### MAGIC GARDENS IN TANNA

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Magical thought is not to be regarded as a beginning, a rudiment, a sketch, a part of a whole which has not yet materialized. It forms a well-articulated system, and is in this respect independent of that other system which constitutes science. . . . It is therefore better, instead of contrasting magic and science, to compare them as two parallel modes of acquiring knowledge. Their theoretical and practical results differ in value. . . . Both science and magic, however, require the same sort of mental operations and they differ not so much in kind as in the different types of phenomena to which they are applied.

Claude Lévi-Strauss The Savage Mind

Tanna, an island in the southern part of the Melanesian archipelago of Vanuatu,¹ occupies a special place in the ethnological literature of the South Pacific because of its peculiar history. I worked on this island in an ethnogeographic capacity in 1978 and 1979, staying in villages located in the northwest (Loanatom and Imanaka) and then in the central part, called Middle Bush (Lamlu). My purpose was to study traditional land tenure through the mapping of customary territories (this research was published in Bonnemaison 1985, 1986, 1986–1987). Along the way I discovered the magic gardens of Tanna.

In the first two decades of this century it was thought that Christian-

ization of Tanna was practically complete. "Pagan magic" seemed to have disappeared and "Christian order" reigned over the island, enforced by a sort of militia of zealous neophytes anxious to impose by force the new moral concepts of Presbyterian theocracy and monotheism (see Guiart 1956; Adams 1984). As in many other Pacific islands, traditional culture and a whole civilization seemed forever extinguished and the transition to a "modern" society irreversible.

On the eve of the Second World War, however, the people of the island made a sudden about-face and returned in a body to magic and to their old values and beliefs. To do so they invented a new religion based on a new messiah: John Frum.<sup>2</sup> This messiah preached that the white man's church should be rejected. The power of the Melanesians as producers and masters of nature reemerged. The return to traditional magic, seen both as an explanation of the world and as a means of controlling the supernatural forces that animate it, took many forms: divination, traditional medicine, magic to control the climate or the land's fertility, the multiple powers of leaves and stones, and so on. It also had the direct result of giving new strength to traditional gardening based on sophisticated and intensive methods.

If Tanna's traditional gardens are still, today, overflowing with beauty and abundance, they owe in part to John Frum their return to their magical foundations. They are beautiful because they are "traditional," and "traditional" because they are magical. The link, which in Tanna joins the cultural revival of tradition to that of magical thinking and its application in the field of gardening, is fundamental. The constructed landscapes formed by traditional gardens, and their symbolic arrangement, are illustrations of this.

# **Magical Space**

Tanna itself is a sort of "pantheon," a polytheistic space peopled with an infinite number of spirits, divinities, and cultural heroes. Networks of places, where magical rocks or stones called *kapiel* are to be found, cover the land and scatter it with supernatural forces. It is in these sacred places (*ika assim* in the Lenakel language of the western part of the island) that the lineages responsible for the essential magical functions sprang up. Alongside the human population, a mythical people of dangerous beings with deformed bodies and of short stature, the *yarimus*, also emerged from the stones. Guarding the land of the stones, they come out at night and wander through the forest.

No big magic stone on the island is without a lineage that springs

from it, and in the case of the most essential of them, a whole network of lineages. Conversely, there is no descent group without a place or network of places and stones within its territory to which it can trace its attachment directly or indirectly. Each big sacred stone (*kapiel assim*) is thus both the foundation of the lineage and the place of emergence of the magical and territorial powers of the human group that draws its essence from it. So between humans and the magic stones there exists a filial relationship and a relationship of shared power: Humans are the children of stones.

In this type of society, magical space subtends social space. The proliferation of humans with their status and powers refers back to the territorial grid of significant places. The earth is a sacred book, a semiological structure that by constructing space also constructs society. On Tanna then, society is reproduced within a mythological explanation of the creation of the world. Rootedness in a place is further reinforced by magic that attaches people to stones.

The forces of garden magic are localized in a territorial network of stones and places from which this power gushes forth.<sup>4</sup> All these places are dedicated to Mwatiktiki and are inhabited by his spirit. This "god" with the Polynesian name is considered to be the "god of food" and the master of all fertility magic: It was he who sent "hot" food to Tanna, which came in the form of magic stones from the island of Lapnuman, his kingdom.

Garden magicians are called *naotupunus* and are the human faces of the fertility stones. There are as many magicians as there are places dedicated to Mwatiktiki. The result is an extraordinary diffusion of the magical function; practically every residence group has one or more garden magicians. The political unity of the clans and residence groups is symbolized by the *niko*,<sup>5</sup> a little wooden canoe a few centimeters long in which the magic fertility stones belonging to a local group are kept. These stones fit into the palm of the hand. Sometimes they are roughly the shape of the yam or taro tuber, the breadfruit, or the banana they are supposed to render fruitful. Each has its name and its own magic connected with a plant or one of its cultivated varieties. The missionaries or their followers threw into the sea many of these magic stones between 1900 and 1930. They organized "parties" to look for stones still in the possession of the pagans. When found, they walked in procession to the sea and threw them away.

The magic stones contained in the canoe draw their power from specific magic places and rocks. One of them for a given area and for each specific plant or variety represents the source of all the others. This pri-

mordial place is the focal point of a magical creation, and the center from which emerges the lineage of magicians in whom the power is crystallized. This idea is expressed in Bislama by the word *stamba*, which comes from the English "stump," the base of a tree. All magic is connected with *stamba* scattered throughout the island. From this primordial place and from the original rock there spreads a network of places of secondary emergence where other magical "canoes" and other magicians are found. They officiate with their own stones but recognize the primacy of the primordial stone and place.

Thus, magical space comprises an infinity of sacred places, each of which is placed in hierarchical order in relation to a few central poles. They form a pattern of links, a series of chains that crisscross the island from one side to another and give rise to political territories and the clans rooted in them. At each nexus there is a garden magician, usually the oldest member of his lineage. To him falls the redoubtable honor of awakening the magical force of the stones.

## **Magic Stones**

The beauty and fertility of gardens are the outcome of an initial magical piece of work. Magical power is vested first of all in a man—the garden magician—and in a place—the sacred garden made by the magician. The magical power then spreads from there throughout the group's territory and that of its closest allies, giving life and vigor to the other gardens, which reproduce on a larger scale the initial model of the sacred garden. Thus, the magician's task is first to awaken the power in the stone, then to prepare the sacred garden that will concentrate its power. In order to do this, he goes into seclusion as soon as the time comes for clearing and burning.

Now the magician must focus on developing his magic and become a being invested by the stones, a "tabu-man," or sacred man. He has withdrawn from the world because it would be dangerous both for him and for laymen if he met and mingled with them. Any relations with the world of women are particularly forbidden. The magician sleeps alone, observes food prohibitions, eats only "hard" tubers prepared and roasted by himself. He refrains from drinking anything except his evening kava, which he drinks alone near the spot dedicated to Mwatiktiki. After a certain time spent living in isolation, and with the nightly semi-intoxication of kava, the magician gradually enters a secondary state in which he behaves strangely and which is conducive to visions and contacts with supernatural forces.

The magician awakens the powers of the stones by "washing" them in the little wooden canoe in which they are kept. For this purpose he uses water from a sacred spring, resurgent stream, or a particular place on the seashore within the stones' territory. Then he rubs them with a special assortment of leaves and tree barks. In the case of stones dedicated to yam growing, the magical assortment must always include the leaves of the nangarie (Cordyline sp.), which are Mwatiktiki's personal emblem. The magician spits on the stones and leaves, and repeats incantations: The water, the plants, the magician's breath and saliva will then awaken the power of the stones. Afterwards, the wooden canoe is buried in the magician's sacred garden, where only he and his closest relatives may work.

Each of the tasks carried out by the magician in the sacred garden is then repeated by all the other members of the community in their own gardens. In addition to his supernatural function, the garden magician appears to be a veritable guide to traditional gardening. He is also a sort of master of agricultural technology.

His so-called magical tasks end with the "first-fruits" celebrations. In the case of vam growing, this festival is called the *kamaru nu*, "attaching the vams." When the vines flower, the magician takes the first vams from the sacred garden and distributes them among the members of his residence group. In exchange they "pay" him for his work with a banana lap-lap, a pig, a fowl, or a kava root. After this the magician once again becomes a man like any other; he can at last sleep with his wife, drink water, eat lap-lap and "soft" foods. His segregation will have lasted six months, from the garden clearing in August to the firstfruits festival in March or early April. The sacred garden is then abandoned; whatever has not been consumed on the day of the first fruit is left to the wandering spirits. Simultaneously, prohibitions affecting other gardens are lifted, particularly those that during the periods of the beginning of fecundation make it taboo for children, menstruating women, and men who have recently had sexual relations to walk through them. So, in the now-open gardens, begins the time of consumption, feasts, and ritual exchanges.

In the past, magic was performed every year to ensure the continuance and abundance of the harvest. For the magician it meant fame for good years, a thankless task for bad ones, and a real danger, should some disaster overtake the gardens, for instance, hurricanes or nasty tribal wars. Nowadays, magical functions tend to be simplified. One man, rather than several as in the old days, takes on the task and observes the taboos, often helped by a biological or adopted son who is

destined to succeed him and whom he initiates into his future functions. As a general rule, complete segregation is observed only in years when a very important ritual is being prepared, which involves calling upon all the available magicians within the area of a group and its allies. In ordinary years, people are satisfied with a more flexible ritual and segregation for a few days only, during which the magician "washes" his stones and plants his yams in the sacred garden.

Such magic practices exist (or existed) for all plants traditionally grown in gardens—for example, yams, taros, bananas, kava, native cabbage, and sugarcane. There are also magical practices for traditional pig raising, for the diseases of pigs, their proper growth, and their safe return in case of loss. Yet others are used for hunting, fishing, and dealing with the rats that may wreak havoc in gardens, for war, for love, and so on. The list is virtually endless, and each group has its techniques, its stones, its own traditions. Between one village and another such special magic practices can be loaned, exchanged, or traded; a magician is often a man with hardly a moment to himself because he works not only for his own people but for a whole alliance.

## **Traditional Yams**

In Tanna, where the yam reigns, the traditional classification covers more than a hundred recognized clones. These clones are not true botanical varieties but cultivars, kinds of hybrid cultivated strains obtained by chance in the course of gardening and then carefully selected and reproduced by the gardeners (Haudricourt 1964; Bourret 1982). Each has a proper name and is linked with magic places and stones that individualize it. The most important have a mythological origin and a place of first appearance. These clones can be broken down into four families, arranged hierarchically according to the position occupied in exchange rituals. For example, the first set of classification criteria apply to the tuber—its shape, size, color, consistency, whether it is smooth or hairy—and the second to the appearance of the aerial vines—the shape and color of the leaves, and whether or not aerial bulblets are present.

The yams ranked at the top of the traditional hierarchy are those with the longest tubers. They are nu, or true yams, and when carefully tended may reach up to 1.5 or 2 meters in length and weigh 30 to 50 kilograms. To the botanist these yams are all *Dioscorea alata*, easily recognizable by the small vegetal wings that form ribs around the aerial stem (Barrau 1956). Each large cultural area of the island has its own

classification and preferences.<sup>8</sup> The large yams at the top of the ritual classification system are always put at the base of the *niel*, a pyramid-like pile of yams topped with kava roots and, nowadays, lengths of cotton cloth, which are presented in the middle of the dancing ground during traditional exchange rituals.

Traditional classifications place the "short yams" or *nowanuruk* next. These have tubers that are usually of irregular shape, with "fingers" like a hand, or curved. These short yams are cultivated in honor of the big yams and, it is said, to serve them as a retinue, so they are placed at the top of the *niel* pyramids, resting directly on top of the big yams. The number of clones is large, greater than in the case of the *nu* yams. The short yams form an important part of the daily diet, and people seek to obtain large quantities rather than concentrating on size.

Round yams, or *nowanem*, comprise the third traditional group. For the people of Tanna, they are not true yams but tubers of a secondary species, sometimes grouped with the potatoes and sweet potatoes brought in with European contact. They are not, therefore, used in ritual exchanges but purely as food. Formerly, they played an important role as a stopgap because they could be harvested early—in January or February when grown according to a quicker cultivation cycle. Most of these yams, especially those with small, numerous and very sweet-tasting tubers, are part of the botanical group called *Dioscorea esculenta*.

Finally, there are the "wild" yams, nelakawung, which grow on the edges of gardens or in fallow ground. These types of "strong" or "hard" yams are particularly appreciated on other islands in the group, in north Malakula for example, but on Tanna they are merely gathered where they are found. Although people like their taste, wild yams do not, to my knowledge, have any primordial magic places or true lines of magic connected to their reproduction, and this distinguishes them from the other three groups. They are recognizable by their round, hard, and sometimes spiny aerial stem. Some are Dioscorea nummularia, the others from part of the Dioscorea bulbifera botanical group.

This classification into a hierarchy of four families is found throughout Tanna. <sup>10</sup> Each local group tends to place the clones that "appeared" on its own land at the head of the classification. As a result of social solidarity, every residential unit is integrated into a larger political and cultural entity that has its own set of magical places and stones—a varied assortment of clones that forms the "biomagical heritage" of the corresponding territory. The hierarchial arrangement of clones rests on the principles of localization. The more "local" a yam is, the more highly it will be considered by the clan that holds its place of origin and possesses

its fertility magic. It will be found to dominate in numbers and in ranking in the gardens and in the *niel* of the exchange rituals of that place.

The principle of clone localization is still observed, even though today there is a stronger tendency to mix clones together and "pool" them. Gardeners do not reject clones that are "foreign" to their territory, in the same way that they accept all the new plants introduced as a result of contact with the outside world. But they do distinguish them from those that are part of their heritage. The latter are the custom plants; they have to do with traditional magic and gardening. The others are aliens and lie outside the domain of magic and tradition. Sometimes the aliens tend to be the most numerous, but they do not form part of the "real" garden; culturally speaking they are marginal even if dominant economically.

# The Garden's Magical Center

The coexistence of traditional and alien plants results in a dualistic garden organization. In the center are the cultural plants of the biomagical heritage and on the outskirts are the profane food plants.

A traditional garden is in fact organized according to a core-periphery pattern. The infusion of magic, the type of gardening that requires special knowledge and is for ceremonial purposes, is carried on at the core. Successive circles of yams, then secondary plants of decreasing cultural value for which simpler gardening techniques are used appear towards the periphery. The proportion of a garden devoted to the ceremonial heart reflects the strength of tradition in the region, but the balance between the two kinds of gardening may vary from year to year according to the importance of the rituals being prepared for. The ceremonial heart is a conservatory of traditional clones and of the cultivation techniques proper to them. The big yams are planted in big mounds called toh. Around these is an inner circle of smaller mounds called toh toh inio. On the fringe, yams called kopen predominate; these are planted straight into the ground without mounds or preparation and usually mixed with other secondary plants, such as manioc or taro, while a ring of banana trees encloses the whole garden and marks its outer limit.

While the "knowledgeable" and intensive gardening at the center is carried out on the basis of rigorous selection of clones and varieties, the simplified gardening at the fringe includes a much more diverse set of clones, many of which are new, introduced species. At present, there tends to be a conflict between the core of the garden that remains a

"true garden" and the periphery, which is a "modern" area with a large and heterogeneous range of plants.

Considerable variations exist today from one garden to another, from one village to another. Some gardens are still traditional while others become more and more modern, similar to those in other parts of the archipelago. But traditional agrarian practices still remain strong on Tanna and can be observed. Gardeners take the principle of classification of cultivatable varieties to its limits. Their horticulture specializes in fully developing a few clones, and each plant is seen as an individual to be surrounded with personal attention. In this way the gardeners seek to attain aesthetic perfection: The planting of ceremonial yams is something of a work of art. Overall, the Tannese garden is a mosaic, an accumulation of mounds each of which is a different ecological niche and an artificially reconstructed microsite.

The traditional mound or *toh* varies with the type of soil, the value of the clone it contains, and the skill or imagination of whoever builds it. Each gardener can give free rein to his sense of aesthetics when planning his garden or making his mounds (see figures).

# Simplified Gardening

While ritual cultivation of *toh* yams only involves big *nu* yams, the "profane" cultivation of edging yams (*katuk toh*) that formerly only involved round yams (*nowanem*) today makes indiscriminate use of all yams grown just for food. Such yams are planted without mounds or holes by a method called *kopen*, meaning "to dig in." A small piece of seed yam is simply buried in soil that has not been turned over but merely broken up with a digging stick. Usually little or no mound is made for the stock yam. The yield of each stock is small, an average of 5 kilos of tubers, whereas a traditional mound will yield 40 to 50 kilos. Much more land is used for this kind of cultivation since low productivity is offset by increasing the planting area. The only advantage of such extensive plantations is that they require much less labor.

Formerly, kopen gardening was limited to the outer edges of a garden or a mound. Kopen yams, in fact, formed a sort of buffer zone between the toh and the outer circle of bananas, wild yams, and often taro. Today, kopen gardening is becoming more extensive while the traditional, magical method is decreasing. The profane periphery is silently encroaching upon the sacred core. This development is particularly marked in certain densely populated coastal parts of Lenakel and White Sands where, in many cases, the magic heart of the garden is disappear-



FIGURE 1. A newly planted yam garden near Imanaka (northwest coast). In the center of the garden are the bigger yam mounds called *toh*.

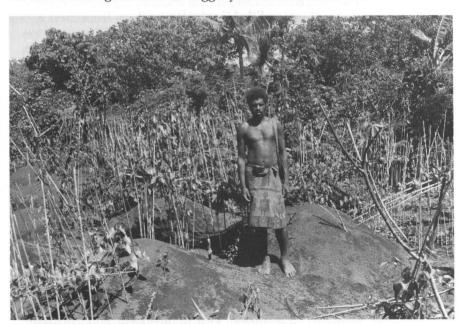


FIGURE 2. The flourishing of a yam garden near Loanatom (northwest coast). The ceremonial heart of the garden is a conservatory of traditional clones and of the cultivation techniques proper to them.



FIGURE 3. Yam stakes in a garden in east Tanna (White Sands). After building mounds, people construct the reed stakes to support the yams' long aerial vines. Tannese gardeners seek to attain aesthetic perfection: The planting of ceremonial yams is a work of art.

ing completely. The vegetable garden then becomes what it is already in many other parts of the archipelago: a "desacralized" garden that contains many different plants without a fixed spatial order and is cultivated more extensively (see also Ward and Proctor 1980).

### **New Gardens**

In the villages near the sea, which have mostly opted for modernity, the disappearance of garden magic involves in effect the abandonment of intensive agriculture and the gradual replacement of local plants and varieties by food plants imported at the time of European contact. Such plants are easier to grow and some have the advantage of being harvestable throughout the year.

In modern gardens, introduced plants are in the majority, especially manioc, but also sweet potatoes, *Xanthosoma* taros (locally called Fiji taros), maize, citrus, pineapples, and, frequently, vegetables of European or American origin (potatoes, tomatoes, onions, and so forth). These plants are mixed together in no particular order, except that low-growing plants benefit from the shade of taller ones. The principal criteria for selection here are economy of labor and ease of cultivation. The plants are cultivated simply by burying them without the addition of compost, and yam mounds have disappeared.

This kind of modern gardening represents a definite agricultural "disintensification." Yam harvests are up to five times greater when the *toh* method is employed. Smaller yields lead to an increase in the amount of land devoted to multiplant gardening. However, in coastal regions, where there is a growing shortage of land as a result of population pressure and the development of commercial coconut plantations, expansion of food gardens can only occur at the expense of fallow periods. In the absence of fertilizer or compost, there is progressive exhaustion of the volcanic soils, which, although rich, nevertheless have a fragile physical structure (Quantin 1980). Fallow periods of eight to ten years were usual in the past. These days, due to extensive horticulture in many coastal areas, they have been reduced to two or three years.

This reduction has numerous consequences. The drop in productivity of food gardens cannot be compensated for by income from cash cropping, coconuts, or the infant cattle-breeding industry, none of which produces more than fluctuating and unreliable returns. In other words, modern areas are gradually losing their self-sufficiency in food without gaining in return a commercial benefit that makes up for the loss. Therefore, present "development" must lead to a dual imbalance, eco-

logical and social; the loss to the Tannese is immense. Because land is scarce, it is divided up more and more, leading to incessant and innumerable conflicts over boundaries and the right to occupy plots as "owner." In short, a new kind of society is emerging in a new landscape, this time a profane one, that of extensive gardening. It is neither traditional nor modern, but appears to have become locked into a cycle of increasing poverty. Those who, at the outset, opted most wholeheartedly for cultural modernity now seem to find themselves in an impasse in the very context of modern economic and social values. Their only consolation is that a little cash circulates among them and they consider that they spend less time in their vegetable gardens than previously.

The traditionalist groups on the island have adopted a dualistic economic structure, and in the middle of their "extensive" gardens or apart from them they still have an assortment of toh or toh toh inio mounds of various sizes. In the John Frum village of Imanaka the two types of gardens are kept separate. Each family makes one or two small toh plots of about 100 or 150 square meters each, and alongside it or at another site. one or two large kopen gardens with many plants, of an average size of 1.000 to 1.500 square meters. The relative proportion may alter in favor of toh gardens in years when some ritual is planned. Such dualism, combining extensive food growing and cash crops on some land with intensive food growing based on magic on other land, provides a certain balance. The door is kept open to modernity, without compromising food self-sufficiency and a surplus of ritual production for the purposes of keeping traditional society going. In the particular context of Tanna, the magical foundation, by making it possible to maintain intensive ritual gardening, forms yet another factor of social and economic stability.

### The New Sexual Division of Labor

A further consequence of modernity is that more of the burden of garden work falls on women, whereas formerly (and still today in traditional society) agricultural labor was divided more or less equally between the sexes.

Hard and painful work requiring strength was traditionally done by the men, such as the clearing and burning of land for gardens, and previously, the construction of fences to prevent pigs wandering in, digging holes, and building *toh* and their cane tutor frameworks (Fig. 3). On the other hand, maintenance and routine tasks like hoeing, keeping the gardens tidy, harvesting small *kopen* yams for everyday consumption, and the simplified care of secondary or imported plants were women's

work. Thus the traditional division of space in the gardens was connected with a sexual division of labor that guaranteed a certain equality in the amount of time spent by men and women on garden work.

In the traditional view, the harmony of the world rests on the separation and equilibrium of contraries, and particularly on the duality and complementarity between the principles of hot and cold. A misfortune or an illness is explained as a break in harmony, the excess of one principle over the other, or by the mixing up of two opposing principles (Wilkinson 1978; Lindstrom 1981). The function of magic is to reestablish balance in a bipolar world by restoring the previous harmony; the aim of fertility magic ultimately is to recreate from the beginning the original harmony that allows food plants to be fruitful. In the context of this magical thinking, men represent a hot concept, women a cold. The magical act itself, in that it constitutes a gesture of power, belongs to the masculine world of heat and is, hence, forbidden to women who belong to the cold, the contrary concept.12 As a result, intensive ritual gardening, a magical activity, calls for a man's hand while extensive subsistence gardening, a profane activity, calls for the hand of a woman. The numerous prohibitions restricting women's access to the heart of the magic gardens during periods of vegetative growth, or forbidding even men from entering a garden after sexual intercourse, are explained by this rule of necessary harmony between the principles. Similarly, as we have seen, the magicians abstain from any relations, visual or tactile, with the world of women throughout the entire period of their magical creativity.

Consequently, there is a division of labor that corresponds to the spatial division of the garden's sacred center and profane periphery, and a sexual division of labor based on the distinction between hot-masculine and cold-feminine. It is in compliance with these principles of "dialectical" separation that the original harmony, which allows gardens to be fruitful, depends.

The principle of separation is still maintained today but in a changed agricultural context. The relationship between the two types of gardening is out of balance and the original harmony of the amount of time spent at work has been broken. When the sacred center of the garden shrinks, or disappears altogether, the profane periphery takes over. Men, whether or not they are traditionalists, desert the garden. It thus becomes an essentially feminine place of work. The ancient harmonious work relationship has been transformed into an unequal relationship in which women tend to be the losers.

This tendency is particularly marked in modern areas where intensive

ritual gardening tends to have been reduced to its simplest expression. Men devote themselves to "noble" activities that give access to the new power: money. They cut copra and sell it, look after cattle, maintain fences, sometimes cultivate market gardens, the produce of which is intended for sale, and apart from this, when they can they go to Port Vila, eventually Noumea, looking for work. Meanwhile, the whole burden of day-to-day work in gardens where food is grown for daily household consumption—in other words the real economic activity of survival—falls on the women. Planting, looking after the garden. harvesting, and carrying roots and firewood to the village are now women's work entirely. Men only go out to the gardens when it is time for clearing bush, and unless they are building toh, they often disappear again afterwards. They then go back, apparently with relief, to an economy that, while it does not produce abundance in terms of monetary gains, does give them plenty of leisure. In Tanna any such spare time is effectively filled up with numerous meetings to deal with land problems, politics, or pigs.

Hence, life is carried on as though modern society experienced a magical transformation. Values have changed but the same complex of mental attitudes persists. To be more precise, the pursuit of monetary gain is now seen as a valorizing activity and a sign that economic power has taken the place left vacant by the disappearance of traditional magic. In this regard, men have remained faithful to their own image: They are following the path of the new magic of modernity and its dreams. The women, on the other hand, continue to follow the traditional ways of the garden, and are finding their share of the work is increasing proportionately on land that brings no prestige and has no magic, as they go on with the extensive subsistence gardening that has always been their lot. This tendency is naturally less marked where traditional societies have retained their magical foundations. Custom still demands a large amount of work from the men, and production of the ritual long vams has remained a source of pride to them. In this case, sexual division of garden labor does not prevent maintenance of a certain de facto equality in the amount of time the two sexes spend in garden work. On the other hand, the disappearance of the magic dream and its replacement by the dream of modernity brings with it a growing imbalance that can only be redressed by genuine economic development. The principle of separation of men's and women's tasks has led to increasing inequality between the amounts of work expected of the two sexes. Since this has become the case the women have been feeding the family: they have not benefited from the change.

## Conclusion

For the traditional people of Tanna, the power of the magic stones activates the earth's fertility: Gardening is a ritual act. By accomplishing it they obtain high yields from a small area, preserve ecological balance, and have a production surplus available for exchange with their allies, thus fulfilling their social obligations. They pay for this attitude by having to work harder in their gardens, and, in a sense, by being pushed to the fringe of the modern world, out of reach of the promises it holds out and its symbols of power, money and consumer goods.

This resistance in the face of the modern world is not motivated by what we would call today a will to maintain "cultural identity" or by a dismissal of the modern world in itself. It is, basically, a belief in the powers of a magic that was lost while Christian rules held sway and then rediscovered. Traditional society and custom's gardens in Tanna continue to exist today because they are still underpinned by a living space through which there stretches a web of magical places, the repositories of ancestral belief in supernatural powers. For many people, it is those powers that must open the way towards the promises of a future whence will come abundance. They are waiting and hoping for material well-being just as much as the others, but to attain it they continue to put their faith in the way of ancestral wisdom. On the other hand, new society and new simplified gardens, which are the result of a drift away from magic, are based on a belief in other values and explanations of the world, perhaps on what we could call a modern "magic." The cultural space that underlies them extends beyond the island, it is sensitive and open to the winds of the world, which carry the idea of progress and change, but it is also more dependent and fragile.

Between traditional society, which seeks its destiny within the closed circuit of its own culture, and the society in search of modernity, which seeks salvation in the outside world's models and its economic and technical rationality, the debate continues. Tanna's gardens embody a choice of society and, even more, a different kind of belief. At the end of the day one may ask oneself who in the circumstances has made the right choice. The people of Tanna ask themselves the same question.

## **NOTES**

A French version of this article appeared under the title "Les jardins magique: le géosystème de l'horticulture vivrière dan une île mélanésienne du Pacifique Sud (Vanuatu)," in Le Développement Rural en Questions: Paysages, Espaces Ruraux, et Systèmes Agraires,

Maghreb-Afrique Noire, Mélanésie, ed. C. Blanc-Pamard et al. (Paris: ORSTOM, 1989), 461-482.

- 1. The island has now a population of almost 20,000 and covers an area of a little more than 560 square kilometers.
- 2. According to various sources, but still debatable, Frum comes from the English word "broom." The meaning here is obvious: John Frum is the one who is coming to sweep the island clear of harmful outside influences. The appearance of this local prophet in the south of the island set off a wave of repression by the Anglo-French Condominium authorities, which lasted until 1957 when adepts of this neotraditional religion were allowed a closely watched liberty.
- 3. In this way of thinking I am following the logic of Malinowski (1935).
- 4. Other territorial networks of places and stones on the island are connected with other magical systems and other powers. I shall only deal here with places connected with garden magic.
- 5. The concept of *niko* is essential to the understanding of the island's traditional social organization. The word has multiple uses: It designates the wooden platter containing the magic stones and the political territory in which the clan is rooted. The canoe is a metaphor for the local group and its independence. The most influential man in each group is called *yani niko*, "the voice of the canoe," that is, he who speaks for the others.
- 6. Kava or *Piper methisticum* is a plant of the pepper family found in the Pacific Islands whose roots have a narcotic effect leading to a sort of quiet inebriation and lethargy. The men of Tanna drink the juice from the chewed root every evening, considering it a religious act; kava puts them in touch with their ancestors (Lindstrom 1980).
- 7. Lap-lap is a traditional dish consisting of dough made from tubers or bananas mixed with coconut milk and cooked in an earth oven with hot stones. It is sometimes described as a sort of pudding.
- 8. For example, the *naravanua* yam, also found on the neighboring small island of Futuna, where a Polynesian language is spoken, is generally classified at the top in all parts of eastern Tanna. This yam is said to have emerged in the form of a stone from Yasur volcano, and a number of primordial places on the east coast serve to contain its magic power. In the western part of the island and in the White Grass area two other varieties are considered dominant yams: These are the *milu* and *kahuye*, which floated into the bays of Ipak and Loenpekel from Mwatiktiki's magical island, Lapnuman. Another yam is dominant in Middle Bush, called *nuya* or *nussua* in the local languages. According to Dominique Bourret (pers. com., 1979) this latter yam is also found on Mare Island in New Caledonia, where it has almost the same name, the *nuia* yam. The catalogue could be further enriched.
- 9. The people of western Tanna believe round yams originated in the northern parts where the primordial sources of their magic are to be found. They then appear to have spread to the south and center of the island through the intermediary of the Rakatne tribal group, which owns one of the sites of first emergence of a number of clones. According to other traditions, *nowanem* yams come from Ilmanga, a local west Tanna name for the neighboring island of Erromango, which is said to have acquired this yam variety and the corresponding magic stones in the course of very ancient exchanges.

- 10. A classification of a similar type is found in the Loyalty Islands on Mare (Dominique Bourret, pers. com., 1979). See also Doumenge 1982, a study of the Melanesian horticultural complex of New Caledonia that mentions comparable organizational structures.
- 11. This kind of planting apparently originated in the White Grass area and other areas of the coastal terraces, no doubt because it is difficult to build mounds there and also because crumbly soils lend themselves fairly well to surface growth of short or round tubers.
- 12. This principle of symbolic separation between hot and cold appears also to occur in the practice of traditional medicine studied by Bourret in New Caledonia. She writes that "certain barks collected on the east coast must be taken at the moment when the rising sun touches them; the same ones on the west coast, at the moment when the sun sets. These trees are called hot in the east and cold in the west, and they are used to treat opposite types of illness, also referred to as hot and cold. Hot, dry, masculine plants are used in the treatment of cold, wet, feminine illnesses, and vice versa" (Bourret 1982).

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