spe-
cific name. Hence the assumption seems plausible that such an enclosure
(_pepuun_) was introduced subsequent to the first reclamation of land; possibly
the place where the first _mapuun_ was performed was then preserved as a per-
manent sacred spot. The role of the supposed centre of the field as the ideal
place for sacred enclosures in which sacred plants are grown or where offer-
ings should be placed is by no means confined to Bali. Adimihardja (1991:38)
mentions that in the Sundanese context the putative centre of a cleared field
is called _pupuhunan_; it is the place where offerings are placed and planting
ceremonies are conducted. Sacred enclosures, ideally symbolizing the centre
of the village, were also common among the Batak (namely the Karo and
Dairi Batak), who created these in the process of the foundation of the village.15

The jero dukuh sakti

The key figure in the process described above is the jero dukuh sakti. In sociological terms, he is a special kind of ritual specialist who in Sakti mediates between human beings and the spirits dwelling in the forest and on the land (such as, for example, isin bet, gamang, and memedi). The jero dukuh sakti is concerned exclusively with the opening up of new patches of land and situations of direct contact between one of the spirits and a particular human being. Such situations, known as kesambet memedi (see Giambelli 1995: chapter VI), may be dangerous for the humans involved.

In Sakti the person fulfilling this role was chosen as such precisely because he was able to see and to communicate with the spirits inhabiting the forests and the land. Thus his particular aptitude qualified him for this role. However, as these spirits are considered to be inferior in type to the purified ancestors and other, Balinese kinds of spirit (for example, widiyadari), the jero dukuh sakti’s work is not considered to be pure (suci). This ritual specialist does not perform any purification rituals prior to entering on his public duties, whereas such rituals, such as mawinten, are compulsory for official temple or village priests (pamangku) and the ritual specialists in charge of the preparation of ritual offerings (tukang banten).

Because of this special character, the jero dukuh sakti has an inferior status in the banjar ritual hierarchy and is certainly considered to be inferior to the pamangku banjar and other pamangku. So the jero dukuh sakti does not receive any meat or any share in the offerings during village festivals, for instance. He does not have any insignia or symbols that make him recognizable as a ritual specialist: he does not wear white robes when performing rituals, does not have long hair, and does not have any official relationship with a tukang banten. In Sakti the jero dukuh sakti was an old man living in a shelter in his garden. I was told that this role is generally fulfilled by a man.

15 The (Karo and Dairi) Batak believed these enclosures, here called beberen and toenggoeng, to be inhabited by the soul of the village or by spirits, to whom regular offerings were made. In them, too, special plants, vegetables and flowers - themselves regarded as a kind of permanent offering to the spirits - were planted. Furthermore, among the Karo Batak, ordinary burial grounds (pendaunen) at the beginning of this century were generally fenced off and had sacred plants growing in them. On Batak sacred gardens see Bartlett 1934:13 ff. For examples of sacred gardens in the South Indian Hindu context see Uchiyamada 1998.
Preparation of the soil

After the land has been cleared, the second phase of the babad process begins. It involves levelling the ground and making terraces for growing crops. As was said above, most of Nusa Penida is hilly, and terracing here is the usual way of making land suitable for tilling. The terracing starts from an appropriate point at the bottom of the hill, where the earth is excavated; the terraces are constructed from the bottom upward. The retaining walls that support the lower terraces are constructed over a base of larger stones at the bottom with smaller stones (panak batu) on top. The gaps between the stones are filled in with earth. The end product is a dry wall. These stone walls, locally called bataran (NP), are one of the distinctive features of Nusa Penida. The upper, flat surface of a wall is called muan bataran (NP), in which muan is the usual word for the human face; it usually has coconut or gamal trees (GLYRICIDIA SPP.) planted along it. The base of the wall is called bongkol bataran (NP) and has coconut and banana trees growing along it. The area of land between two bataran (a lower one and an upper one) is called cutak. The next stage involves the first breaking up of the earth, called makalin (NP) or mungkahin. This is done by men using a plough (tenggala) with only one straight metal blade drawn by two cows. There seem to be no special ritual requirements for this particular stage. However, the work here is generally done exclusively by men, the women reportedly being asked to prepare a special meal for the men performing this job. This meal, which is taken to the land, must consist of boiled rice and chicken, to which are added sweets made from glutinous rice. Before eating, the men are supposed to place small quantities of each kind of food on the ground as an offering to the spirits inhabiting the land. No such special meal is required the following days. In Nusa Penida the soil is dry, hard and rather stony, so that the earth has to be broken up in stages. Once the entire surface has been turned over lengthways, the patch is ploughed breadthwise to make furrows at right angles to the furrows of the previous ploughing. This crossing of the first furrows is called nugehin. As the earth has to be broken up in stages, the patch is ploughed several more times after its entire surface has been turned over a first time, with an extra blade being added to the plough each time, to a maximum of four, so as to gradually break up the earth into finer parts. The entire process is called mangkrak (NP), from the name, bangrak (NP), for the plough used. It is supposed to be the final stage of preparing the soil before planting.

16 Differently from other ethnic groups in Indonesia (for example, the Iban), the people of Nusa Penida tend to avoid growing crops on sloping land and prefer terracing.

17 The words bataran and cutak have different meanings in Balinese. According to Kamus (1990), Balinese bataran/batarang means 'floor', and cutak 'measure of rice'.
Once the ground is ready for planting, the rains have to be awaited. Nusa Penida is an extremely dry island, and no one would dare to plant anything before the beginning of the rains. The mungkalzin, nugelin and mangkrak processes are repeated at the beginning of each new planting season.

Planting

Planting in Sakti is classified according to the type of tree, plant or seed planted. The two basic classifications are matajuk and mamula.

Matajuk (to plant) is formed on the basis of the stem tajuk, denoting the entire class of unhusked seeds which, when sown, show no visible sign of sprouting. In Nusa Penida these are corn (jagung), sorghum and mung beans (kacang ijo). They are planted in the earth directly, without any prior preparation. There is some division of labour along gender lines in this category of planting.

Mamula (to plant) designates the second type of planting. The verb is formed from the noun pula, which denotes the class of seeds, bulbs, tubers, cuttings, and rhizomes that show prominent signs of roots or germination when planted. Sprouting coconuts, the rhizomes of banana trees and cuttings from cassava stems all belong to this category. A division of labour along gender lines also applies to some elements of mamula. For instance, only men are allowed to do the planting of rhizomes or seeds that will develop into large trees like coconut, banana or mango trees. But in the planting of cassava, for which cuttings from the plant called turus are used, there is no such division of work along gender lines.

A patch of land that is newly reclaimed from the forest and sown for the first time in Nusa Penida is called mamula (NP). This word is apparently used only in Nusa Penida. At least, I have not been able to find it in Bali or in any of the Balinese dictionaries I consulted.

The division of labour in planting (matajuk) corn, dry rice or beans is as follows. A man with a metal-tipped wooden stick called nyukjuk (NP) walks along the furrow and at each step rhythmically drills a hole (song panyukjuk (NP)) in the ground. Behind him follow one or more women, who place seeds (binih) in each hole and then cover the hole with earth using their feet. This act by the women is called mubud, from bubud, 'to fill in'. The planting tends to be done by married couples, with the husband walking ahead doing...

18 The word mamula, according to all my informants and both the Kamus (1990) and Kersten (1984), undoubtedly derives from the word pula and is only related to the Balinese word mula – which, possibly under the influence of Indonesian, is glossed as 'beginning' or 'origin' – on the point of form. For these words, see Kamus 1990 and Kersten 1984.
the nyukjuk and the wife following him doing the mubud.

This type of planting, along with the connected division of labour along gender lines, has close parallels throughout the Indonesian archipelago. The same applies to the emphasis on the participation of married couples and the fertility of women. Comparable cases are the Atoni in Timor (see Schulte Nordholt 1971:69), the Sikka in Flores (Metzner 1982:124) and the Iban in Borneo (Jensen 1974:177). Here, too, planting and the role played in it by married couples seem to emphasize a link between human fertility and the fertility of the land, which is made analogous to the fertility of a man and a woman. This is evident firstly from the fact that a married couple (in any case a man and a woman) is in charge of the work, and secondly from the perception of a woman in terms of the earth which in the planting process receives the seeds (on the subject of fertility see below).

Additionally, planting and all its connected activities in both Nusa Penida and Bali are subject to a strict schedule that is regulated by the lunar calendar and by the necessity to pick an auspicious time. While the fact that people wait for the appropriate lunar month has a practical reason (for example, the need to wait for the rains to start), the choice of an auspicious time is prompted by more ideological considerations. To ensure the growth of the crop, all factors connected with the Balinese perception of time should be considered in combination.

First, then, a proper sasih – designating the Balinese lunar month, though possibly also season – must be chosen. In the dry climate of Nusa Penida, people wait till the sasih kapat (fourth lunar month, which generally corresponds to the month of October) to plant the first corn or dry rice of the season. To say that the sasih kapat is the most appropriate time for planting is equivalent to saying that the time of arrival of the first rain brought by the westerly monsoon, which generally occurs in that period, is the right time. Secondly, the day for planting must be chosen for auspiciousness by consulting the ingkel calendar, which gives directions in connection with the agricultural cycle. The word ingkel designates a particular Balinese system of reckoning time, as well as the six resultant time divisions of seven consecutive days each. This is a cyclical system that runs right through the Balinese calendar independently of any other system of time reckoning and time classification. The six ingkel periods are referred to by Old Javanese names which have become fully integrated into the Balinese language. These names – wong, sato, mina, manuk, taru, and buku – are qualifiers of particular objects or characteristics with which the respective ingkel are associated. The name buku, for instance, indicates all varieties of plants that are characterized by a stem divided into segments, such as bamboo or corn; in animals, it refers to the joints in the body. The ingkel calendar explicitly forbids the planting of any kind of plant classed as buku during the ingkel buku period. In Sakti it is
said that if corn is planted during this period, the joints of the stems will be particularly weak and holes will form in the stems themselves, so that eventually the entire crop will be destroyed. Another taboo on planting applies on the day umanis of the Balinese five-day week (pancawara), as a crop planted on that day will be particularly sweet (manis) and thus especially attractive to insects. Hence if the prohibition is violated, the crop will be eaten by insects or larvae. In both these cases, it is the name of the ingkel period or the pancawara day and its semantic relation to the crop to be planted that appears to determine the inauspiciousness of the particular time for this activity. However, the taboo, rather than being entirely negative, also appears to have a positive side insofar as protection is afforded during the relevant periods to plants that are considered to belong to categories associated with those particular ingkel or pancawara time frames.

The mababad phase effectively ends with the first sowing. All this is by no means unique to Nusa Penida or Bali. In this connection it is relevant to cite Geertz where he talks of babad as a word for a historical chronicle and for clearing forest in the Javanese context, as this is analogous to the situation I have described above. Geertz says:

To mababad is to clear a tract of wilderness and turn it into a village complete with surrounding rice fields, to create a small island of human settlement amid a great sea of forest-dwelling spirits, although nowadays it is also used for the general preparation (plowing, raking, and so on) of a rice field which one must do at the beginning of the rice-growing cycle each year. The picture the myth [Babad Tanah Djava] presents is one of an incoming flow of migrants pushing back the harmful spirits into the mountains, uncultivated wild places, and the Indian Ocean as they move from the north coast to the south, all the while adopting some of the more helpful ones as protectors of themselves and their new settlements. (Geertz 1960:23-4.)

In Nusa Penida, land, after it has been cleared and sown for the first time, is referred to by the following names:

*TEgal* – a very general word for any area of dry land that has been cleared and that may or may not be currently cultivated;

*Abian* – a word, not usual in ordinary speech, used to designate any culti-

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19 In quoting Geertz on this, I am concerned solely with the spread of the analogy between the two meanings of babad: babad as clearing and babad as a historical chronicle. I am not concerned with the correctness of Geertz's interpretation where he considers the Babad Tanah Jawi as 'Java's history of successive "invasions" of Hindus, Moslems, and Europeans'.
vated area, such as a garden or an orchard;

Mel – the usual word in everyday speech in Sakti and elsewhere in Nusa Penida for all kinds of dry cultivated land, gardens or orchards. The word mel is also used in Bali, in which connection Goris says:

In the oldest Old Balinese edicts the word mel appears to refer to non-irrigated fields. According to Korn the cognate word kemal still has, in Tejakula, the meaning of vegetable garden or orchard. In Selat it was stated that mel could be interpreted as sawah. So in any case, this word relates to cultivated ground. (Goris 1969:113.)

Abasan – a word indicating an area of sloping land, generally a hillside, that has been fully cleared and is used for cultivation. The word is related to rabas, which designates the action of totally clearing land of trees or other existing vegetation.

Last but not least, in summarizing categories of secondary land, I should mention neng. This term refers to any stretch of fallow land that has been left uncultivated for some years to allow growth of secondary forest or grassland.

All the above terms refer to cultivated areas that are detached from residential village units. To summarize, the categories of land, from forest to village, are:

Table 2. Terms for land categories, from forest to village, in Sakti

<table>
<thead>
<tr>
<th>Forest and uncultivated land</th>
<th>Cultivated land</th>
<th>Village land</th>
</tr>
</thead>
<tbody>
<tr>
<td>alas, bet</td>
<td>tegal, or: abian, mel, abasan, neng</td>
<td>tanah pekarangan banjar20</td>
</tr>
</tbody>
</table>

In this context it is appropriate to give a few more details on the layout and cultivation of gardens. In the framework of the pattern of relations between human beings and land, there seems to be a general tendency to avoid the radical clearing of any patch of primary forest and so totally transforming an existing landscape. A kind of balance must be struck between the former environment and the new agricultural land. For example, one or more large trees must always be kept on the newly transformed land as reminders of the earlier forest, for in principle the original inhabitants – the spirits – should not be totally displaced. In this connection, land of the mel category is not viewed as

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20 This is land on which the inhabitants of the banjar have constructed their compounds. Formally, this land belongs to the banjar. An analysis of the banjar land class can be found in Giambelli 1995: chapter III; see also Stuart-Fox 1987: chapter II.
a single, extended, homogeneous whole, but as the sum total of small, scattered individual patches with different characteristics and uses and of different categories and classes. Inside gardens, there is a large variety of trees, and diversification appears to be the rule. For example, the border of each terrace (bataran) is planted with fruit trees, such as coconut trees, and trees and shrubs grown for other useful products or wood. In the cleared area of the terraces corn, mung beans, red beans, peanuts, cassava and sweet potatoes are planted, and these grow alongside the trees accommodating the memedi or spirits of the former forest. Additionally, a specific part of the garden or terrace may be devoted exclusively to banana or other fruit trees. The kubu (temporary shelter) and the shelters for pigs and chickens are located in the central part of the garden, so that they are adequately protected.

_Fertility_

The preparation of the soil and the growing of crops are closely connected, as the development of the crops is very much dependent on soil fertility. In Nusa Penida, the way in which the fertility of the land is viewed has certain analogies with the perception of human fertility. There is a close relationship between the words for the various activities aimed at making land productive and fertile and those for marriage and its various aspects, which in a like way are regarded as rendering a bride productive and fertile. The words in question are derivatives of the verb sakap. So the term nyakap tanah, in which nyakap comes from this verb, denotes the action of working a garden belonging to someone else. The garden is temporarily given under the métayage system to someone (always a man) to make it fertile and productive. The form masakapan, on the other hand, indicates a number of rituals relating to human fertility and to the recognition of new infants as descendants. Masakapan is also a common designation for marriage. The underlying idea is that women, like land to be worked, are given away in marriage for their husbands to make fertile, thus ensuring progeny for their lineage.21

_Masakapan beling_ is a ritual performed by a married couple to mark the seventh month of pregnancy. The couple asks their dead ancestors as well as the living elders of the family for recognition of the child the woman is carrying in her womb. The foetus from that moment is regarded as a full human

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21 In Nusa Penida, as well as Bali, procreation is the object of all marriages. A newly married couple is not regarded as a family until the birth of their first child. Lack of progeny is viewed as a sin, and it is said that couples who have refused to have children are condemned to be hanged from bamboo trees in Neraka (hell) after their death (see, for example, the relevant painting in the eastern part of the Kerta Gosa in Klungkung, or Warsika 1986:21).
being. The child is evidence of the woman's fertility. This ritual is similar to the rituals performed by farmers for the rice or corn at a point when the plants are considered to be 'pregnant' with the new harvest.

*Masakapan cucu*, a ritual similar to *masakapan beling*, is performed by grandparents for their grandchildren. In this ritual, young infants are recognized as legitimate descendants by the older generation. Again, new generations are viewed as a sign of the fertility of women, which is activated by and finds full realization in marriage.

*Masakapan*, in the Balinese context, is a quintessential manifestation of individual and collective fertility. Concern over fertility of the land and that over continuation of the lineage are expressed in the same way. Human beings as well as land, whether cultivated or uncultivated, are made fertile in a similar way. The conceptual similarity upon which the analogy appears to be based in Balinese thinking is that between women and land. Land, or earth in a very general sense, is conceived of in Nusa Penida as well as in Bali as a woman and mother, named Ibu Pretiwi, who is the ultimate symbol of fertility. Plants and crops are believed to be the product of the relationship between her as the earth and Akasa as the sky. People say that rain, equivalent to male sperm, is the element that activates her fertility, thus making the life of the crops and vegetables that are useful for humans possible. In this way of thinking, human beings and plants are brought into being in the same way.

This interpretation of the emphasis on the fertility of land, crops and humans gives rise to some problems in the current anthropological discourse on Bali. Barbara Lovric, in her doctoral thesis, argues against the idea that the principal periodical Balinese rites originate in a concern with agricultural fertility and abundance. She suggests instead that the main aim of these rites is a preventive one, as they are primarily concerned with the prevention of a number of diseases affecting the island's inhabitants. About the relationship between the Balinese agricultural system and Balinese society and ritual she writes:

22 There is an area in the centre of Nusa Penida where there is still dry-rice-growing. The names for the ritual in connection with the pregnancy of the rice vary from place to place. In the *banjar* Batuguling area it is called *aturan idaman*, in which *aturan* designates the presentation of offerings, and *idaman*, derived from *idam*, the cravings of pregnant women. In the *banjar* Tulad area the ceremony is called *miburin*. Interestingly enough, the same name is used for a rite for the well-being and 'pregnancy' of the corn in Sakti, where the corn spike is considered to be pregnant with the new harvest, too. *Miburin* involves the presentation of rice porridge (*bubuh*) and implements to the rice or corn plants to foster their growth. On this issue, see Giambelli 1995: chapter XIII.

It is axiomatic that the fundamental will to survive is common to all organisms. The imperative to do so is manifest in certain actions, generally ritual and prescriptive. Communities tend to focus attention upon, and culturally elaborate matters of crucial concern. These may relate to sustenance, in which case there is likely to be a cultural emphasis upon agricultural fertility, rainfall and their contingencies, drought and famine. Animal fecundity is another focus of concern related to sustenance. Bali's fertile volcanic soil, superb drainage and reliable rainfall have made agriculture less problematic than almost anywhere else in the archipelago, including Java (Geertz 1980:8). For the Balinese, the perceived substantive danger of ritual omission is not that the crops will fail or that there will be no rain but that epidemics will rage and deplete the population leaving insufficient people to tend crops and produce sufficient food to sustain life. Historically, people and their labour have been the essential resource. The debilitating effects of disease and the decimation of the population engaged in labour-intensive sawah cultivation have constituted a crucial issue and a theme of historical literature. Similarly, motifs in visual representations do not display concern with animal fertility or fecundity. Protective symbolism is directed primarily towards the immediate physical well-being of the human population; human fertility, survival of the hazards of infancy, the attainment of puberty and successful procreation. (Lovric 1987:430-1. Italics mine.)

Although I have sympathy for Lovric's work, I have two major problems with the argument developed in this quotation. The first concerns the assumption that 'Bali's fertile volcanic soil, superb drainage and reliable rainfall have made agriculture less problematic than almost anywhere else in the archipelago'. This is an incorrect generalization, as these conditions obtain solely in the southern parts of the island, and certainly not in Nusa Penida or in the north-eastern parts of Bali (for example, to the north of Gunung Agung) or the Bukit area. I should point out here that, although the culture and socio-economy of Nusa Penida undoubtedly place it in the Balinese world, its ecology and agriculture show greater similarities with Eastern Indonesia. The second problem is that, as I have shown in this paper, both human and crop fertility are central in the preoccupations of the people of Nusa Penida, and the two are closely related. This does not imply that the people here tend to worry less about health or ill-health or to express their preoccupation with this in less significant ways. The obvious conclusion here must be that the fertility of land and crops and human fertility and concerns about health and ill-health cannot be regarded as mutually exclusive or antagonistic categories. Fertility of the land bears a relation to human, social reproduction and goes hand in hand with human fertility and a preoccupation with human health and ill-health. Thus, the protective symbolism

On Nusa Penida agriculture see Giambelli 1995. Central to this issue is the problem of to what extent a productive system is or may be part of the culture. For reasons of space this theme is not developed here.
extends both to human beings and to crops. This appears to be the more true when we consider the metaphorical associations between human beings and land.24

Conclusion

This article has focused on forest clearing, basic farming practices, and the way a link is established between people and land and the tillage of land. The common denominator between these elements is fertility and the concepts and beliefs connected with it by the people of Sakti.

The paper has pointed to the role of nature spirits as the original owners of the forest. In this connection, the transformation of a pre-existing landscape is effected through the ritual appeasement and domestication of the spirits of the forest, and by clearing the forest and erecting fences in a space previously perceived as undifferentiated wilderness. Both practical and ideological concerns foster this process. The creation of a garden involves the demarcation of an area of land and the establishment of two different realms: the realm of the uncultivated and that of the cultivated, the domains of spirits and human beings respectively. However, in the Nusa Penida context these realms are never completely separated, and a balance must be struck between them in the laying out of a new garden. Central to the activities involved are the mapuun ritual and the babad process. Observations on babad point to an analogy between forest clearing and other aspects of Balinese life, such as in connection with the beginning of a particular activity, or with stories or plays. As babad literally designates the process by which a new patch of agriculturally productive land is created, it may denote by analogy the individual history of those who own and have cleared that land. In this sense the history of the land becomes the history of the people who have cleared the land and made it agriculturally productive.

Furthermore, it has been shown how agricultural activities like planting and concern about the fertility of the soil in Nusa Penida display certain parallels with other regions in the Indonesian archipelago. In particular, ideas about fertility, the perception of the role of women, the concept of Ibu Pretiwi, and the use of the term masakapan both for a marriage ceremony and for a series of rituals focused on descent point to an affinity between notions about the productivity of land and the reproductive role of women.

In conclusion, it is interesting to note that the comparison of women to

24 On this issue see also the discussion of the link between human and plant fertility and metaphors linking human beings and the coconut palm in Giambelli 1998 and Giambelli forthcoming.
land, and of the activities required to make a woman fertile through marriage
to the work required to make land fertile is not unique to the Balinese world view. It is a concept shared by many societies, among them ancient Greek society. In this connection it is worth quoting Vernant, who says:

For the Greeks, in fact, marriage is similar to tilling, where the woman is the furrow and the man the tiller. If a bride did not, through marriage, become like tilled earth, agricultural soil destined to bring forth crops, she would not be able to bear worthy and welcome fruit, legitimate offspring in whom the father could recognize his own seed, which, through tilling, he has planted. Demeter, the goddess of agriculture, is equally the guardian of marriage. When entering into wedlock, a young woman enters the realm of the divinities protecting crops. In order to set foot and remain in this realm, the bride must strip herself of the "savage" element that is intrinsic to womanhood and which, as manifested by the two opposed forms it may assume, might cause the bride to totter and fall on either side of the line of marriage – on the side of Artemis, into abstinence from sexual intercourse, or on the side of Aphrodite, into unrestrained licentiousness. (Vernant 1975:XV; my translation.)

The idea of the dual nature of the female sex, balancing between asceticism and wild eroticism, with women finding their proper place in marriage, is also clearly embodied in the Balinese pantheon in the figure of the analogous Ibu Pretiwi, who as the wife of Akasa embodies the asceticism of Dewi Sri, and in her other manifestation the unrestrained sexuality and its attendant dangers of Rangda. This point is discussed in more detail in Giambelli 1995: chapter VIII, and Giambelli forthcoming.

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