SOCIALIZATION FOR SCARCITY:

Child Feeding Beliefs and Practices in a Haitian Village

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" Grangou se mizè,

Vant-plin sé traka."

If your belly's empty, you feel miserable.

If it's full, you feel upset.

A proverb taught us by the children of Kinanbwa

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INTRODUCTION

In this report we will present a somewhat detailed description and analysis of the food-related beliefs and behaviors of a community of Haitian peasant cultivators located in the Cul-de-Sac Plain. Our intention is to synthesize for readers interested in Haitian peasant life a complex body of information which we gathered on matters specifically related to food. This entails descriptions not only of community nutrition beliefs and ideals but also of actual community behavior with respect to the preparation and distribution of food. Our hope is to present a clear, descriptive, dejargonized account of what people do to feed themselves and -- especially -- their children. This will entail delving into local belief systems on the one hand but also making clear the factors which produce increasingly common deviations from these beliefs and ideals. Much of rural Haiti is suffering nutritional stress, and one current body of opinion begins with the premise of nutritional ignorance on the part of peasants as an important cause of this stress. Our research findings simply do not accord with this guiding premise, and we will try to present our own description of what we found to be an impressively accurate understanding of human nutrition. The failure of the Haitian population to achieve nutritional well being is not due principally to defects in local knowledge or belief, but to factors lodged for the most part in a deteriorating rural economy.

This report is an elaboration of field materials gathered originally in 1971-1973, expanded by a second series of observations in the village during the summer of 1980. The original report submitted by the authors in 1973 (Childbearing, Sickness, and Healing in a Haitian Village) to the Division d'Hygiene Familiale has been updated in terms of its treatment of several food related matters, and in addition large sections have been added (some two thirds of the current report) concerning a number of nutritionally relevant behavior patterns not covered in the first report.

As in our earlier research we identify the community by a pseudonym, Kinanbwa. It is a lowland agricultural community whose men are engaged in a particularly heavy brand of the cash cropping that to some degree characterizes most Haitian peasants, and whose women carry on a particularly active form of commerce by traveling frequently to Port-au-Prince.

We have subdivided our information into twelve chapter headings, but have grouped these chapters into three major sections. Part One of the report will deal with the beginnings of life -- that is, with food-related beliefs and practices surrounding the sequence of biological events that begins with the conception of a fetus and ends with the weaning of a child. Part Two will then move analysis into the more general food system of the village, analyzing the different pipelines of food into the rural kitchen pot and discussing the factors leading to the rapid deterioration of these pipelines and the arrival of consequent hunger and nutritional stress as common elements in village life. Part Three will then examine the daily rounds of preparation and distribution of food in village kitchens.

Our methods in gathering the information spanned the gamut of techniques commonly used in anthropological research. Much use was made of transcribed tape recordings and verbatim reconstructions of villager explanations in constructing our model of food related components of the village belief system. Behavioral observations following children through daily rounds were also made. Information on actual feeding schedules and interhousehold differences with respect to food behaviors was gathered with the help of young villagers who were taught to observe and record in Creole activities surrounding the kitchen and cooking pots of their own kitchens. We gathered information on all the food served in seven households during a two week period using this method. And we gathered upper arm circumference data on village children as well as survey data on all village families, permitting the identification of several correlates of differential nutritional status in children.

We are deeply grateful to Linda Morse for her persistent encouragement to undertake this research and for her thorough support during the summer of 1980. We also thank her and Jerry Russell for their patience in awaiting this report, whose compilation proved to be physically longer and more time consuming than anybody involved could have ever anticipated. Our deepest gratitude and affection is reserved for Franjel, Ti Nono, Minouche, Jantal, Vadlin, Tchon and all of the other children of Kinanbwa who for years have enriched us with their affection and taught us about human physical and emotional survival and growth even under conditions as harsh as those prevailing in Kinanbwa.

PART ONE: THE BEGINNINGS OF LIFE

1. MATERNAL FEEDING AND GROWTH OF THE CHILD DURING PREGNANCY

1.1. Folk-Anatomical Concepts

Standard discussions of child feeding practices begin with the food that is given to the infant after childbirth. But in the village of Kinanbwa, there is a prominent series of beliefs, and an underlying folk-biological theory which guides village understanding of the development of the child. All human beings are believed to be born with two intestinal "sacks" (see Figure 1). The first is the sak manjé (the "food sack", also known as the gro sak), which is the repository of the food consumed by the individual. The second sack, which is smaller, is viewed as the repository of liquids. Village anatomy also posits two intestines (the ti-trip and the gro-trip). But these intestines are seen as beginning just beneath the throat. Food is carried from the mouth to the sak manjé by way of the ti-trip which starts at the base of the throat. From the small intestine, food passes on to the large intestine where all of the food is ground (moulin). It is only after the food is totally ground that the food enters the sak manjé, that receptable which English speaking people refer to as the "stomack". Liquids are also believed to pass first through the ti-trip, then through the gro-trip. But from there they are diverted on to the smaller sack, the blad. It is inside this latter sack that the liquids take on the yellow color that they will manifest when exiting from the body. In short, local folk-anatomical theory has several discrete elements that to some degree correspond to the elements identified by modern science. But the internal arrangement and inter-relationships of these elements are quite different form from that found in modern anatomical theory.

All human beings are viewed as having a sak manjé and a blad. But in addition females are viewed as having a third sack, the sak pitit, where the unborn child will lodge during pregnancy. (See Figure 1).

FIGURE 1

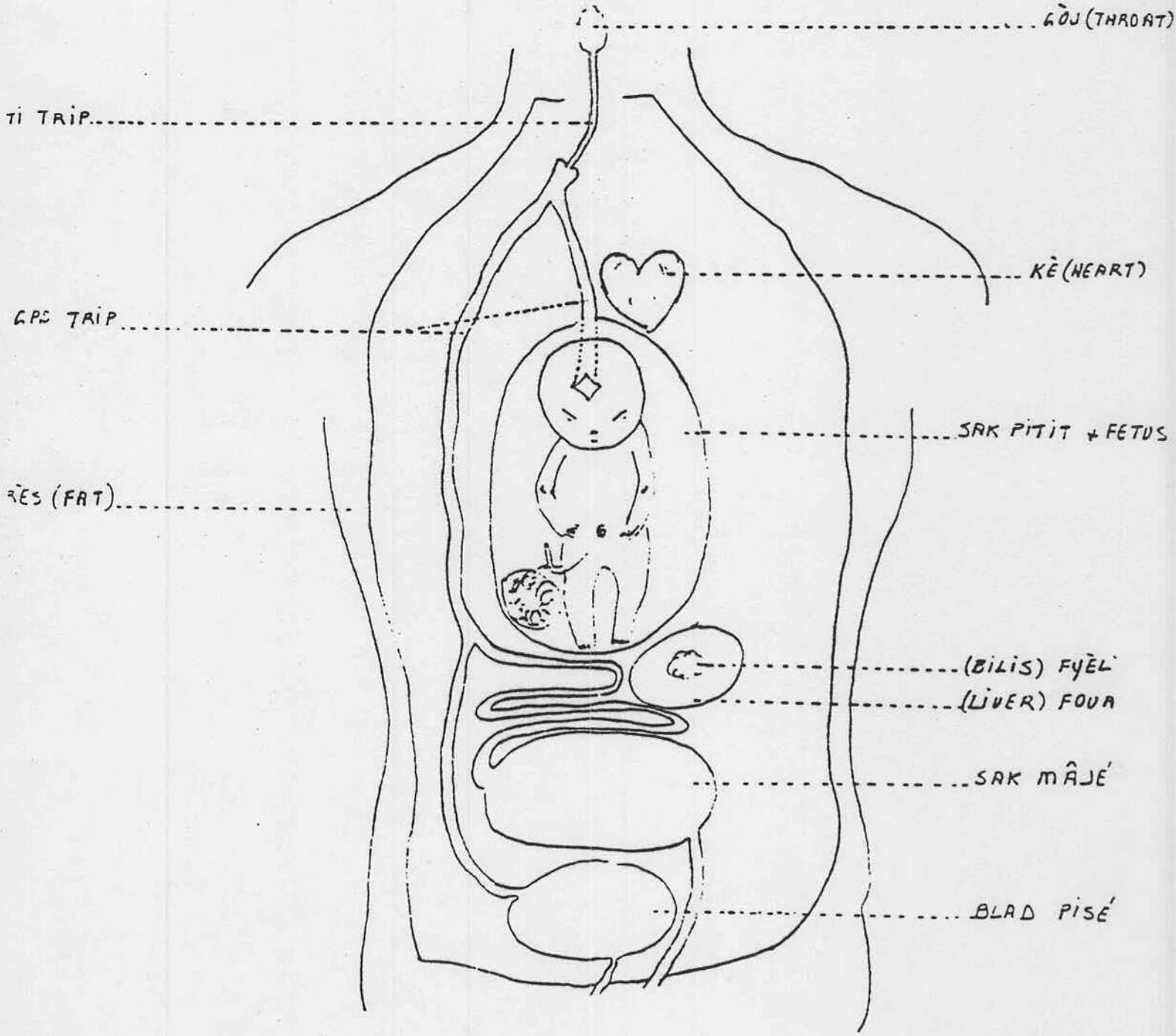


Fig. 1 Folk anatomy of a pregnant woman and fetus as elicited from a village woman

This sack corresponds to what in English is called "womb". The woman's placenta (mèt vant) are also lodged inside the womb, during pregnancy, and it is into the womb that the woman's monthly flow of blood will enter as nourishment for the child, the flow that would normally exit as her menstrual flow. The womb is completely closed except for an opening at the top, which connects directly with the large intestine.

1.2 Concepts of Fetal Development

The entire body of the woman is believed to be in a process of slow "opening up" during pregnancy. The opening is believed to affect principally her bones, to the degree where some informants claim that the bones can occasionally be heard shaking and rattling. In view of this salient belief, one of the major tasks that postpartum care will attend to is the re-closing of the body of the women.

As for the fetus itself, at the first stages of pregnancy, villagers believe that there is only water in the sak pitit. Within a brief period of time, however, this water will turn into a tiny ball of blood (ti-boul san). It is from this embryonic blood that other parts of the child's body will slowly emerge.

The first two months of pregnancy witness the gradual formation of the major parts of the child's body. By the end of the fourth month, all of the parts will be there, though the body is still very small. It is believed that the fetal development of a female will proceed more rapidly than that of a male. That is, though both will be born at about the same time, the female's body parts may be finished by the end of month three, whereas those of a boy may take a month longer.

It is thought that the body is completely developed by the end of month seven (li fini nèt). Some children are in fact born in their seventh month. Some people insist that no viable children are ever born in month eight. Children born in month seven can survive, but children born in month eight will assuredly die. If a woman delivers during the

eight month of pregnancy and the child does not die, the husband has every right to suspect that the child is not really his but was rather conceived by the woman with another man a month before the woman told her husband that she got pregnant from him.

Villagers will frequently talk about the growth of the fetus during pregnancy in the terminology of house building or in the terminology of sewing. In this case the architect and tailor is Bon-Dié (God). (The loua, the spirits of the folk-religious pantheon, are not believed to have a role in conception and fetal development. They can only have negative effects in these matters, according to village theology). God is veiwed as gradually adding pieces to the body until it is finished. The most commonly used verb is "koud" -- to sew. One by one God "sews" on the parts of the body.

It is strongly believed that growth occurs principally when the mother (and child) are sleeping. This particular belief is one which justifies ample sleeping during pregnancy (though there are countervailing concepts that say that the woman who sleeps too much will produce a lazy child). If the mother and child are violently startled from sleep, then the particular part of the child's body that was in the process of being "sewn" may be missing or deformed when the child is born. Thus there are strong norms against startling awake a pregnant woman. If necessary the woman can be awaken by gently touching, but not by violently shaking or loudly calling. This particular mother-protecting belief is merely one in a long series of similar beliefs and practices whose effect is to protect the mother and child before, during, and after pregnancy.

1.3. Cranial Feeding of the Fetus

The above complex of beliefs is intimately associated to a corresponding set of beliefs about the feeding of the child while in the womb. Local folk-theory may attribute the growth of the fetus to the silent hand of Bon-Dié. But people are simultaneously convinced that

the proper growth and development of the child in the womb is intimately linked to the food which it directly consumes from its mother. Comparing Kinanbwa traditions with practices which we have observed in other cultures, we are impressed with the explicit emphasis given in this Haitian community to the biological need for a high-quality diet for the pregnant woman.

The very position which the fetus eventually assumes in the womb is seen as being a feeding-related development. It is believed that the fetus spends most of its pregnancy in a standing position inside the mother's womb. The child is not "floating" in the sack, as modern anatomy would have it. Rather he is standing, his feet resting on the bottom of the womb and his head just beneath his mother's heart. It is only immediately before birth that the child will shift his posture to a head downward position in order to permit normal delivery. The upright position during most of pregnancy is in order to facilitate the direct feeding of the fetus.

When the woman is not pregnant, the entrance at the top of the womb is closed. All of her food thus descends through that branch of the intestine which by passes the womb, to enter directly into the stomach. But when the woman is pregnant it is believed that part of the food which she eats also enters the branch of the intestine leading into the womb itself. This portion of the food is then directly consumed by the growing fetus. The food enters the fetus not through its mouth, but through the hole which is at the top of its head. It is through this cranial aperture, via a branch of the large intestine, that food is transferred from the mother's mouth directly to the body of the growing fetus. Traces of this cranial opening can be seen at birth, and the softness and throbbing that characterizes neonates' heads is believed to represent the as-yet unfinished closure process that seals up the opening that was their major source of nourishment while in the womb.

We have found this particular element on the folk model -- the notion of direct feeding through a hole in the fetus ' head -- to be present in other parts of Haiti as well. Rural Haitian folk-biology thus makes the growth of the child directly dependent on the food which the mother consumes, since the fetus itself is believed to partake directly of this food.

It is perhaps in this light that the general absence of strong food taboos during pregnancy can be understood. There is a general belief that very bitter items should not be eaten by pregnant women, and some informants have mentioned rum and certain types of pills as proscribed during pregnancy. But in general the rule for pregnant women in this village is: eat well and frequently, for the development of the child in your womb depends on it. Informants specifically mention, not only the standard carbohydrate staples, but also meat, eggs, milk, and beans. All are recommended for pregnant women.

1.4. Folk-Theories of Intrauterine Homeopathy

Local folk-belief concerning intrauterine feeding of the fetus is best understood as one element in a broader set of concepts which posit a series of behavioral and emotional interrelationships between the mother and the fetus that go far beyond the purely biological relationships with which modern medicine deals. Not only do the two parties -- mother and fetus -- influence each other's behavior. In addition there is also believed to be a consonance between the physiological states -- hunger thirst, sleep -- and the bodily positions -- standing, sitting, lying -- of mother and child, as well as a similarity of moods. The following examples are of particular interest.

a. Energy and Activity Level. To a large degree the child in the womb mimics the behavior of the mother. The woman's very energy level has important behavioral effects on the child in the womb. If the mother is active (manyin isit, manyin la), the child will jump about in the womb, moving back and forth, up and down, thumping the mother with its head,

puffing out her stomach, etc. If the mother works hard during pregnancy, the child inside her will also "work hard". Hard work on the part of the mother during pregnancy insures not only a more energetic child, but an easier childbirth as well. If, on the contrary the woman spends most of her time sitting or lying down, the fetus will also sit or lie in the womb and will in all likelihood turn out to be a lazy child. The child who stays "lazily" in only one position during pregnancy — i.e. who does not kick about — is thought to be vulnerable to a difficult birth.

But this influence works in two directions. If the activity level of the mother can affect the energy level of the child, the reverse is believed true as well. Some children in the womb make their mothers lazy while others will make her work harder. A mother who is sleeping or sitting down most of the time is believed to be under the possible influence of a fetus with a pre-existing "lazy" character. That is, the explanatory system is broad enough to accomodate built in inconsistencies. On the one hand laziness on the part of the pregnant mother is thought to be the cause of future laziness in the child. On the other hand the same belief system allows her laziness to be interpreted as a possible effect of the fetus' personality. What is constant, however, is a widely shared belief in a literal similarity of temperament between mother and fetus.

The behavior of the woman can not only affect the energy level of the child but also his personality. A child can turn out to be a bad child if the mother's behavior in pregnancy is not proper. In turn the fetus can make the mother dislike and "hate" certain people and induce her to behave meanly toward them. Many women feel unusual antagonism towards certain people (their husbands included) during pregnancy. They may find themselves constantly arguing (fè kont) with them for no apparent reason. Such feelings are believed to be an expression of the feelings of the child in the womb. As soon as delivery occurs the woman's emotions become her own again and she may be again on good terms with the person in question.

b. Sexual Relations of Parents. Though a child in the womb cannot directly prevent intercourse between its parents -- he still has no knowledge of "those things" because he is not yet out of the womb -- he can interfere with its parents sex life indirectly by creating animosity in the mother for the father. Thus there are women who during pregnancy will physically resist the sexual advances of their husbands. They sleep by themselves (pou kont yo). They will sleep in the sal (sitting room) while the male sleeps in the cham (bedroom). If the father tries to approach, the unborn child will make his mother resist him.

But otherwise there are no general village norms against intercourse during pregnancy. Informants say that some couples continue to have intercourse the normal two or three times a week thorughout pregnancy, while others may have contact only once a week or every two weeks. (The notion of daily intercourse seemed exaggerated to all who were questioned; not even newlyweds will keep up that pace).

A pregnant woman can have sexual relations with her husband until the day she gives birth. In fact, frequent intercourse is felt by many to be helpful during pregnancy, because it will keep open the uterine canal. If intercourse ceases or drastically diminishes in frequency, it is said that the opening can become blocked.

c. Bathing of the Woman. Though there are no taboos against a pregnant woman bathing in cold water, some children cause their mothers to avoid and dislike such cold baths; the child may want to be bathed only in pre-heated water. Certain children don't want to be bathed at all. Children who resist bathing while in the womb are said to be "not clean". Opposed to these are those unborn children who right from the womb manifest a liking for water. These latter will be delighted if their mothers stay in water all day long. In fact it is believed that they can make her cross-eyed (jé viré) or dizzy if she does not comply to their wishes, at least by occasionally pouring water over her head. Paradoxically the child who disliked water while in the womb will enjoy it more than other children once he has been born; and the contrary will happen to the child that craved for water constantly while in the womb.

1.5 Food Related Behaviors During Pregnancy

Concepts concerning realtionships between mother and child in the womb are especially prominent with respect to feeding behaviors.

1.5.1 General Dietary Orientation

As was pointed out above, the general thrust of village tradition with respect to the feeding of the mother during pregnancy is one of encouraging the heavy eating of a broad variety of foods. With the exception of very sour foods and drinks, the mother will be encouraged to eat the foods which are generally considered to be of higher quality in the village. This encouragement is buttressed by earlier mentioned beliefs concerning the direct manner in which food consumed by the mother will be directly channeled into the body of the fetus via the earlier described cranial aperture. That is, in eating abundantly the mother is not only indulging herself. She is also providing the raw material from which the growing body of her child will be fashioned.

1.5.2 Special Pregnancy Beverages

In addition to a general mandate to eat abundantly and well, village feeding beliefs also recommend certain special drinks that the pregnant woman should consume at different times before delivery. Many of these mandated beverages have as their function the protection of the growing fetus against spiritual and magical harm, especially by the nocturnal lougarou, those vampires whose thirst for children's blood leads them to attack children even while they are still in their mother's womb. The various protective drinks which are prepared with this goal in mind are generally very bitter, one of the major potions being made from fyèl bèf, extracted from cow's liver. These preparations are believed to act as tounin-san -- literally "blood changers". Their protective action is achieved by making the blood of the mother bitter. Since part of what she drinks will also be drunk by the growing fetus through its cranial aperture, the blood of the fetus itself will also become bitter and will repulse any lougarou that approaches.

But apart from these magico-religious drinks, village custom also recommends other drinks for pregnant women. In her third month a woman will begin taking a purgative known in Creole as lok. As will be seen in the section on post-partum feeding of the child, there is a very salient set of beliefs concerning the need to actively and regularly purge out the insides of the child. This purgative process begins toward the end of the first trimester of pregnancy. The lok is prepared by mixing castor oil, grated nutmeg, juice from sour orange, bicarbonate of soda, sugar garlic, cinnamon and star anise (anétoilé). The castor oil will be koulé (strained) and bat several times (stirred vigorously) until it turns white. Only then will the other ingredients be added to it. If there is no sugar available, people will sweeten the lok with rapadou, local sugar cane extract.

This purgative is taken on three different occasions during pregnancy. The purpose of this lok is to purge the stomach and blood, not of the mother, but of the child. It will be recalled that part of the lok will enter the fetus itself and directly operate on the insides of the fetus. It is believed that this cleaning of the child's stomach and blood several times during pregnancy will help assure the birth of a healthy and beautiful child. And a child that has been thus purged is believed to be less vulnerable to the tranchman (stomach pains) that frequently attack children after birth, and to the postpartum rashes that also affect many children. The purgative that will be given to the child immediately after birth will be given to expel the meconium. But these pre-partum fetal purges are believed to have their effect by expelling the air that tends to get inside the stomach of children.

In addition to the purgatives, some women will drink a bitter salted tea made from the leaves of asousi (Momordica charantia). This tea is believed to make the child more beautiful. Furthermore pregnant women may frequently drink mixtures of water and commercially purchased laundry starch. This starch is believed not only to "refresh" the child in the womb; it is also believed to have substantial nutritional value as well. As will be seen below, the starch gruel will also be one of the first foods fed to the neonate after delivery. It is perhaps best seen as being part and parcel of the broader purgative complex within which the lok practices are lodged.

1.5.3. Food Cravings and Aversions

The above sections have discussed the general attitude toward abundant feeding during pregnancy, and several special beverages which are taken by women during this same period. But in addition to these practices there is a set of nutritionally relevant beliefs and practices which focus on eating and drinking whims which attack women who have a child in their womb.

Information already presented makes it clear that rural Haitian folk-biology attributes an independent personality to the fetus, a personality that can be affected by the mother's feelings and behaviors, but one that is already autonomous enough itself to exert an impact on the feelings and behavior of the mother. Furthermore it is believed that the fetus even has independent access to the food which the mother consumes. It is in the context of these concepts of fetal "autonomy" that the craving/aversion complex is best understood.

The first principle is: the fetus has an appetite of its own. It wants food and will make that known in a number of ways. Furthermore it dislikes certain foods. And it will make these dislikes known as well.

The most direct tactic which the unborn child has at its disposition for communication its likes and dislikes is to kick, pound, and bang away at its mothers insides. The movements of the fetus during pregnancy are frequently interpreted as an effort on its part to induce the mother to carry out some activity or to prevent her from doing something which she has started to do. We have already seen the manner in which the fetus can make the mother bathe, or avoid her husband. But by far the most prominent topic on the mind of the fetus is food, and most of its messages focus on this concern. If it is hungry, it will kick away until the mother feeds it. If you are near a pregnant woman and can see her stomach in active movement, your first suspicion should be that the fetus is hungry, that the unborn child is complaining about a lack of food.

But the fetus makes its hunger and food preferences known not only by these gross kinetic outburts. Perhaps even more effective is its ability to communicate hungers, thirsts, likings, and aversions by homeopathic generation of identical feelings in the mother herself. When the pregnant woman is hungry, in all likelihood it is the child itself that is hungry. And it is seen as an injustice to the child to let it remain hungry (a powerful social principle that will be seen to come into frequent play in terms of the organization of the rural kitchen). This universally and strongly felt negative community injunction against letting children go hungry comes into effect even before the child exits from the womb. When a pregnant woman wakes up in the morning with an empty stomach, the hunger she feels is really the hunger of the fetus. And she must take immediate measures to get food to her child. A pregnant woman has no right to let herself go hungry. If she does not eat enough, the child inside her will not grow. And the hunger pangs she feels are no longer her own. They are direct messages being transmitted to her by her child. And not only the mother, but also other family members and neighbors, recognize the right of that unborn child to receive the food that it is clamoring for.

But the complaints of the child in the womb center not only on the quantity of food that its mother is providing. Many unborn children are quite explicit in terms of the types of foods that they want, or the types of food that they don't want.

During pregnancy women will feel unexpected hungers for certain foods that never interested them before, or certain aversions to foods which they used to like. These cravings and aversions are inevitably attributed to the unborn child.

Women differ with regards to the particular cravings which they experience. Obedient to the demands of their unborn child, some continue eating their regular food: cornmeal, ocre, fish, sweet potatoes, beans. Others develop a dislike for generally popular foods like rice, millet,

goat's meat. These common foods may suddenly turn bitter in their throats (sòt amè). Other women may develop a mysterious craving for items they did not particularly care for when not pregnant: clairin, goat's liver, green mangoes, hot pepper (piman) mixed in water, sweet oranges, white peas, poua d'tchous (Phaseolus lunatus), goat's head, eggs, very salty food, and in some reported cases, soil. Some women may even enioy foods that are "spoiled", e.g. a fish that is not fully cooked, or one that has begun to rot. If the mother obeys the whim of the child, even repulsive items may "turn" and taste good in their mouths. It is the child itself sho makes them good. Sometimes the cravings for a locally unavailable item are so strong that a village woman may take a truck all the way to Port-au-Prince to purchase the desired food.

These cravings are particularly strong in the early stages of pregnancy, but last throughout the nine months. Even a woman about to give birth may have a sudden food craving. On the whole, however, cravings diminish over time. As the child grows and the mother's stomach expands, the increasing general "heaviness" leads to a diminishing of appetite.

If a woman fails to satisfy a craving, she is not only prolonging the momentary hunger of the child. She may permanently damage him. If she experiences a food craving, articulates it to herself, and leaves it unsatisfied, the child's body may be permanently marked (makê) with some physical blemish. It works thus: at the moment that the woman articulates a craving, if her hand was touching her cheek, and she does not fulfill the craving, then the cheek of the child will have a blemish. (If the woman merely becomes aware of the craving without verbalizing it to herself or to others, no mark will appear). This theory of cravings, of course, provides one framework within which to interpret birth defects. This, if a child is born with a birthmark on its lower body, it is thought that the mother may have failed to satisfy a craving for liver. If a child turns out to have buck teeth (dan priyin), it may be because its mother did not satisfy a craving for crabs. (Even villagers who ascribe to the general theory of fetal cravings may not take these specific interpretations too seriously).

This theory of fetal food whims endows the pregnant woman with at least some increase in social rights with respect to food. If she explicitly verbalizes a food craving to her husband, then the man is in a position where he is expected to provide the money to satisfy the whim, and to go out and somehow raise the money if he doens't have it available. He is vulnerable to an accusation of irresponsibility and stinginess if the child is born with some defect and he hasn't satisfied a food craving of his wife's. Pregnant women also enjoy much more freedom to ask neighbors and passers-by for any food item which they want. A pregnant woman whose fancy is struck by someone else's mango has every right to ask fcr it. Both family and neighbors may tease her for asking, but they will generally be in a good disposition to help her satisfy the craving. It might be added that neighborly generosity does not get the husband off the hook. If the woman has explicitly asked her husband for the food, and the neighbors provide the requested item, the child is still in danger of being marked.

Once the husband, or neighbors, have provided a specific item, they themselves may be the beneficiaries. The woman who has herself cooked the food and inhaled the aroma during cooking has virtually satisfied the child. Others may then eat of the item if she herself suddenly loses interest. This sudden reversal is not an infrequent occurence. A woman (under the direction of the child in her womb) may request an item and lose all interest in it once it has been given to her. Such behavior is seen as perfectly acceptable, because it originates not in the woman but in the whims of the unborn child. And if outside analysts are in the final analysis obliged to regard all of this as a form of collective prescientific "make believe", they should take careful note that the designers and creators of these dramas have provided a script which, if faithfully enacted, would surround pregnant women and unborn children with special care and protection.

1.5.4. Food Supplements Received from the Dispensaire

At the beginning of our first research there was no functioning dispensary in the town to which Kinanbwa is administratively attached. But by 1980 a dispensary had been functioning for several years. As part of the effort to induce women to come in for pre-natal care, the dispensary has begun distributing wheat flour free of charge. Referred to as farin sinistré, literally "hurricane flour", such foreign donated food has generally reached Haiti in the wake of hurricanes, droughts, or other disasters.

Probably most such foodstuffs have reached the rural population in the form of Food for Work, and it is common knowledge that the food which workers receive as wages is generally sold, rather than consumed by the recipients. The flour that is passed out in the context of public health programs, in contrast, is given out in quantities too small to make sale of it an attractive regular practice, at least judging from the situation in Kinanbwa.

Nonetheless even in this context it appears that the food is not used for the purposes intended. In theory the food is supposed to be used by the pregnant mother herself. In actuality in the cases that we observed the food was distributed by mothers to the younger children in her family.

Food made directly from wheat flour is generally not popular among adults in the village. But the poorer families, who may have no other food available, will take and cook this food. Quite interestingly, when this food is used in combination with other foods in the family kitchen, visitors will tend to get heavier helpings of the wheat. Thus, the food that is in theory intended as a supplement to the diet of pregnant women many times gets used as an inexpensive (or free) substitute which can be fed to young children or given away to visitors, to permit the fulfillment of hospitality norms while simultaneously saving the more highly desired local foods for consumption by family members.

The practice used by poorer mothers of giving to young children the food gifts that the dispensary had intended for the mothers' own use dramatically exposes a pattern which must be kept in mind when interpreting the cultural patterns -- the traditional behaviors and beliefs -- dealt with in this report. Our observations and conversations with villagers have permitted us to identify an impressive structure of mother-and-child protecting norms. But in many cases these must be seen as ideal patterns which are commonly maintained as standards of behavior. But such mother-and-child protecting rules are difficult to follow under conditions of scarcity. The mother who comes from the dispensary with a packet of wheat flour to a home with three hungry children will be under the control of several contradictory sets of rules. Her own internal hunger signals -- generated by the hungry child in her womb, according to local belief -- will be perceived at the same time as the cries of the three live children who are waiting for her at home. In such a situation where different rules are competing with each other, there is little question as to which set of rules will win out in most cases. If the mother followed the advice of the people at the Dispensary, who told her that she should consume the wheat, of if she followed the dictates of a belief system which emphasizes the hunger of unborn children and their rights to food, then she herself would eat most of the donated food. But in such cases, the Haitian mother will do what most mothers around the world will do: hold in abeyance the advice of both Modern Medicine and Traditional Culture and simply give the food to the three hungry children crying outside the kitchen door.

POSTPARTUM CARE OF MOTHERS AND INFANTS

There is a lengthy and complicated inventory of culturally mandated "rules and regulations" that govern the behavior of individuals in the perinatal period. Analysis must begin with a listing and description of these rules and behaviors. But if presented as a simple list, the reader is confronted with what appears to be a helter-skelter potpourri of beliefs, commands, injunctions, and taboos. Such descriptive lists are more helpful when they are simultaneously accompanied by an analysis of the underlying concepts and principles from which the heterogeneous surface behaviors ultimately derive their underlying unity and inner coherence. We can approach this task by examining the two general sets of problems to which most human cultures explicitly attend in the postpartum period:

1. Protecting the neonate against forces that can harm it.

2. Assisting in the physical recuperation of the mother after the experience of childbirth.

Haitian villagers are no different from the members of other human communities in the concern they feel for these two general sets of problems. Where cultures differ from one another is in the precise way in which they conceptualize the problems and in the specific behaviors which they recommend or forbid. The different paths--both conceptual and behavioral--which different cultures may have themselves been determined by historical forces no longer easily visible. But no analysis of remote causes is possible without first a satisfactory description of the practices and beliefs as they exist in the present.

The following pages will be an effort to describe and understand the strategies which the villagers of Kinanbwa employ to resolve these two "panhuman" postpartum problems. Anticipating the conclusion: the protection of the neonate tends to involve restrictions and taboos, whereas the restoration of the mother entails the encouragement of certain positive behaviors. Food

related beliefs and practices play a critical role. But in its attitude toward food, the traditions of Kinanbwa (and probably those of many other Haitian peasant communities) have been shaped by a clear and decisive cultural choice: protective restrictions surrounding food, though present, are kept to a minimum; food consumption is rather governed by those positive rules whose goal is the rapid and complete restoration of the mother's body.

2.1 Childbirth Beliefs and Practices

2.1.1 Preparation for delivery

Through most young women now deliver their first child in the Port-au-Prince maternity hospital, subsequent births still tend on the whole to take place in the village. Many women will continue their marketing activities right up to the week before delivery is expected. But as the anticipated delivery date approaches, the woman will return to Kinanbwa. She will have purchased a standard set of childbirth supplies, including soap, a razor blade, kerosene cooking oil, matches, baby powder, safety pins, seasoning, cotton, and charcoal. If the woman herself was not in Port-au-Prince, she will entrust these purchases only to close relatives or trusted friends, to minimize the chances of magic against the soon-to-be-delivered child.

There are also immediate pre-delivery food preparations to be made. The woman will have purchased the ingredients for the postpartum purgative which will be given to the child (to be described below), and will in addition have a supply of arrowroot and laundry starch. The latter will be part of the purgative given to the neonate. The former is a favorite item for early infant supplementation, which, as will be seen, also begins shortly after childbirh.

But the delivery preparations in addition entail the purchase of food which the woman herself will consume. During the five days which she will spend in confinement in the bedroom of her house, the woman is counselled to consume substantial amounts of chicken, to be followed by large quantities of goats meat once confinement is over. (Many women simply prefer goats meat from the beginning). The husband will purchase a male goat or two (female animals, of course, being spared because of the offspring which they will produce). Childbirth is the one occasion on which a family will regularly slaughter animals for home

consumption. Ordinarily when meat is eaten it is purchased in small quantities in the market place. But since the woman will consume so much goat's meat after delivery, it is more economical to slaughter an animal. Second to goats meat in importance is a large supply of plantains. These two heavy foodstuffs are the major items in the special abundant diet that is felt to be the newly delivered woman's need and right in the village. The days before delivery will also be the occasion for the receipt of food gifts from friends and relatives--rice, sweet potatoes, plantains, whatever they have available at the moment. The emphasis at this time is on food. Well wishing friends and neighbors will generally make food gifts rather than other types of gifts.

2.1.2 Food and Drink During Delivery

Traditionally childbirth is handled by village midwives. The details of the delivery practice have been described elsewhere by the authors and need not be recounted here. With respect to food consumption even during labor, village tradition permits a woman to eat if she so desires. But is up to the woman. At one extreme are those women who will devour an entire plate of boiled plantains and drink several cups of herb tea during delivery. But in other women the pain of childbirth and the sight of blood may remove any desire to eat. The one drink that appears to be specially recommended during childbirth is given with a view of purging out the blood which has gathered in the womb. Villagers believe that even during pregnancy the woman will continue to have her monthly blood flow, but that the blood will flow directly into the womb and thus build up over a nine month period. There are special teas which are believed to help clean out this "bad blood" from the womb. One recipe involves the leaves of kasé-lé-zo (*Boerhaava scandens*) combined with ginger, ground pepper, peanut skins, and portions of spider web taken from the kitchen. But aside from this specifically recommended portion (which many women may decline), the only general rule is that the woman should follow her own inclinations with respect to eating during delivery.

2.2 The Organization of Postpartum Confinement

The postpartum period can be divided into two general phases. The first is a five-day period of confinement to the house, followed by a more loosely structured phase of about three months when the woman may leave the house and resume domestic work provided she is properly covered and the work is not heavy. Here we shall focus on the first period: the confinement period.

The days following childbirth are particularly demanding for the family. The midwife's services for the most part terminate once she hands the clothed infant over to the mother after cutting the umbilicus & bathing him. Hereafter she will come only for medicinal leaf baths and massaging of the mother and to escort mother and child out of the house on the day they exit from confinement. Thus it is the mother and the family's responsibility to provide the child with adequate care. In his early days of life, especially before the umbilicus has fallen off, the infant is seen as being particularly vulnerable to cold, illness, and magic. It is believed that only dedication and skill on the part of his family members, especially the mother and father, can protect the neonate from disease as well as from magic.

On the days following childbirth, all the activities of the members of the immediate family will focus almost entirely on the mother and on the child. Though the husband will diminish his work activities, he must not only provide money for a plentiful food supply, but also provide sufficient charcoal or firewood for the cooking, kill the goat(s), and keep watch at night. Other children will play hooky from school and older girls may temporarily abandon sewing lessons or trading activities in Port-au-Prince, so that they can assist in the many delicate activities that can only be confided to very close relatives during this extremely vulnerable period: washing and ironing clothing, buying food, cooking for the mother and child, gathering leaves for medicinal baths, boiling water for the baths.

The ideal is to have the woman freed from all such tasks during the five-day confinement period.

When strictly adhered to, village tradition even restricts the movement of the mother to certain parts of the house. The ordinary village house has two rooms. The front room, through which people enter the house, serves as a sitting room during the day and is referred to as the sal. The back room serves as the bedroom for the adults, and is referred to as the cham. Though delivery traditionally takes place in the front sal, the neonate and its mother will immediately be put to rest in the back cham, and in principle the woman should not exit from this cham during the entire period of confinement. She is ideally freed from all cooking, washing, and other domestic activities. Likewise all of her own personal functions--eating, bathing, waste elimination--will be done in the cham. Other family members will prepare food, make tea and coffee, heat up water for her bathing, and wash and iron for her. The woman is supposed to spend these days lying still, caring for the baby, taking prescribed baths, and in general assisting her body to recuperate from the trauma of delivery.

In practice the economic or domestic situation of many families does not permit strict adherence to the traditionally mandated rules. Many women will thus have to forego some of the privileges which custom defines as their right. Some women may have to do much of their own cooking and washing. But in such cases the rēcho (cooking brazier) will be brought into the house. Such women will venture out into the front room of the house and carry out other minor domestic chores. But the prohibition against leaving the house itself will be generally respected.

2.3 Protecting the Neonate

With respect to the first of the two universal postpartum problems mentioned earlier, a number of the traditional postpartum restritions which may initially baffle outsiders have been erected to protect neonates (and their mothers) against a series of dangers to which they are believed especially vulnerable in the postpartum period.

2.3.1 Danger of Magic

There are a number of visiting restrictions which address themselves to the dangers of negative magic. Some magical harm is carried out on young children by persons who intentionally take measures with this end in mind. But many types of harm can be done by individuals who may not intend harm to the child. Some person's glances can simply harm the child even in the absence of malevolent intentions on the individual's part. For

this reason visiting restrictions are maintained.

Confinement is a period when relatives "in good terms" (byen ak moun-nan) will pay brief visits, and neighbors will salute timidly from the door. But though non-kin from the same lakou will be allowed to visit the woman in confinement, these visits are delicate. People already have ideas about who is good and who is not good. And some people have the reputation of being lougarous--human by day, vampires by night. In general people are reluctant to visit a woman in post-partum confinement. If something happens to the child the outsider may be accused of being a djab, of casting an evil eye, of sending a ghost on the child or of practicing some other form of sorcery. In general the villagers are very careful about who they let in the room or who they let handle the child. It has to be moun-ou, "your people", meaning either relatives or proven friends.

There are fewer reservations about receiving presents, however. Both the mother and the child may receive presents. Small amounts of cash may be left by visitors, and relatives send presents of goat meat, plantains, rice, or chicken. Such gifts may arrive all the way from Port-au-Prince.

2.3.2 Danger of delayed umbilical healing

Village understanding of the role of the planceta and the umbilicus differ greatly from modern understandings. The role which modern science gives to the umbilicus as the principal conduit of nourishment for the fetus is unknown to the villagers, who posit instead (as we have seen above) a direct intrauterine feeding of the fetus through a cranial aperture. In village terminology, the child's lombrit (umbilicus) is sometimes called its met trip, literally "master of the intestines". The midwife will have cut the umbilical cord only after the mother has been bathed and put to bed. The cutting is traditionally done with a razor blade (generally unsterilized), and is surrounded with magical concepts. One such concept, for example, is a belief that the eventual size of an individual's genitals can be influenced by the length of the stump which the midwife leaves when she cuts the umbilical cord. The ideal stump size is about 4 pous (which in village terminology refers to

a literal thumb-width measure rather than a standard "inch"). A longer or shorter stump will increase or reduce the size of the infant's genitals, the penis in the case of a male, the vaginal opening in the case of a female.

But village tradition differs from modern medicine not only in terms of umbilical-related beliefs. There are serious differences with respect to practice as well. The major difference is found in the traditional belief in the necessity of treating the umbilical stump immediately after cutting. Drops of a magico-religious lotion prepared against vampires may be applied to the stump. And there is a general practice of cauterizing the fresh wound with a piece of heated (and unsterilized) iron.

The dessicating function attributed to this cauterization is believed to help bring about a rapid falling of the umbilical stump in the days following birth. The rapid healing of the umbilicus is seen as a delicate process and there are several types of maternal carelessness which are believed to be able to cause harmful delays of umbilical healing in the postpartum confinement period. Loud speech on the part of the mother is one behavior which is believed to delay the healing of the stump. Thus during the postpartum confinement period a woman lying in the back room is not supposed to carry on conversations with people in the front room. Other people believe that a woman should not handle a needle in this period for fear of unintentionally "sewing" the umbilicus, thus delaying or totally preventing the fall of the stump.

2.3.3. Dangers from Cold and Airs

The preceding two sets of dangers--sorcery and umbilical harm--involve magical or quasi-magical beliefs. But there is an even more salient third sphere of danger with which village tradition is concerned. This third danger area concerns the perceived vulnerability of mother and child to two purely natural phenomena: cold (fredi) and airs (van). There are two interacting somatic concepts which come into play here. The first concerns the extraordinary degree of opening which is believed to characterize the body of the woman after childbirth.

In addition the woman's body is considered to be unusually empty after the exit of the child. This open, empty body is believed particularly vulnerable to cold airs. Thus the windows and doors of the house are to be kept

carefully closed both day and night--creating a dark stuffiness in the confinement room which may startle outsiders, whose own belief system may emphasize the therapeutic value of light and ventilation. Ventilation is emphatically not recommended by village custom. Quite the contrary. Women who expose themselves to cold and airs are viewed as behaving irresponsibly, not only toward themselves, but also to their child.

But protection against cold and airs involves more than merely keeping doors and windows shut. In addition the woman must even be careful about her own body postures. Those women whose domestic situation does not permit them to spend the entire five days confined to bed are strongly mandated to avoid body positions which may increase the likelihood of the entry of cold. The danger is particularly great with regards to cooking posture. The ordinary village cooking posture entails either sitting on a very low chair (chèz ba) or of squatting. In either case the woman's knees will be spread open. If a woman is forced to do her own cooking during the confinement period, she must avoid this traditional posture. The principal entry point for air is through the vagina, and the traditional spread-leg position is an open invitation for the entry of cold and air. Women who cook during this period are supposed to keep their bodies in a more hunched, closed position, by squatting, for example, on their heels.

But in addition to open windows and spread legs, cold may also enter through contact with cold water. Thus not only can the woman drink no cold water during this period. In addition she is not allowed to have any physical contact with cold water at all. In short there are a large number of discrete commands and prohibitions whose underlying cognitive rationale is the belief in the particular vulnerability of the open, empty body of the recently delivered woman to fredi and van.

But this belief in the harmful power of cold takes on further significance in light of yet another cognitively salient element in village belief: the existence of homeopathic relations between mother and neonate. We have already discussed the role of homeopathic beliefs during gestation, the

manner in which mother and unborn child are believed capable of exerting mutual behavioral and emotional influences. These homeopathic interactions continue throughout the early months of life. This means that the mother who exposes herself to cold is not only endangering her own body, but that of her infant as well. Many neonatal problems--including, in traditional belief, neonatal tetanus--are believed to be caused by cold. And whereas the cold may enter the infants body directly, its presence in the child may also have come through carelessness on the part of the mother with respect to her own body... The intervening mechanism is generally believed to be the mother's milk. The mother who has been careless enough to let cold or airs get inside her will transmit this to the child through her milk.

Unlike the earlier discussed belief in umbilical danger, which is contextually confined to perinatal events and bears a low functional load in the overall village belief system, the belief in the noxious power of cold and airs is a highly generalized theme that affects a broad variety of health-related situations. But in no context are the dangers of cold seen as being as serious as they are during this immediate postpartum period.

2.4 Restoring the Mother's Body

The above practices address themselves principally to the first of the two major postpartum problem which confront human cultures: the protection of the neonate. Even the protections which are afforded to the mother are in general done with a view to preventing harm to the infant through homeopathic illness transference. These infant-protecting rules for the most part rely on restrictions and thus are largely negative in character.

But in addition there is another set of customs which address itself to the second major postpartum problem, the recuperation of the body of the mother. Prevailing village beliefs posit the occurence of a number of necessary but potentially detrimental changes which come over a woman's body during

pregnancy and childbirth Though these processes are seen as necessary and normal, it is believed that positive steps must be taken to reverse these processes in the postpartum period and to restore the woman's body to normal. In these pages we will discuss three of these processes which affect a woman's body during pregnancy and birth and toward which village tradition directs recuperative concern.

1. The opening and loosening of her body

In order to prepare for delivery, the woman's bones slowly open up during the course of pregnancy and her body becomes generally "loosened" (lach). *This overall openness and softness must be immediately reversed* in the early postpartum period by a series of therapeutic interventions whose effect is to make the woman's body once again "tight" (dri) and hard.

2. The filling of her womb with menstrual blood

Menstruation does not cease during pregnancy, in the view of the villagers. It is merely redirected. The monthly flow of blood, instead of exiting the woman's body, is merely redirected into her womb. Thus there is a nine-month internal buildup of blood which, though necessary for the development of the fetus, becomes harmful after childbirth. Steps must be taken to ensure and hasten the drainage of this "bad blood" immediately after childbirth. And, in addition, precautions must be taken so that no other child is conceived until this reservoir of contaminated blood has been completely purged from the woman's womb.

3. The trauma of sudden, debilitating internal emptiness

The exit of the child from the womb has left a gaping internal hollow inside the woman. It is the presence of this sudden emptiness which accounts for much of the weakness that a woman feels after childbirth. Custom mandates the immediate filling of this emptiness.

For each of these above mentioned problems, the folk-medical traditions of the village provide a set of specific remedial procedures.

1. The bones will be closed and the body hardened by means of a series of hot medicinal baths given to the mother while still in confinement.

2. The bad blood will be drained from the uterus through the administration of special teas and other preparations.

3. The internal emptiness will be filled by providing the woman with solid, abundant and frequent food.

There are other less important physical alterations that may occur in isolated cases. A woman may get fever, or may develop an itchy rash on the head and body (due to the heat of the medicinal baths). She may also get stomach colics (referred to as tranché kaban) from having drunk cold water prematurely. Some women suffer from disjointed teeth and jaws (kasé le zo nan bouch). In this case, soaking the mouth and teeth in vinegar is believed to restore closure to the affected bones. But such problems do not present themselves in every childbirth; these are specific and isolated cases. The other three problems to be discussed, however, are common to all births.

2.4.1. Medicinal Leaf Baths

On the day following delivery, the midwife will return for the first of the three very hot leaf baths (beng fey) which she will give the woman while in confinement. The purpose of these baths is to pull together the body of the woman again, to close her bones, her stomach, and her genital and pelvic regions. At the same time they are also meant to keep her body warm.

In preparation for the baths, immediately after delivery, the husband will have dug a deep hole on one of the corners of the bedroom (most village houses have dirt floors). Across the hole he will have placed a board on which the woman will sit while she is being bathed. And he will himself have gone (or will have sent a close relative) to secure the medicinal leaves and barks which will be boiled for the bath: boua chandel (Amyris balsamifera L.); maskiti (Ricinus communis L.); boua lèt (Sapium Jamaicense); Kalbas (Crescentia linearofilia); ciruel, avocado, papaya and mango leaves. Mango barks will also be used.

For the baths, the mifwife comes around midday, when the sun's heat is at its peak. In preparation, a family member will have boiled the leaves, producing a fragrant water whose pleasant aroma fills the house. Using other aromatic preparation the midwife proceeds to bathe the woman.

A family member will have ascertained the stability of the board, and the door that leads from the front-room to the outside will have been closed. The woman takes off her clothing, steps on the board, and sets directly on a handful of very hot leaves which the midwife will have put there.

The locus that receives special attention is the vagina. The woman first soaps her own genitals. Taking a handful of these hot leaves, the midwife applies them to the woman's genitals. Many women will cry out in pain at this operation, which has the function not only of cleaning out the genitals but also of making them firm and hard. Then the woman herself (or the midwife) proceeds to soap the rest of her body and to rub it energetically with leaves. The midwife will then massage the woman's belly for about two or three minutes, and in addition soap the woman's back and rub it with leaves.

Some more hot leaves may be applied to the woman's genitals at this point. All throughout the bath, the midwife slaps the woman's body, using leaves dipped into the hot water. The purpose of these slaps is to help make the woman's body hard and solid again. This bath lasts about fifteen minutes. On termination the midwife pours the rest of the water over the woman. The water will still be very hot and some women may plead with the midwife to stop. But the midwife usually finishes her task imperious to the complaints of the woman.

After the bath the woman will be given a cloth to wipe herself dry. The midwife will then apply one of the most frequent and important elements in her therapeutic repertoire: the abdominal massage. In contrast to the rough treatment of the leaf bath, the abdominal massage is firm but basically gentle.

Massaging is done by midwives in a variety of contexts and is generally conceptualized as an attempt to put some displaced internal organ of the patient "back into place". In the case of these postpartum massages, the

organ that has become displaced in childbirth is the woman's lamè. Though the term lamè is sometimes (erroneously) translated into English as "womb", or even "placenta", in village belief the lamè is a special female organ for which there appears to be no counterpart in modern anatomical science. The role of this locally invented human organ will be discussed whem postpartum feeding practices are described. For now it is sufficient to point out that the lamè tends to get "displaced" in childbirth, and like so many other internal organs that shift out of their proper positions, it is located by the skillful diagnostic hand movements of the midwife, and coaxed gently back into place by her therapeutic massaging.

The midwife will then tie up the woman's stomach with a large band, (The woman may tie on her own stomach band if she is experienced in these matters). This tight band is thought to function to prevent air from getting inside the woman (pran van). In addition it will help flatten the woman's stomach. This abdominal band is changed every third day and the woman continues to wear it until she begins to bathe in cold water, two or three months after childbirth.

Her leaf-bath terminated and her stomach bound, the woman will tie a cloth to her genital region (maré anba-l) to absorb the blood and keep her warm. With the aid of the midwife she will then clothe herself and return to her bed or mat.

These leaf baths are a central part of the recovery process. Even a woman who has had her child in the hospital will be given the special baths when she gets back to the village. (People express concern because women in the hospital may be bathed in water that is not sufficiently hot; in the village it is a cardinal rule that mother and child be bathed only in hot water during the confinement days). If the woman is not given the very hot leaf baths it is feared that her body will not harden and close but will rather remain open and slack, especially in her genital region.

In addition to the leaf baths which she receives while in confinement, the woman also washes herself two or three times a day. Every morning somebody will heat water for her to wash her face, and in the course of the day water

will be heated up several times for the woman to wipe herself clean, and to change her vaginal rag. Female relatives--her mother , sister in law, children, etc--will take charge of washing the cloth for her. But her clothes are always washed apart from other clothes because of the blood.

After the woman comes out of confinement, she is counseled to wait about a month-and-a half before bathing herself in the cold water of the river again (though some women will wait only a month). If a recently delivered woman takes a cold bath too soon she may be unable to have children again, or at least have a hard time in conceiving again.

2.4.2. Draining away "bad blood"

The bleeding that accompanies and follows childbirth is seen as a necessary part of the recuperation of the female. During nine months her womb was the receptacle for the monthly flow of blood. This accumulation of blood is seen as necessary for the development of the child in the womb. But once the child has left, this old blood is not only useless to the woman, but also harmful.

The vaginal bleeding that occurs during confinement is thus seen as a healthy process, and steps are taken to induce and increase this bleeding. Every morning the woman will be given a tizann prepared from the leaves of boua kanpech (Haematoxylon campechianum) and the bark of avocado tree. Both of these are believed to stimulate more rapid bleeding.

It is believed that in slower cases, the woman's womb may not be cleaned out until as long as a month after childbirth. But it is also believed that the conception of a new child must be avoided until her insides are totally clean. Local custom imposes a general three month period of sexual abstinence as the proper protection for the woman. Her genital region is seen as slowly closing up and premature sexual relations are believed to impede the full closure that is necessary for a full recuperation of "tightness" and "hardness" ofthe woman's body. However, it is also known that some men are too impatient

to abide by this ideal and may even begin to insist on sexual relations before the woman's uterine blood has been fully purged. If a new child is conceived in a womb that has traces of old blood left, it is thought that the child is likely to be born underweight and emaciated. Such a child is thought to have been "tricked" by its parents.

In short, both for the health of the mother, and for the safety of the next child to be conceived, village custom dedicates a great deal of attention to encouraging ample vaginal bleeding by the recently delivered woman.

2.4.3. Eating abundant and solid foods

Food plays an important role in the events surrounding childbirth. As was pointed out already, some women will eat food even during childbirth. This eating is believed to help keep the woman from fainting. But it is viewed as entirely optional. Postpartum feeding, in contrast, is viewed as obligatory, as a serious responsibility which the mother must meet, not only for her own good but for that of the neonate as well.

The major concept which governs the provision of abundant postpartum food to the mother is the need to fill up the hollow space created by the exit of the child. In addition there is the need to create positive emotions in the mother which will be homeopathically duplicated in the neonate itself. With respect to the first concept, it is observed that after childbirth the "stomach" of the woman has been emptied, a condition which accounts for the weakness that women feel in the postpartum period.

But postpartum weakness and the local beliefs concerning the need for abundant postpartum food cannot be understood apart from the concept of the female lamè. In an earlier section, it was pointed out that the lamè is an internal female organ whose existence is posited by rural Haitian folk medicine but for which there is no counterpart in modern anatomy.

Even in village explanations, the woman's lamè is described as an organ which nobody has ever seen but whose effects are felt. Sometimes referred to as the manman vant (the mother of the womb), the lamè remains firmly attached to the womb during pregnancy (li makoné ak sak pitit-la)

and functions as a companion to the child. The attachment is not only physical, but quasi-emotional as well. For the sudden exit of the child triggers off a panic reaction in the lamè. Li chaché plas koté pitit-la té yé. "It looks around in the place where the child was". When it fails to find the child, it moves about frantically in the womb, as a mother who has lost her own child. Some women claim to be able to feel the lamè moving about inside them during the immediate postpartum period. It hurts them from its violent search, failure to find the child in the womb may even cause the lamè to leave the womb and to look for the child in other parts of the woman's body. The complete debilitation of the limbs that many women experience is thought to be caused by a roving lamè desperately searching for the missing child. The major function, therefore, for the earlier-described postpartum massage by the midwife, is to locate the lamè and to coax it back to its proper place behind the woman's navel.

But the major remedy for the lamè is the consumption of large amounts of solid food by the mother. This food is believed to go directly to the space vacated by the child. It is principally this postpartum filling of the empty space with certain mandated foods which gradually appeases the lamè and causes it to cease its frantic internal movements. The hands of the midwife will locate and properly reposition the lamè. But it is only large quantities of certain prescribed foods which will bring a halt to its debilitating movements and keep it at rest.

With respect to the types of food "mandated", reference has already been made to the two items which are de rigueur: goats meat and plantains. The ideal is for the husband to purchase (or separate from his own herd) two male goats. One will be killed and fed to the mother during the five days that she is in confinement. This first goat is referred to as the Kabrit cham. The second, which will be slaughtered after exit from confinement, is referred to as to kabrit déyo.

The preference for goats meat is partially to be understood as a practical capitulation to the importance of the goat in the local economy. In this semi-arid region, goats are a very popular animal, and the only meat regularly butchered in the nearby town market, for example, will be goats meat. But the

is, in addition, a positive belief in the special nutritional value of goats meat. Pork, for example, is believed to be substantially inferior to goats' meat in terms of the ability to restore strength to a woman drained of energy because of the sudden exit of a child from her now-empty stomach. The rationale for this belief in the superiority of goat over pork is not clear, but the preference is explicit. Older traditions appear to have held up chicken as the best meat to feed to a woman while still in confinement; goat's meat would come after exit from confinement. But the prevailing opinion in Kinanbwa is that goats' meat should be the confinement meat as well. Beef would compete with goats' meat in terms of its perceived strength-restoring power. But the preference would be academic. No beef is regularly slaughtered for sale in the local market, and few if any village husbands would take their husbandly concern to the point of killing an expensive cow for their wife. Occasionally the local spirits may get a cow sacrificed to them, but we have never seen a village woman receive this offering. On the whole cows are the bank which villagers use to amass capital for the ultimate purchase of land. Thus the equally appreciated--but less expensive--goat emerges as the traditional vehicle for providing the newly-delivered mother with the large quantities of strength-restoring meat which local tradition declares to be her right.

As was mentioned above, the goats' meat is not seen as being sufficient by itself. For it to have its full strengthening effect, it must be accompanied by generous quantities of boiled plantains. This combination of goats' meat and plantains is best understood in terms of the general food categorization schemes prevailing in the village. A meal is felt to be less than optimal unless there is at least one representative of two general food types: vyann and viv. The term vyann literally translates into English as "meat". As will be seen in a later section, however, other foods such as eggs and milk also are categorized as vyann by the villagers. As for its companion, the term viv may be glossed as "vegetable". But likewise many items--including cornmeal--will be called viv by the villagers which fall outside of the English category of vegetable. As will be discussed below, there is an uncanny correspondence between the vyann/viv distinction prevalent in the traditional food categorization scheme of the village, and the protein/carbohydrate distinction which is given such prominence in modern nutrition texts. For purposes of the discussion here, it suffices to point out that the meals prepared for the newly-delivered mother

are not only supposed to meet this vyann/viv criterion. The postpartum food traditions are somewhat more precise and mandate a specific vyann and a specific viv that are locally believed to be of exceptionally high nutritional quality: goat's meat and plantain.

But the specific mandate for goats meat and plantains does not rule out the provision of other foods as well. On the contrary, there are a variety of local popular foods that are considered to be, not substitutes for, but occasional alternatives to, these two essential staples. Chicken and salted codfish are two popular vyann that will be served. Rice, black beans, and red beans will, in addition, serve as alternative viv to the plantains. In addition the woman will be given coffee in the morning, and will be given various herb teas and bisywit at different points of the day and just before sleeping. One typical day might be:

8:00 a.m.	Boiled plantains, goats meat, and coffee
10:30 a.m.	Medicinal tizan (tea) with bisywit
12:00 p.m	Boiled plantains, and goats meat
4:00 p.m	Codfish, rice, and plantains
6:30 p.m	Ginger or cinnamon tea accompanied by bisywit

Thus, post-partum period--even more so than the period of pregnancy--is the one period in a woman's life when she can ask for large quantities of these popular food items. Her body is seen as a recently emptied vessel whose cavities must now be filled with large quantities of food. If the woman downs a hefty plate of goats meat and plantains and asks for more, it is not because she is gluttonous (voras), but because she has an important restorative task to perform, a task on which not only her future child-bearing ability hinges, but on which the well-being of the recently born infant also depends.

As can be suspected the provision of these usually large quantities of rich foods does not leave unaffected the diet of other family members as well. Other children also get to consume smaller protions of the meat, plantains, beans, and other food which are ostensibly being prepared for their mother. Thus the postpartum confinement and immediate postconfinement period is looked forward to by other household members as well. Even husbands are permitted to appropriate for themselves at least some of the food which they are providing for their wives. If the man is found taking more than the small morsels of meat which are considered proper, he may be teased by his wife-- "apa ou nouris tou". "You act like you've just had a baby too."

Of course not all husband/father's have the resources to purchase two goats and to provide the other abundant food supplies which tradition mandates. But there will be a great deal of pressure--not only from the woman, but also from gossip-ready neighbors-- for the man not to skimp unnecessarily on his responsibilities at this time. But in cases where resources are simply lacking or in cases where the woman has no husband, the two-goat ideal will not be met up to. The woman may have to make do with smaller quantities of meat and plantains purchased in the market place. But in all cases some effort will generally be made to provide her with at least small quantities of the special foods which are seen as being the right of women who have delivered a baby.

The preceeding discussion has focused on the positive food rules which village tradition supports with respect to the feeding of the newly-delivered mother. But much anthropological research on these matters tends to emphasize rather the negative, nutritionally detrimental postpartum food taboos found in traditional cultures. If the preceeding paragraphs, however, have emphasized the foods women are supposed to eat it is merely because village discussion of the postpartum period is overwhelmingly positive when it comes to food. That is, though informants spontaneously enumerate a list of prohibitions when talking about certain other postpartum behavioral domains, their discussion of the feeding of the mother is dominated less by a series of dont's than by a long list of do's.

There are, however, some dont's. There appears to be widespread agreement that the following foods must not be eaten by the mother during the first three months: white beans, poua tchous (Phaesolus lunatus), poua inkoni (Vigna sinensi tomatoes, and kalalou (ocre). (Note: despite the prohibition of the three types of beans on this list, common red beans and black beans are both permitted and encouraged in the village.) The villagers' attitudes toward milk and eggs appears ambivalent. Some informants say that they should not be eaten. Others say that they may be eaten, but will simply be of little nutritional use to the woman. In village idiom, they will not do anything for the woman" (yo pa fè anyin pou li). They will not sustain her. (yo pap kinbé-l). In general the villagers appear to take these food prohibitions much less seriously than the positive mandates discussed above. And the words of one informant expressed well the general attitude toward prohibitions: if you believe in "those things" and still violate them, you will be harmed. But if you don't believe in them, then you can eat and drink them and nothing will happen to you. Women who deliver in the Port-au-Prince maternity ward drink the milk that is offered to them there with little sense of endangering themselves or their child. In contrast, the behavioral prohibitions against getting "cold", for example, are hold with firmness and conviction. But the postpartum food taboos, at least in the village of Kinanbwa, seem to be inconsistently believed and only weakly adhered to. Thus, in this village, as perhaps throughout much of rural Haiti, the stance which local postpartum traditions generate toward food is one which encourages, not restriction or abstention, but heavy, unashamed indulgence in a varied and nutritionally rich menu.

To sum up the preceeding: local tradition surrounds the events of childbirth with two general sets of rules. One set of rules attempts to protect the infant against a number of dangers to which local belief views him as highly vulnerable. These rules tend to be restrictive in character. But the second set of rules has as its general objective the restoration of the body of the mother. The thrust of these rules tends to be positive. What is most important for the student of food-related behaviors in rural

Haiti is the tendency for food to be conceptualized as the most important element in the positive restorative process, rather than as a dangerous element to be surrounded by negative restrictions. There are other social context in rural Haiti in which eating is seen as dangerous. But perinatal customs are overwhelmingly positive when it comes to food. The newly delivered mother is viewed as having a right, not only to a broad variety of foods, but to large quantities as well.

3. POST-PARTUM FEEDING OF THE INFANT

3.1. The Purgative Complex

Local folk-biological theories conceptualize the child's meconium as a harmful kras nwa ("black bulk") which blocks the child's intestines and which must be expelled with the aid of a purgative. This purgative is seen as the first food which must be fed the neonate.

Referred to by the villagers as lok, the purgative is prepared by cooking together castor oil, grated nutmeg, rapadou (unrefined sugar), garlic, the juice from half a sour orange, and sufficient water to permit the mixture to cook. This lok is considered to be absolutely essential for the normal development of the child, and the preparation of this purgative is one element of village childcare that appears to have remained relatively unchanged, despite other changes which are occurring. Women who deliver in the Port-au-Prince maternity ward will, of course, follow medical instructions while there. In compliance with hospital rules, the first feeding of the infant will be sugared water, to be followed by breastfeeding. But on return to the village, the child will immediately be given its lok. That is, the order of events may be changed, but the post-partum purgative remains a central element in village childcare.

Sometimes the lok will achieve its purging effect after only one dosis. But in other instances the purgative may have to be repeated at least one other time. The change in color of the child's wastes from blackish towards yellowish serves as an indication that it may be ready for other foodstuffs.

Though village tradition is unanimous in asserting that the lok is the first food which should be fed to a child, (lok sé premyé mangé ti moun) there are differences in terms of when its feeding actually starts. We have seen some women feed their child very shortly after birth, as soon as they could have the lok ready, while others waited as long as 14 hours. The child appears to set the pace in some cases. Women remark that "some children are hungry from the moment they are born", a trait that is evidenced by the yawning and crying of the child. Such children are said to be "greedy" (visyé) from in the womb; they yawn frequently and suck any finger extended to them. Such children will tend to be fed the lok more rapidly. But in general the timing of the purgative will be set by the mothers themselves and their different notions on when it is the best time to start feeding the child. The lok is fed to the child with a little spoon that villagers supply for young infants. Usually four or five spoonfuls are given at a time, on as many as five different occasions or as few as one, depending on how well the infant is managing to expel the kras.

This traditional purgative is one area where the traditional beliefs and practices of the villagers differ radically from the opinions of most modern medical specialists. Some physicians have been heard to comment that this purgative is so harmful that its institution may be a form of disguised "elimination" of weaker children. Villagers would disagree, attributing a higher mortality rate to children who for one reason or another are not given the purgative as the first element (or at least an early element) in their diet.

The lok is not the only controversial postpartum food which village tradition mandates. In addition, within two or three days most mothers will feed their children a mixture referred to as labouyi lamidon (literally "starch porridge"). This gruel is prepared by mixing water, starch, white sugar and cinnamon. The starch itself is commercially

purchased, and is frequently referred to by its brand name Argo. The Argo box indicates that it contains a gloss laundry starch and has clearly written instructions in English: "Not Recommended for Food Use." These instructions, of course, are neither understood nor followed by villagers, and Argo today is one of the regular components of the diet of the neonate (and young infant).

One administration of the starch porridge which we observed was done according to the following recipe. Eight pieces of cinnamon were mixed with two and half tablespoonfuls of white sugar and dissolved in about five ounces of water. This mixture was put to boil on the fire, taking care to remove the cinnamon sticks immediately after the mixture had begun to boil. Then one and a half tablespoonsful of Argo starch were mixed with a little water and strained twice. This strained starch pap was then added to the boiling sugar and cinnamon water and left there for about two minutes. The mixture was then cooled and spoon fed to the small child. This starch mixture is given by the villagers not only because they believe it is nutritious for the neonate. In addition it is believed to assist the purgative action of the lok which has already been administered.

There exists to our knowledge no empirical evidence with respect to the effects of this purgative complex. But one thing is certain: the post-partum purgative continues to be a firmly held element in the "child feeding practices" of the villagers of Kinanbwa. And whereas certain other traditional practices may yield rather easily to modern medicinal advice, the stability of this purgative complex over our eight year observation span leads us to believe that these particular beliefs and practices are likely to be returned with some tenacity. Such tenacity is generally maintained only where there are reasons, reasons which may frequently be invisible to outsiders. And though our current information does not permit us to attribute any underlying adaptive function to this

postpartum purgative, neither can we point to any empirically convincing evidence for great harm. Our sense is that the didactic stance which public health educators are likely to take against this complex should be modified and softened by a simultaneous willingness to further examine empirically its rationale and its actual effects.

3.2. Fol -Theories of Breastmilk

Village tradition mandates that, following the post-partum purgative, the next food that should ideally be given to the child is the mother's milk. As we shall see below, there has been an increasing use of powdered milk. But this practice has not been accompanied by any cognitive downplaying of the nutritional value of breastmilk. Village women, both older and younger, seem unanimous in their view of the superiority of breastmilk to powdered milk or cow's milk. So firm is this belief that village women have come to rely on a biologically fictitious illness called "spoiled milk" (to be discussed below) as a justification for early weaning and heavier dependence on other supplements. The very need for this "spoiled milk" syndrome is itself generated by the firm village belief that, in its ordinary state, breastmilk is the best food for children and that the child has a "right" to this food.

But village beliefs about breastmilk center not only on its nutritional content, but also on its location. It is believed that breastmilk, during pregnancy builds up over the entire body of the woman and is "spread out" (gayé) over the woman's body much in the same fashion as her blood. The points around the woman's nipples are seen as the terminal points for the seven internal "branches" which lead in from different parts of her body and which will serve as the conduits drawing milk "down" into her breasts after childbirth.

Thus breastmilk is seen as being a mobile substance which may be temporarily concentrated in the nipples, but which remains highly prone to displacement. As will be seen below special precaution must be taken to prevent the milk from getting mixed with "bad blood" (mové san) and --above all--from making its way up into the woman's head. Many illnesses are thought to be caused by such contaminated or displaced breatsmilk.

3.3. Folk Methods for Inducing Lactation

Lactation is viewed as a process that will occur automatically after delivery and no special practices exist which are applied to all women. If the milk is slow to arrive, however, and if the woman is not a primipare (the latter being given three or four days to lactate before concern is felt), then special measures are taken.

Though villagers occasionally use store-brought remedies to induce lactation, locally available herbs are believed to be more effective. Though everybody has at least some knowledge of herbs, there are folk specialists (dokté fèy) who know exactly which preparations should be applied to each particular case. One common remedy is a tizann - a tea - which is prepared in the home. Barks of avocado and mango trees are boiled in water and given to the woman to drink, no salt or sugar being added. Or a preparation with cotton, kenèp (Meliocca bijuga), panzou (Solanum tortipes) and lian koulev (Passiflora rubra) may be boiled and given to the woman. Another lactation-inducing measure is to tie cotton, malomé (Eiphorbia pilulifera or hirva), lyan pouasson and codfish bones into seven small packets. One of these packets will be boiled each morning, until all have being consumed as a tea. The seven packages are for the seven branches of milk that the woman is believed to have, which are seen in the seven points around her nipple from which the milk comes out. When the woman's milk refuses to come, it is thought that one or more of these branches may be at fault.

If, after these remedies, the woman's milk still refuses to come, the services of wet-nurse may be sought. If there is another woman who is still nursing her child, she may give her milk. But this is only if she is a ti nouris. If she is gro nouris, it would be harmful to her to act as a wet nurse. A woman is gro nouris when her child has begun to walk, and her milk is said to be stronger. If the child is not yet walking,

the woman is said to be a ti nouris. Only women in this phase will serve as wet-nurses for other women.

3.4. The Question of Colostrum

There may be a shift occuring with respect to the village's attitude toward colostrum. Eight years ago village opinion seemed unanimous on viewing the mother's colostrum (lét jon in Créole, literally "yellow milk") as being something very nutritious for the child, and something to which the neonate had a "right". Recent conversations with younger women, however, seem to indicate a growing ambiguity on this matter. Some say that the "yellow milk" is good. Others affirm that it is bad and should be disposed of rather than be given to the child.

That is, what appears to be occuring is a shift in belief and practice brought about in the context of greater contact with the city. As is not unusual, the shift is from a biologically sound traditional practice -- giving the neonate the mother's colostrum -- toward a nutritionally maladaptive tendency to deprive the child of this food. One informant told us that the "Miss" - the maternity hospital nurses - had informed her that the colostrum was bad. If this is the case, then we have an example of "mixed signals" being sent out by representatives of modern medicine, whose official position encourages feeding of the colostrum to the child but whose lower-level representatives may be transmitting, either intentionally or unintentionally, a message whose effect is just the opposite of the desired one. We will see that this critical pattern of "mixed signals" is occuring also in the domain of powdered milk.

3.5. Breastfeeding on Demand

When lactation begins, the mother will breastfeed the child every time that the child cries. That is, for children at the breast, the feeding

schedule is imposed by the child itself. In the days immediately following birth, the mother will generally nurse the child in a supine position, laying the child down beside her. But the ordinary position is a sitting position. A woman with particularly large nipples will have learned also to support her breast with one hand so as not to gag the child. Following breastfeeding, village women are careful never to leave the child alone. It is known that vomiting may follow nursing and that if the child vomits through the nose, suffocation may be the result. Thus children will not be put to sleep and left alone immediately after nursing. They will be placed on the mat or bed with their heads supported somewhat higher than their body by means of a pillow and a cloth, and the mother will keep an eye on the child until it is clear that the recently consumed breastmilk will be retained.

4. TRADITIONAL SUPPLEMENTATION PRACTICES

Certain cultures appear to withhold supplementation for almost a year and to have the infant rely exclusively on breastmilk for as long as is biologically possible. If cultures were ranked on a continuum from "non-supplementing" to "heavily supplementing", the traditional child-feeding practices of Kinanbwa would, in contrast, fall far toward the heavy supplementing pole. We have already seen the manner in which, even before the infant is breastfed, he is exposed to oral intake of purgative substances. But in addition, virtually right from the earliest weeks of life, village custom mandates that he be given a variety of foods to supplement the on-demand breastmilk which constitutes the principal element in his diet.

The supplementing process can best be viewed as a gradual movement toward adult food, most commonly and colloquially referred to as manjé chodyé (literally "cooking-pot food"). Between breastmilk and cooking-pot food, there are two intervening phases. The first one is the phase of manjé dous ("sweet food"), to be followed by a subsequent period of manjé sél ("salt food").

4.1. Manjé Dous

"Sweet food" is a generic term used by villagers to refer to sugared *paps and porridges prepared by dissolving one of a variety of locally* prepared flours (especially those prepared from plantain or arrowroot) in a water or milk base. Such mixtures are generally referred to as labouyi, a term which may be used somewhat synonymously with the phrase "sweet food."

There is some interhousehold variation with respect to the timing of the introduction of these cereal based porridges. But they continue to be the major food supplement of young children in the first months of their

lives. Some mothers begin giving these porridges within the first month after birth. And all mothers will have begun by the onset of the child's third month. It is recognized by everyone that milk-based labouyi are better than water based ones. But during the early weeks when the child's insides are believed to be still in the process of cleaning out, the women will use water even when milk is available. Later on the preference will be for porridges prepared with cow's milk, water being used only when milk is not available.

Probably the most commonly used traditional porridge is labouyi farin banan, made with the flour of dried and grated plantain. A green plantain will be peeled, cut up and left to dry in the sun. When fully desiccated the pieces will be ground to a powder and turned into a porridge. This is believed to be highly nutritious. Even more popular is porridge made from arrowroot. But this latter must be purchased. Labouyi will also be made from traditional grains, especially corn and millet, and from grated sweet potato. But these are seen as being substantially less nutritious than arrowroot or plantain porridges. Rice based gruels are seen as being of intermediate quality. What emerges from this is a pattern of clear preferences and of clear notions that some substances are more nutritious than others. The presence of such discriminations reveals an accurate approach to nutrition, though a modern nutrition specialist may question the villagers ranking of certain items.

Village mothers try to vary the content of the supplementing gruels at least weekly. Enough flour will be ground or purchased to last for several days or a week. But a different gruel will be prepared the following week, recognizing the tendency of children to reject and even vomit up the supplements when the same item is served day after day.

Once the supplementing with the manjé dous has begun, the child will be fed labouyi at least twice a day and generally more. The limiting factor, especially in recent years, may be, not the availability of the food itself, but the availability of fuel. The preparation of these gruels entails lighting a fire, and as the availability of fuel continues to decrease and its price increase, the practice of lighting a separate fire just for the neonate's gruel becomes less and less feasible.

A great deal of care is taken in the preparation of these paps. A small special kettle (the aluminum bom, distinct from the cast iron chodyé which serves as the major cooking pot) will be set aside and used exclusively for the preparation of the infant's labouyi. Water will be carefully boiled and covered for use in these porridges. And in most cases the preparation will be done using charcoal rather than firewood. Charcoal cooking is more expensive, and entails the use of a cast iron brazier rather than the traditional three stones used with firewood. But it is viewed as being "cleaner" than firewood, and because it makes less smoke, it leaves less of a taste in the item being cooked. That is, villagers are aware that there are hygienic and less hygienic ways of preparing food, and custom imposes the application of the highest local standards when dealing with the preparation of neonatal food supplements. In such matters the people of Kinanbwa are, in their practice, as likely to depart from local ideals as people of any human culture, of course. But the presence of the hygienic awareness is itself an important pre-existing raw material of potential use to designers of nutrition programs.

With respect to the content of these gruels, a pattern which was already present during the first research period had become even stronger by 1980: the pattern to consider store-bought powders and preparations, not only as nutritionally superior to home prepared mixtures, but also as manifestations of greater concern and solicitude on the part of the mother. This pattern has an impact on the use of powdered milk, which will be

discussed separately below. But prestige considerations also come into play with respect to the purchase of bases for gruels. Thus part of the preference toward arrowroot as perhaps the favorite labouyi base may stem from the fact that arrowroot must be purchased. And mothers who purchase pre-ground grain bases (such as rice and corn) appear to be a bit more demonstrative of their maternal solicitude than mothers who prepare the bases by themselves desiccating and grinding them. The highest prestige child-supplementing behavior is to buy imported preparations such as Gerber cereals and oatmeal. Some mothers, rather than disposing of the empty Gerber jars, will line them up and prominently display them on some table visible to visitors. And it is common to hear conversations concerning child care in which one of the participating mothers will at some point make pained but unequivocal allusion to the amount of money which she is forced to spend on the feeding of her child. In short, the shift toward increasingly frequent use of store-bought "sweet foods" has not only been behavioral in character. There has been a simultaneous strengthening of an evaluative tendency which assigns higher marks for parental solicitude to those mothers participating in this shift.

It must be noted that admiration of things store-bought is modified by experience. One formerly popular store-bought food in the village was Maizena, a corn-based powder. Many village mothers began noting, however, an apparent association between this food and worms in their children's feces. The result was a turn from Maizena. But in the absence of such clearly negative experiences, it is assumed that store-bought supplements are both biologically and socially superior to village-made supplements.

In addition to the gruels, which are viewed as the most important supplement to breastmilk in the early months of life, children will also be given different types of sugar water and teas. Teas will be made not only from cinnamon, but also from citrus leaves, soursop leaves, and others. Though these sweetened teas are believed to have some nutritional

effects, they are not considered in the same light as the more important labouyi. It would appear that the use of these teas in growing in importance with the increasing importance of bottles. The labouyi is generally spoon fed to the child, whereas sugared waters and teas are administered through a bottle. As will be seen below, the baby bottle, though formerly not part of the traditional pre-delivery trousseau, has now become a central element in the equipment prepared for the reception of the child. This has been accompanied by a simultaneous growth of the importance of teas, though these continue to be viewed as secondary supplements to the primary labouyi supplements.

The perceived importance of water in the feeding of the child, however, is quite high in the village and deserves some brief discussion. Water itself and water based foods, are seen as being particularly important during the first weeks of life. We have already discussed the manner in which villagers, though recognizing the nutritional qualities of cows' milk, will intentionally prefer water-based paps during the first weeks of life in order to assist with what they believe to be the necessary purgation of the child's stomach and intestines. But village belief, in a chemically inaccurate but medically adaptive fashion, attributes special purgative qualities to boiled water. Thus the water that is used as the base for early supplementing gruels, and the water that will be directly given to the child as a drink, is boiled. Growing fuel scarcity may be leading to a shortening of the boiling process itself to a point that reduces its microbe-killing efficacy, but the boiling is still considered essential.

But this boiling of water takes on an added significance as well in light of the nutritional role which local belief attributes in general to water. It is firmly and apparantly universally believed that the nourishing and growth-inducing properties of food are weakened or undermined if the individual does not drink water after each meal. This principle applies most heavily to the eating of meals by adults and older children.

But villagers also appear to apply the same principle to the feeding of young infants. Water, often sweetened, will frequently be proferred to the infant after the feeding of a labouyi, much in the same way that other household members will invariably drink a glass of water after their own meals. The effect of the meal is otherwise believed to be diluted.

Stated somewhat differently, village food beliefs construe the consumption of water not only in terms of water's thirst slaking powers. Boiled water is also believed to help finish the intestine-purging function begun by the lok and the starch pap fed to the neonate in the first days of life. But in addition, for all household members, water is believed to be a necessary post-meal internal solvent without which the food itself will not be able to have its intended nutritional effects. Thus neonates and infants will be constantly proferred water, and one can judge as highly adaptive those hygienic practices--including use of boiling of the water, use of special kettle, use of smoke-free charcoal rather than smoky firewood, and frequent cleaning of the bottle in which the water (or tea) will be delivered to the child--with which village custom surrounds the preparation of water for infants.

A final point to be made in discussing the manjé dous phase of the child supplementing practices of Kinanbwa concerns the type of sugar which is used. Most sweetening of adult foods is done with brown sugar or with rapadou (locally extracted unrefined sugar), these being substantially less expensive than refined white sugar. This latter is given to adults only on special occasions. But for the sweetening of infant water and teas (as well as for the sweetening of the above-mentioned gruels), village custom calls for the use of white sugar, as being lighter and freer of possible contamination. Thus the white-sugar is merely one more element in the same neonate-protecting complex which underlies the water-boiling mentioned above.

To sum up the preceding section, village women continue to believe that the best food for the child is the mother's breastmilk, but simultaneously supplement this food, usually from the first month of life, with a series of paps and porridges lumped under the general label of labouyi. Milk-based labouyi are known to induce growth more effectively than water-based ones, but the latter will be chosen in the early weeks of life because of the believed purgative effects of boiled water. (The same intentional return to water-based paps may occur when the child shows symptoms of intestinal problems or even for other illnesses.) The use of white sugar as a general sweetener for most foods consumed in this period has led to the practice of calling all such paps and sweetened drinks as manjé dous ("sweet foods"). And whereas such sweet foods will be given on occasion to adults (especially when they are ill) on the whole they are viewed as being manjé ti-moun (baby food) and their major importance in the rural Haitian diet consists in their status as the principal supplement to breastmilk during the first months of life.

4.2. The Shift to Manjé Sel

The next stage in the feeding of the child will be the gradual introduction of solids of the type cooked in the family pot. The transition to these solids will be very gradual, at first being a minor supplement for the daily labouyi, which themselves are supplements to breastmilk.

As in so many other processes, the sequence of events is fairly commonly adhered to, but the timing will vary from mother to mother. In general, the onset of sitting in the child, which occurs as early as the fourth month in some village children, will be a signal that the child is ready for the introduction of solid foods. The introduction of these solids, however, is not done at first by taking food directly from the family cooking pot. Rather the mother will select foods of the type that are prepared there but will cook them in a special way for the child,

frequently by using a milk base. The generic germ used in the village for this intermediate type of food -- between the pap and the family cooking pot — is manjé sel, literally "salt food". Cooking-pot food is, techinically speaking, manjé sel. But the villagers tend to use this phrase also as a pre-cooking-pot food fed to infants.

The earliest solids are generally cornmeal or white rice, prepared with milk. The principal difference between this manjé sel, and the earlier administered manjé dous which may have also been prepared with the same ingredients, consist less in the absence of sugar and presence of salt, than in the absence of a grinding process which converts the grain first into a powder. For the first time the infant is eating foods in a quasi-solid form. And this manjé sel stage of also characterized by the absence of city-purchased conspicuous -consumption alternatives. That is, the display element in infant feeding tends to focus on the earliest months of life. But eventually mothers turn to the no-nonsense task of preparing the child for eventual weaning and participation in the family cooking pot.

Once the child has begun to eat this specially prepared cornmeal and rice, the mother will begin slowly adding other elements taken directly from the family pot, such as bean sauce and the different types of meat sauces that are prepared in the village. The infant will also be encouraged to tackle small bits of boiled mashed plantain.

During these months the mother and the other caretakers assigned to the child will be monitoring the physical growth and behavioral development of the child. it is recognized that at this stage children begin manifesting their own individual personalities. At one extreme are those children who simply reject solid foods and who are even reluctant to eat labouyi, maintaining a strong attachment to the mother's breast. At the other extreme are those children who eagerly accept the solid food proferred for them and who begin showing a preference to these foods over the earlier paps. It is believed that these latter children

grow much more reapidly and will have a much quicker and easier weaning experience.

The village women would find it strange that outsiders would tell them to begin observing their children. On the contrary, villàgers are clearly aware of the behavioral sequences through which children go from helplessness to walking, for example, and have notions as to which achievements should occur in which month of life. Difference between children in this regard will generally be attributed less to nutritional or organic differences, than to pre-existing personality tendencies in the children themselves. Slow developing children, for example, may be described as being inherently parésé (lazy).

But the developments themselves will be used as signals for the appropriateness of giving the child even heavier doses of manjé sel and for cutting back on the porridges. The process seems to entail a playoff between "sweet food" and "salt food". We found little evidence that there was intentional phasing out of breast feeding, though such phasing out is occurring by virtue of the fact that now more of the child's hunger cries are met by other types of foods.

The villagers are aware, not only of behavioral developments in children, but also of differences between children in terms of their physical growth rates. Concern with physical growth is a salient element in local biological folk-theory, and local explanatory schemes attribute causal growth-inducing power to factors alien to modern biological theory. For example, the crying of infants is believed to be a necessary element in their physical growth. The bones and general body structure of the infant are believed to be stretched and expanded by its wailing, and children who cry little are believed to manifest slower growth patterns. There may be a paradoxical and indirect causal link which gives some validity to this particular folk theory. The frequency with which a child is fed, and to some degree the amount which he is fed, will bear a close

relationship to the insistence with which he makes his hunger known. In this way it may in fact be the case that children who cry more frequently grow more rapidly. They may get fed more frequently.

Another widespread folk-theory attribute growth-inducing power to mud and dust. Young children who play naked in the mud may not necessarily lack clothing. In the words of the villagers, labou rinmin grandi timoun (mud is good at helping children grow). The same is said of jwet té ("playing on the ground"). *It is felt that children should be allowed to have* virtually their entire body covered for brief periods of time with mud and/or dust. The ideal time is early or mid afternoon, just before the late afternoon bath that is given daily to all children. (No villager would allow children to remain muddy or dusty for more than brief periods of time).

The actual growth spurts themselves are believed to occur only when the child is sleeping. The large amounts of sleep that infants and young children need are directly related to this. Unseen to the eyes of people, Bon-Dyé Himself makes children sleep more than adults and secretly adds tiny increments to their size. This process lasts all the way to adolescence. Try as one might, one can never see the exact moment in which the child grows.

But the growth of children is also believed by many to occur more strongly on certain days of the week. For reasons which no informant could explain, it is believed by many that Saturdays and Mondays are the days on which boys grow. Young girls, in contrast, have their growth spurts concentrated on Fridays. An analyst need not ascribe to the validity of the villagers' model of human growth to be nonetheless impressed by the explicit salience given to the physical development of the child in local folk biological theory.

But despite these local theories concerning growth, villagers are fully aware that the major determinant of the growth of an infant is the amount of food that the infant consumes. Village notions emphasize the rapidity with which the infant accepts manjé sel as perhaps the best indicator of its future growth. But there is a tendency in the village, in discussing why some infants eat less than others, to attribute differences to pre-existing preferences and personality differences in the infants themselves, rather than to differential food availability or differences in feeding practices between different mothers. Villagers will admit that there are important differences in their own practices and that of moun lavil ("city people") and express convictions as to the better nutritional outcomes of their own practices. But there is a strong tendency to deemphasize the importance of village-internal economic or behavioral differences as they may impact on infant feeding, and a corresponding tendency to place great emphasis on the preferences of the individual infant as the cause of differential food consumption and ultimate growth rate. When pushed, women will admit that not all village mothers care for their children the same way. But the prevailing verbalized model is one which places a great deal of causal responsibility on the infant itself for its own nutritional status.

Such an emphasis on the personality of the child is logically compatible with other propositions which one hears concerning the personality of the child even before it has exited from the womb. And the dynamic which generate this emphasis with respect to differential growth -- the perhaps merciful denial function which is being served in an environment where so much malnutrition is caused by sheer scarcity factors -- are not at all surprising. But whatever its origin or possible adaptive functions, this explanatory tendency to lay so much of the burden for suboptimal growth on the feeding preferences of the infant is one behavior pattern on which designers of nutrition intervention programs will want to focus their attention.

But the attention should entail openness to unsuspected logic. Villagers are aware that the most dangerous time for children is during the post-weaning period itself. It is during this latter period that certain children will begin to fall seriously behind others in terms of their growth. But the lag will affect principally those children who have not taken well to the manjé sel during their second semester of life, those children who have continued to show reluctance or outright rejection toward the rice and strained bean sauce proffered to them in small quantities. But for this very reason the manjé sel period is important. Those children who have taken well to these specially prepared solids will in fact have a much easier transition to the family cooking pot, and the more closely one examines the matter, the less irrational does the belief in the nutritional importance of child preference begin to appear. It may very well be that, even if food availability were to remain constant, children who for one reason or another took less readily to solid food will in fact suffer greater nutritional traumas during the immediate post-weaning period, and that a least some of the acute malnutrition that shows up on surveys may in fact be attributable to the child-preference variables that play such a prominent role in village explanatory schemes.

The manjé sel phase of breastfeeding is the context for yet another important shift in child care: the introduction of the child to drinking water that has not been boiled. Once children have started to sit and crawl, it is believed that they may safely be introduced to the same water that other household members drink. In fact during this period parents may be particularly insistent in teaching the child to drink substantial quantities of water after each meal of manjé sel. Informants say that at the onset of eating manjé sel, children are eager to drink great quantities of water. But this infant preference is perhaps created, or at least buttressed, by urging from caretakers, who will try to teach the child the earlier-mentioned rule that any adult villager knows, namely that a meal pap fé anyin pou ou ("won't do you any good") unless you drink

water immediately following the meal. Thus this period is the occasion for heavy exposure by the infant to possible water-born illnesses from which customary water boiling practices had up till now given him at least some protection.

Finally the introduction of solids during the manjé sel period is also accompanied by a phase-out of spoonfeeding and a gradual teaching of the child to feed himself. A plate of food will be placed in front of the child and he will be expected to begin eating with his hands, and will continue to do so through most of his childhood. It is only later that children begin experimenting with the spoon, and even after spoon eating has been mastered most children continue to consume most of their meals with their hands. (The use of the knife and the fork is virtually unknown in the village, even among adults.)

If the manjé sel period has been successful, at its termination the breastfed child will already have begun to eat small quantities of food directly from the family cooking pot. This final transition to the consumption of genuine manjé chodyé is ideally something that will occur, not after weaning, but before.

To sum up, as is true in many, if not most human cultures, the children of Kinanbwa make their way to the family cooking pot in a two-stage preparatory period. The first stage, the "sweet food" period, is characterized by the spoonfeeding of a variety of sugared paps and gruels. The second period, the "salt food" period, is characterized by the slow introduction to unsweetened solids of the type that will later be consumed from the family cooking pot. The display behavior that surrounds the purchase of special store-bought "sweet foods" virtually ceases in the "salt food" phase, as children begin receiving direct training in the consumption of the foods which other family members eat. The timing of the introduction of solids is closely linked to certain behavioral developments in the child, especially sitting and crawling. And

experienced mothers take careful note of the willingness with which the child takes to the solid foods, as the best indicator of the ease with which the child will make the transition to the family cooking pot and avoid the post-weaning growth lag which is known to affect children attached exclusively to the breast.

5. VILLAGE WEANING PRACTICES AND BELIEFS

5.1. The Weaning Procedure and the Role of Sibling Caretakers

Weaning in Kinanbwa is generallly done in an abrupt fashion. But there are two ways of carrying out the process. The most frequently used one is for the mother to absent herself physically from the village and to resume her itinerant trading activities. The other procedure is for the woman to remain at home but to take special measures to break the dependence of the child on the breast.

When the first option is chosen, the mother will give one final breastfeeding to the child in the predawn hours of the appointed day. She will then ramasé afé-l (gather up her belongings), join her trading companions, and for the first time since delivery make her way to Port-au-Prince to resume marketing activities. By that time her child will ideally already have begun eating from the family cooking pot. When the mother returns to the village some two or three weeks later, and all has gone well back home, the child will already have bliyé tété-a (forgotten about the breast) and will no longer cry after the woman's breast.

Some women, however, prefer the second weaning option and will remain at home. The day for weaning is chosen and the process begins. Most women in this situation, rather than simply denying their breast to the child, will instead apply to their nipples the extremely bitter jelly-like substance found in the leaves of the local aloe tree (laloua) to assist in extinguishing the child's attraction to the breast. Each time the child gets access to the breast, he will be repelled by the bitter aloe. Children who have already begun eating manjé sel and manjé chodyé will soon cease demanding the breast. At the same time sleeping arrangements also change. During the nursing period the child will have slept on the same bed or mat as both parents. Now the child

is put to sleep far away from the mother.

The days following weaning can, of course, be traumatic for the child. In the words of the village, ti-moun-nan chagrine, the child feels chagrin. The chagrin may be combatted with a number of special teas prepared for the child. Village belief also attributes weaning-crisis mollification to certain local leaves (boua kabrit or Cassia emarginata). These leaves will be placed either under the child's pillow or under the mattress where it sleeps. These leaves are believed to reduce the severity of the post-weaning chagrin.

However, there is another village practice which appears to be the most important buffering mechanism to help ease the toddler through the weaning period, especially in that majority of cases where the woman has physically absented herself from the village. This practice consists in the use of child caretakers.

In societies where the mother has been the sole or major caretaker, an abrupt break in the bond established brings about great distress for the infant. This is more severe if, a) separation is sudden; and b) if it occurs between 6 to 24 months of age. Separation stress may bring about weeping, temper tamtrums, insomnia, anorexia, weight loss, susceptibility to infection, etc.

In the village of Kinanbwa, these reactions appear to be buffered and minimized by the practice of using a child caretaker who is responsible for the child from birth. Even before a child is born, the caretaker is selected from among young pre-teen or early teen girls in the immediate or extended family. We have even seen cases where girl caretakers were purchased in Port-au-Prince and brought to the village in preparation for the birth of an infant.

This child-caretaker will eventually take on full responsibility for most matters that involve the infant, such as cooking its labouyi and manjé sel, and washing and caring for its clothing. When the child reaches an age when he can spend time outside of the house, the caretaker will be there holding it, playing with it, supervising it. It is a full time task for the young girl and she is expected to assume full responsibility for that infant. Before weaning, or course, the mother will be there to breastfeed the child on demand. During the first two months the mother will generally be the one to bathe and clothe the child as well. But after this time, even the bathing and clothing of the child will be the responsibility of the caretaker. This practice, which strikes outsiders as especially demanding on (and even unfair to) a young pre-teen girl thus saddled with ceaseless responsibility, is with little question advantageous for the infant. Not only does it receive constant attention. But the close relationship which it has built up with the caretaker will constitute a psychically important buffer when the mother suddenly absents herself in the pre-dawn hours of the day chosen for weaning.

5.2. Traditional Criteria for the Timing of Weaning

The preceding section discusses only the procedures for weaning. But of great nutritional importance is the age at which mothers wean their children. Traditional village norms in Kinanbwa provide a great deal of flexibility with respect to the age of weaning. Villagers will talk about children being weaned at 12, 14, 15, 21, and 23 months, finding such interhousehold and interchild variability quite acceptable. Traditional norms view an 18-month period of breastfeeding as the most suitable general practice, but village opinion also recognizes that there are other factors which can justify either an early termination of breastfeeding or a prolonging of breastfeeding beyond the normal period. (as will be seen, the former exception has become much more frequent than the latter.)

But the use of "months" as a terminological context for discussing weaning is more an outsider's practice than one of the villagers, who use other criteria to judge whether it is now "safe" to wean the child.

By far the most important criterion for the weaning of the child is its feeding habits. A child that has left the sweet-food labouyi period and successfully passes through the salt food "crisis" to begin eating directly from the family cooking pot is a child that village women will wean with no reservations. This willing consumption of cooking-pot foods is the most important behavioral indicator of readiness for weaning.

But other maturational and developmental criteria are also observed. Dentition is an important criterion in this regard. Children who are weaned before teething are felt to be more vulnerable to the diarrhea and loss of appetite that normally accompanies weaning. Children who have begun to teeth are believed to suffer these conditions less. Likewise, children are also believed to be more vulnerable to cold while teething if they have already been weaned when teething begins. In contrast, breastmilk is believed to have a warming effect that will help ease the child through a safer cold-free dentition period.

Walking is another important criterion which is taken as a further sign that it is "safe" to wean the child. Children who are still a tè ("on the ground") will be more likely to get sick if they are weaned. Language constitutes yet a third signal for weaning. The onset of speaking — the calling of mammam and papa — is an important traditional signal that phase-out of breastfeeding may be considered. Some informants, infact, joked about people who prolonged breastfeeding to the point where the child would tell the mother "Mother, come sit down and feed me." The joke itself indicates that linguistic competence and breastfeeding are felt to be somewhat incompatible.

A fourth-important weaning criterion is the general health of the child. If the child manifests good health in addition to a good appetite for other foods, it is believed that he can be weaned with fewer risks.

5.3. Drop in the Average Age at Weaning

The above-mentioned criteria are the traditional ideals which served as guidelines for weaning. But the eight years that had passed between the time our first research was carried out and the present research were enough to make visible a number of impressive tendencies that were undoubtedly already in operation when we first lived in the village but which had since gained impetus. The most impressive of these is the tendency to wean children much earlier than the traditional and mandated dizyuit mwa konsa (18 months or so).

Table 1 gives some quantitative evidence for the pattern whose existence we suspected from simple observation and questioning of neighbors. There are 124 village children under the age of 15 for whom information was gathered on the age at which they were weaned. Table 1 breaks children into 3 groups: those who were born in the last two years, those who were born from two to seven years ago, and those who were born more than seven years ago. The figures show a clear decrease in the average age at weaning. Caution should be used in interpreting the average of 9.8 months in the case of the children under two. The figures include only children already weaned. In this first group there are still children being breastfed beyond the age of 10 months. When this "cohort" is totally weaned it is likely that the average weaning age will be close to a year, rather than 9.8 months. But even with this increased mean age, the tendency remains dramatic: village women are weaning their children much more rapidly than they used to. And it is not at all unlikely that the mean age will continue to drop.

TABLE 1

Diachronic Decrease in Mean Age at Weaning

Years since Birth	Mean weaning age (months)	(N)
0 - 1.9	9.8	(18)
2.0 - 7.9	14.7	(52)
8.0 - 15	16.2	(54)

(P .001)

5.4. Economic Underpinnings of the Drop in Weaning Age

The reasons that women give for early weaning of children frequently involve elements of a cross-culturally unusual belief system (the "spoiled milk complex") that will be discussed below. But this belief systems is not the ultimate cause of the drop in age at weaning. It is best viewed, rather, as an intervening cognitive mechanism to justify possibly detrimental behaviors whose ultimate cause is to be found in a worsening of the general economic situation of village households.

The women of Kinanbwa have now, and have traditionally had, an unusually heavy degree of involvement in long-distance marketing activities that keep them away from the village weeks at a time in some cases. Just before the birth of a child, the woman would return to the village. She would deliver there with the assistance of a village midwife and — most importantly — she would remain at home in the village during the entire 18 month period of breastfeeding. During this time, some women reinvested their capital in livestock and found alternative sources to generate a little income for themselves while nursing their infant in the village: making straw mats, making sisal rope (kodé pit), selling fried foods, bonbons, biscuits, at different social and recreational occasions, buying and

reselling items or foodstuffs, etc.

But this situation is rapidly changing. During the past eight years a series of rapidly increasing economic pressures has triggered off a shift in the domestic economy of many village households. Comparing 1980 with 1972, several patterns stand out:

1. Families continue in absolute dependence on purchase of food during much of the year;
2. The price of food staples has risen dramatically over the past eight years.
3. Many families are now more dependent on the purchase of cooking fuel as well — a rare occurrence eight years ago — and the price of this commodity is also rising.

These changes affect the well-being of children, not only in terms of the availability of food and fuel in the household, but also in terms of the increased opportunity costs now associated with stable village breastfeeding. Stated simply, women can no longer afford to remain economically inactive for extended periods of time. The increased cash-flow crisis constitutes a major deterrent against the use of the traditional 18 month withdrawal period which village women formerly enjoyed.

There are several responses to this pressure. Thus, it is not uncommon now for a woman to remain in the village the first 3 or 4 months, and then to take her baby with her to PAP, where she may have to wean it a few later because of the difficulties inherent in carrying out full business activities at the same time that she nurses her child.

When a woman leaves the market to feed her baby, she is not selling, and is therefore not making any money. This in turn makes the baby a burdenso economic liability, not only because of how much money the woman has to invest in it, but because of the money it prevents her from making.

Options available to women in other societies are not part of the Haitian marketwoman's repertoire. For instance, in some societies where women engage in similar trading activities babies accompany mothers to market. While one sees many things in a Haitian market, the sight of nursing babies is not one of them. Mothers remark how rough, dirty, and dangerous this environment can be for a baby and they would rather leave the market to nurse the baby rather than bring the baby with them. Another option used by working mothers in other societies, especially with babies that have reached a certain age, say 2, 3 months, is to nurse the infant before departing to work and to resume nursing after coming back. Relatives will use bottle feeding or other supplements while the mother is away. But this sort of partial breastfeeding is again not part of the Haitian woman's repertoire. Either a woman is breastfeeding or she is not.

The adaptiveness of this traditional insistence on full-time dedication to breastfeeding should be obvious. In addition to the advantages to the child, it provided a long period of rest to the village mother, an 18-month period in which she could remain free from the physically exhausting, rough-and-dirty itinerant urban marketing activities that had become part of the traditional repertoire of village women.

But this arrangement, adaptive as it was, has proven to be extremely fragile in the face of worsening economic conditions. Under the traditional arrangement breastfeeding itself entails an opportunity cost in a way that is not true, for example, of the African mother who simply takes the child to market. But as this local opportunity cost has become less and less tolerable, the Kinanbwa woman has been faced with the choice of either taking the nursing child to market with her or of simply accelerating the weaning process. Those familiar with the squalid, inferno-like conditions of the Kwa-Bosal streets where these women sell will recognize that, in opting for the drop in weaning age, the village mothers have probably chosen the lesser of the two evils.

5.5. The Role of Powdered Milk

The effectiveness of the above-mentioned cognitive mechanism has been made possible only because of the simultaneous availability of a substitute for breastmilk. Long before our original research in 1972, village mothers had already begun to give powdered milk as a supplement to breastfed children. But at that time powdered milk had the status of simply one among many supplements which mothers fed their children in order to vary their diet. It was a functional equivalent to the various paps and liquids that were and are part of the village food supplement inventory.

But the increasingly early weaning of village infants had led to a simultaneous evolution of the position of powdered milk in the behavioral repertoire and cognitive mind-set of village mothers. Powdered milk is now no longer one among many supplements. It is now treated as an absolutely necessary staple. And even mothers who are fully committed to breastfeeding will feel obliged to provide the baby with powdered milk as well. This supplementation with powdered milk will begin no later than the second month of life, and generally begins even earlier.

The rapid emergence of powdered milk is dramatically exemplified in changes that have come over the typical village trousseau. The impending arrival of a child has, in Haiti as in most cultures, traditionally been accompanied by the preparation of a trousseau. Eight years ago, a bottle was hardly ever a part of the expectant mother's trousseau. she would get the little bonnets, waistbands for dress, castor oil to massage the head, soap for washing, matches and kerosene for keeping the house well lit, and other such necessities. Few babies owned bottles and most of the non-breast feeding was done with a small spoon. If anything, after a couple of months, a bottle was bought, for teas, sugared water, cow's milk, and some occasional "lèt pharmacie". Today, however, a bottle (at least one) is <u>an essential part of the baby's trousseau</u>. Women who have no bottle

will be looked down upon; and better-off women will have two or more bottles which they display to their neighbors. This intrusion of the bottle into the contents of the village trousseau is merely the material manifestation of the successful "capture" by powdered milk of a new and privileged position in the childfeeding habits of the village.

Why has powdered milk achieved this new position? There are a number of contributing factors, including the simple need for a milk-supplement at a time when the continuation of lengthy breastfeeding has become unfeasible for many women. But it would be a mistake to attribute the recent predominance of powdered milk over other supplements to these simple "demand" factors. A very powerful process has been unleashed in another quarter as well. First births are increasingly taking place in the government run maternity ward in Port-au-Prince; and at least some women are having all of their children there. Informants have repeatedly told us that women are obliged by the hospital to include a bottle as part of the packet which they bring with them to the hospital. It would seem that the bottle is used in the hospital, not for formula, but for the preparation of boiled sugar water for the child until the mother can breastfeed him. But in the cognitive scheme of village women, the bottle is associated with powdered milk. And the inclusion of a bottle by the representatives of Modern Medicine as an essential item in the childcare equipment of the expectant mother serves as an important additional support of powdered milk. There has been a recent surge of publicly funded billboards in Port-au-Prince praising mothers' milk as the best food for children. But few village women see these signs, and even fewer can read them. Much more impressive to them is the insistence by Doctors and Nurses that they bring with them a bottle to the hopital where they will deliver, creating a paradoxical and perhaps unintended situation in which medical personnel transmit conflicting messages. It is clearly the pro-powder message which is coming through more strongly to the village women.

Despite the growing attachment to powdered milk, however, the village women are aware of certain practical problems which it creates. It is, first of all, increasingly expensive. It now costs about 10 g a week to feed an infant with powder milk, and this does not include the other foods that are simultaneously given the child. Secondly, it makes more demands of cleanliness than the usual tools. Keeping a bottle and nipple clean are much harder goals than keeping a spoon clean, or keeping the breast clean. Thirdly, it increases the risk of infection. More quantities of boiled water are required to prepare the bottles, which means more firewood is consumed and spent by the family.

But these practical difficulties will not suffice to turn back the increasing reliance on powdered milk. In this sense the village of Kinanbwa is traversing the same path that communities in other world regions are traversing, impelled by similar economic dynamics.

5.6. The "spoiled milk syndrome" and other cognitive mechanisms

Traditional norms placed a great deal of emphasis on protecting children. Women would wean children only when it was safe. Worsening economic conditions have placed village mothers in a double bind situation. Traditional beliefs have told them that, other things being equal, they would be harming their children if they weaned them before they had achieved the various physical developments mentioned above that were completed near 18 months of age. But economic conditions now impel them into behaviors (early weaning) which by their own cultural standards are physically detrimental to their offspring.

Anthropologists have long since learned that, when faced with such dilemmas, communities will find cognitive escape hatches which, without challenging traditional premises, nonetheless permit capitulation to new economic realities. In this case the major cognitive escape-

hatch mechanism has been the florescence of a formerly minor belief complex by which, under certain circumstances, it was now dangerous for the woman not to wean her child. This minor complex, consists principally of a belief in an illness called let gate ("spoiled milk").

Villagers believed that it is possible for the milk of a lactating woman to gate, to spoil and turn into a poisonous substance that may, instead of nourish the child, harm or even kill it. The most frequent cause for this transformation is the onset of a violent negative emotional state in the female. Even a mild emotional upset, triggered off by an argument or a disagreement with one's spouse, can disturb the woman's milk sufficiently to prevent her from feeding her child immediately. The milk will be given time to simmer back to normal.

But if the emotional reaction reaches a certain intensity, then it is believed that the woman's milk is irreversibly harmed. It would appear that marital conflicts are themselves the major context in which this milk spoiling occurs. Following a violent argument involving a lactating woman, two things can happen to her milk. On the one hand, the milk can "go up into her head" (vinn monte nan tet-li), a serious turn of events which can lead to permanent mental illness on the part of the woman. On the other hand, the altercation may simply turn her milk into move let or let gate (bad milk or spoiled milk). The milk then becomes harmful to the child, causing eruptions of boils all over his body or other illnesses which in some cases may prove fatal. Once this happens to the mother's milk, the process is generally irreversible, and the only responsible course of action is for the woman (reluctantly, of course) to immediately wean her child, even though he or she may be only a few months old.

Beliefs such as this arise and are sustained because they serve some function or functions in the group which entertains them. One is impressed at the manner in which this traditional belief in the ability

of breastmilk to get spoiled forms part of the above-mentioned complex aimed at protecting the lactating woman. That is, not only is the woman freed from the obligation to generate income in the marketplace. At the same time, she is defined as being in a vulnerable state where neighbors and other family members must accord her special treatment -- above all by avoiding any words or actions which will excite her -- to prevent her milk either from entering her own head and causing insanity or from spoiling and causing problems to the young infant. This "spoiled milk" complex then can be seen as one element in a traditional complex whose principal effect was to protect the lactating woman from the physical and emotional stresses of ordinary village life.

During our initial research in the early 70's, we had been exposed to the belief in spoiled milk. But by the time our follow-up research began, this originally minor belief had turned into a frequent topic of conversation in the village. It was as though this formerly infrequent illness had rapidly come to take on epidemic proportions, one outcome being the empirically impressive plunge in mean age at weaning documented in an earlier section.

The "illness" itself would appear to have little or no basis in biological fact. The "epidemic" must therefore stem from other factors. The belief itself was already present in the population, and even in traditional times a small degree of early weaning was probably done in conjunction with the belief. Perhaps the most productive formulation of the question is the following: what factors have caused people to invoke with increasing frequency a belief that in former times was of minor importance?

It takes little imagination to perceive the manner in which this "illness" provides precisely the cognitive rationale for turning to the increasingly early weaning that the worsening economic conditions

in the village make practically desirable. The belief complex itself makes possible a behaviorally convenient symbolic metamorphosis of the meaning of early weaning. Traditionally, early weaning was seen as an injustice to the child. But when a woman has let gate, her early weaning is interpreted as a service to the child. In this case, early weaning is not cruelty to the child; it is instead cruel not to wean the child.

We suspect thus that the epidemic of let gate which appears to have come over the village cannot be understood apart from the economic pressures which make early weaning desirable and from the concomitant need for a cognitive rationale within which this formerly criticized practice becomes personally and socially acceptable. But in positing this function, two errors must be avoided. In the first place, this factor does not explain the origin of the belief in spoiled milk. This belief antedated the early weaning patterns and must be explained on the basis of factors which fall outside the scope of this report. All that is being explained here is the increased use which villagers make of this pre-existing belief.

Secondly it would be a serious misinterpretation to assume that the use of this early-weaning rationale is being done consciously and intentionally by women looking for an excuse to stop breastfeeding their children. It is our impression that the women involved are genuinely convinced that their milk is spoiled. What appears to be operating is an anthropologically common pattern by which beliefs emerge that make possible the turn to formerly unacceptable but now necessary behaviors. These cognitive mechanisms operate on the whole without any awareness on the part of the actors involved that they are engaging in collective make-believe, and there would be no justification--either empirical or theoretical--for positing conscious trickery on the part of the Haitian woman whose milk gets thus spoiled. What has occurred has been a *shift in the function of a traditional behavior/belief complex*. The spoiled-milk folk-theory which formerly was used to justify special

concern for and treatment of lactating women is now invoked to rationalize the early weaning of children. The belief itself has remained untouched; what has shifted is the behavior complex into whose service it is called.

6. THE KITCHEN, FUEL, AND WATER IN VILLAGE LIFE

6.1 The Village Kitchen

All human societies prepare food with the use of fire, and most societies establish functionally specialized locations whose spatial organization and material equipment facilitate the lighting of cooking fires. When these locations are enclosed or partially enclosed spaces -- as is generally by no means universally true -- we are dealing with what in English would be referred to as the "kitchen". In rural Haiti the lighting of cooking fires is generally done in such functionally specialized enclosures.

6.1.1 Importance of the Kitchen in Nutrition Research

Any location which is the physical setting for such important nutritional and energy-consumption behaviors would be interesting to the anthropologist. But for nutrition researchers the kitchen is a particularly critical location where macroeconomic factors and "micro-cultural" factors all interact to determine the types and quantities of foods that actually enter the mouths of children. For those concerned with the larger economic picture, the observation of different kitchens is one excellent setting in which to see firsthand the results of differential food availability. For those interested in "cultural" factors -- a phrase which is frequently a poorly disguised paraphrase for "practices by which adults deprive children of food even when they have the food" -- the kitchen is the best place to sit, observe, validate hunches, and -- most importantly -- correct the class-biased stereotypes that frequently contaminate the "cultural-deficiency" claims of those planners who rarely spend much time actually sitting in the kitchens of those whose culture they would like to improve. It is in the kitchen itself that the critical separation and distribution of food generally takes place, and it is therefore here that differential patterns of parental "selfishness" or parental "self-sacrifice" actually unfold, as the decisions are made as to how much food is to be given to each family member. If households at the same apparent economic level are nonetheless

achieving different levels of nutritional well-being for their children observation of their respective kitchens is an excellent setting in which to begin a search for the possible determinants of these differences.

But the kitchen is also an important setting — perhaps the most important setting — for detecting the way in which harmful microorganisms make their way into the bodies of young children. The mutual causal interactions between childhood malnutrition and infectious disease are now known to be important, and the kitchem is perhaps the most important conduit for the transference of these microorganisms into the bodies of young human victims.

This transfer is made possible because of other physical tasks besides cooking that are essential components in the food chain of most human groups:

1. Food storage. Except in the most hand-to-mouth settings, there will be a store of uncooked food on which the family gradually draws. The locally available food storage techniques can be an important determinant of harvest disposition and subsequent dependence on purchased food. But more immediately poor storage can lead to the introduction of microorganisms into food which may not be completely killed in cooking. But it is the ineffective storage of cooked food that is much more conducive to the proliferation of microorganisms.

2. Water storage. The sources and quantities of water used can also impact on infectious disease. But the differential use of different sources of water, as well as the effective covering of water, also help to minimize the danger of infectious disease. But these patterns also occur either in the physical confines of the kitchen or at least in close association with kitchen events.

3. Kitchen implement cleaning and storage. There are two functionally distinct subgroups of kitchen objects that human societies utilize: vessels of different sorts for holding food, and hand-tools for cutting or moving the food within and between these containers. But in addition most societies also have two behaviorally distinct subsets as well: vessels and tools used in the

consumption of the food once cooked. Since these latter rarely if ever come into contact with germ-killing levels of heat, their effective storage and post-use cleaning is important for protection against disease.

4. Fuel Storage. A fourth nutritionally and hygienically relevant pattern that can be observed in the context of the kitchen is the availability of fuel. As we will see, fuel shortages can exert a detrimental impact either by:

a. reducing the time allowed for cooking, or
b. reducing the number of meals that are cooked on a given day.

Observation of the storage of fuel sensitizes the observer to the movements and increasingly frequent domestic shortages of this once abundant resource.

In short, observation of the kitchen can provide a number of important insights into behavior domains that exert a strong impact on the nutritional outcomes of any human community. Kitchen behaviors are rarely the ultimate causes of malnutrition in a society. But the kitchen is certainly a methodologically useful context in which to generate hunches as to where the locally relevant determinants are to be found in any given social setting, and to generate suggestions as to how outside agents might provide useful inputs.

6.1.2 *The Kinanbwa Kitchen*

In Kinanbwa the kitchen is always separated from the house itself. People must pass outside to reach the kitchen, and food must therefore also be transported at least short distances "under the open sky" to be brought into the house itself, which is where adult males are in principle supposed to eat.

Kitchen structures are almost always smaller and of inferior construction to houses themselves. Even a house with a tin roof and rock walls will nonetheless have a kitchen with wattle-daub walls and a thatched roof. The most salient structural difference between superior and inferior kitchens consists in the number of rooms. The ideal is to have a two-room kitchen. One of these

rooms, kept under lock and key, will be the storage room (cham depo) where food, fuel, cooking implements will be kept, along with the family store of uncooked food itself. (The elevated food storage structures seen in other parts of Haiti are unknown here). The other room will be the "fire room" (cham dife) where the fuel is kindled and the food actually cooked.

Table II shows that a healthy minority of houses do manage in fact to have a two-room kitchen complex,

TABLE 2

Kitchen in Kinanbwa

Type	(N)	(%)
Two Room	87	43.7
One Room	73	36.7
Ba Van	5	2.5
No Kitchen	34	17.1
TOTAL	199	100.0

and some eight out of ten village houses will have at least a one-room kitchen. In such cases storage functions will be shared between the kitchen itself and the house. The third category, the ba van, is not a permanent enclosed structure, but is rather a temporary barrier erected against the wind. Those houses that have no kitchen are either temporarily using the kitchen of some neighbor or relative or are temporarily cooking in the house itself. Many of the houses that have no kitchen have no resident conjugal couple. Such is the case in houses where older children live but continue to eat from their parental cooking pot.

The vast majority of kitchens are without systematic ventilation. There are no windows that are left in kitchens analogous to the windows that are built in houses. The strategy is, rather, to have as confined a space as possible to avoid disturbance from the strong breezes that blow across the Plain at certain times of the year. The problem of smoke, which is especially

serious when firewood is the fuel, is partially alleviated by the widespread practice of allowing the kitchen to fall into at least slight disrepair. This means that there will be cracks in the walls and spaces between the roof and the wall through which at least some of the smoke will escape. But the cooking procedure nonetheless continues to produce smarting eyes even in experienced cooks.

6.1.3 Independent Households and Separate Kitchens

Demographers and census takers sometimes define the "household" as all those individuals who eat from the same cooking pot and sleep under the same roof. This notion is in basic accordance with the village definition of household membership (moun kay-la). The definition must be extended to accomodate those older children who may not sleep in the paternal house itself but rather in a adjacent depo or empty house. But such individuals are still considered as moun kay because they are still dependent on the parents (sou kont paran-yo). This dependence manifests itself principally in their eating from the same cooking pot. Furthermore, in Kinanbwa, the definition of household member must be further expanded to include those absent mothers and daughters who are doing business in Port-au-Prince. But they are also moun kay because their food comes from the same fund (sot nan mem lajan) as the food that enters the village cooking pot and their money is in fact responsible for purchasing much of the food that goes directly into that pot. In sum there is an intimate association between being considered a member of the house and some form of regular participation in the family cooking pot.

But this has an inverse application as well. It means that each household must have its own separate cooking pot. But a separate cooking pot ideally means a separate kitchen as well, and a separate inventory of the numerous objects that go into the equipping of a rural Haitian kitchen. There are many compromise arrangements found. For brief periods of time two couples (generally parents and a married child) may eat from the same pot and pool resources. But such arrangements are extremely short-lived and fragile. And other cases can be found where a couple will "borrow" the kitchen of a

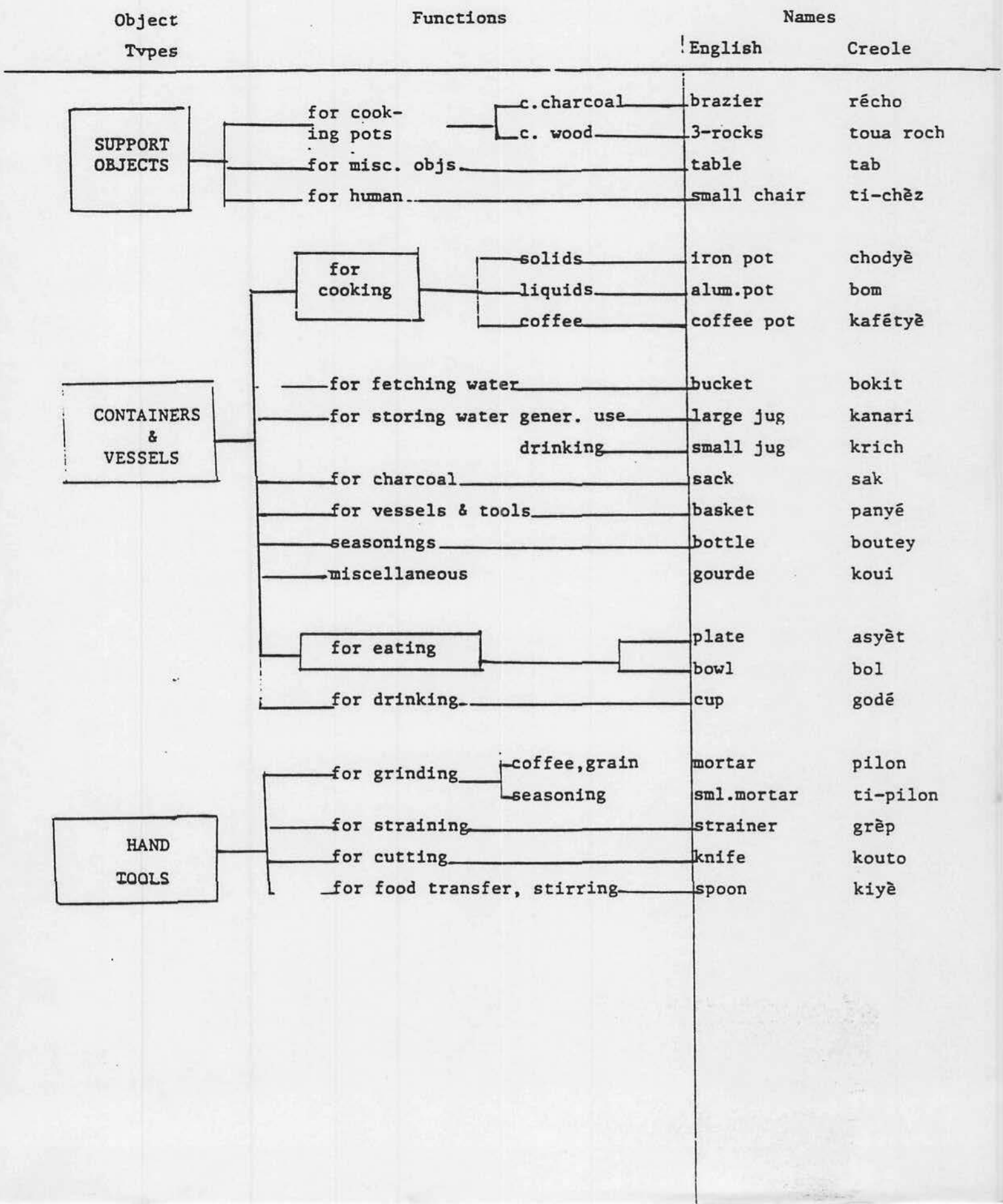
close relative, an arrangement that is made feasible by the vacancy of many village houses due to involvement in Port-au-Prince trade. But these arrangements are also considered temporary, and eventually each couple will establish its own kitchen. We shall see later that there is a great deal of food exchange that unites households. But such food-mediated solidarity manifests itself, not in joining resources to cook in the same pot, or the same kitchen, but in sending across the compound plates of food that each household has independently cooked in its own kitchen. An independent kitchen, and an independent stock of locally used kitchen supplies, is a prerequisite for adulthood and social respect in Kinanbwa.

6.2 Village Kitchen Equipment: Schematic Overview

The standard equipment found in the village kitchens of Kinanbwa consists of three basic categories of objects found in kitchens around the world: Physical support objects, vessels to hold the various foods and liquids during preparation and consumption, and a series of hand tools used in the physical alteration and transfer of the foods. A young couple wishing to set up a kitchen in Kinanbwa will have to purchase more than twenty different specific types of objects that fall under these three general categories. And most of these object types (such as bowls, spoons, pots) are such that the couple will have to purchase several members of the category to permit efficient and/or socially dignified execution of the various food-related functions. Figure 2 schematizes the contents of the village kitchen, identifying the specific local objects that constitute the rural Haitian solution to the more general food preparation tasks found around the world.

Figure 2

The Village Kitchen



6.2.1 Physical Supports for the Cooking Pot and the Cook

The cooking fire is the functionally critical component of any human kitchen. In rural Haiti it is rare for foods to be placed directly on the fire. With the exception of ears of corn or occasional sweet potatoes roasted as snacks, food in Kinanbwa are cooked in pots of one sort or another, and these vessels themselves are placed on some sort of physical support associated with the cooking fire. There are two fundamentally different types of support found in Kinanbwa and throughout rural Haiti.

The most common traditional support for the cooking pot is a quasi-triangular arrangement of three rocks. This support strategy is used whenever the food is being cooked over firewood. The burning wood itself is placed directly on the earth floor of the kitchen between the three rocks, and the cooking pot is positioned on top of the rocks. The resulting distance between the cooking pot and the fuel permits ventilation despite the contact of the fuelwood with the ground. The heat generated by the flame extends high enough to permit efficient cooking despite the distance between the cooking surface and the fuel itself. The "three-rock" arrangement thus balances the need for heat with the need for simultaneous ventilation to ensure continuous combustion. This arrangement is a cross-culturally common rural cooking strategy that appears to have evolved independently in different parts of the world. It is still by far the most frequently found cooking arrangement in rural Haiti.

When charcoal is used, however, the "three-rock" cooking pot arrangement becomes technologically infeasible. Because charcoal produces no vertically rising flame, its heat permits cooking only if there is no gap between the charcoal and the bottom surface of the cooking pot. The vessel must therefore be in direct contact with the charcoal. The "three rocks" would have to be removed to permit this direct contact. But this removal of the "three rocks" would create a ventilation problem. The floor surface would block air from beneath and the directly superimposed cooking vessel would eliminate ventilation of the charcoal from above. The fire would die.

The solution which has emerged in Haiti and in many other parts of the world is one in which the charcoal is placed on a cast iron brazier whose surface is located several inches above the ground and is perforated with numerous small holes large enough to permit ventilation from below but small enough to prevent loss of the charcoal. This cast-iron platform is referred to as the recho in Haiti, and is now a standard part of the kitchen equipment of even poorer rural households. The three rocks will be used for firewood, but the recho will be used in those increasingly common cases where the food is being cooked with charcoal.

Both the three-rock structure and the recho are placed directly on the earth floor of the kitchen, creating a situation in which the cooking pot is no higher than knee-level for the cook. This is in contrast to traditional cooking structures in Central America, for example, where the fire is made on a platform that permits women to maintain a normal standing position while cooking.

The rural Haitian woman, in contrast, must maintain her body in a lowered position while tending the cooking pot. Though most women have learned to adopt a squatting position for long periods, a special type of low chair (ti-chez-ba) is also part of the standard equipment of the rural kitchen. This permits a respite from the fatiguing squat that the woman would otherwise have to maintain.

Some kitchens will also have a table as part of kitchen furniture, but this is exceptional. Tables take up space and since most of the work is done in a squatting or low sitting position, there is little use of the waist-level table as a working platform that is found in other settings.

6.2.2. Complementary Cooking Pots: Chodyé and Bom

Some world regions have fuelwood-based cooking technologies which interpose a fixed cooking surface as a vehicle for heat transfer between the flame and the food itself. The Central American tortilla, for example, is prepared by placing the ground corn directly on a fixed clay surface that forms part of the stove itself and is heated from below. Rural Haitian

cooking techniques do not employ any such fixed heating surface on which food is directly placed. Rather the food is first placed in a cooking pot. It is the surface of this pot which then conveys heat from the fire to the food.

All cooking pots in Kinanbwa are made of metal. There is no recollection among older informants that it was ever done differently. That is, households have always been dependent on purchase for their cooking pots, a practice that probably dates all the way back to the colonial period.

There are two types of cooking pots that are commonly placed over fire in the village. The most important is a cast-iron pot referred to as a chodye. It is in the chodye that cornmeal, rice, millet, plantains, and most other viv are cooked, as well as the occasional meat and fish that are consumed in the village. Chodye come in three general sizes. Every household in the village will have at least one chodye, and most have more than one.

But recent years have seen the increasing importance of lighter metal pots as well. Made of either aluminum or tin, these lighter pots are referred to as bom. Whereas the chodye is associated with the making of heavier vivs, the bom is seen as the most appropriate vessel in which to cook beans, soups, or any other liquid or quasi-liquid food. Though beans could theoretically be prepared in the chodye, village women prefer the bom for at least two reasons: 1) it comes with a lid that permits effective covering of the beans during a particular moment of the cooking, and 2) it is simply "better" to cook beans in the bom than the chodye.

The bom has other advantages as well. Because they are light weight, larger boms can be used as substitutes for the buckets that are normally used to fetch water. And also even the largest bom can be purchased for substantially less than the $4.00 that must be paid for a large chodye. But the bom cannot be used as a substitute for the chodye. It is too thin to withstand the long, intensive heat necessary for the proper cooking of cornmeal and other grains. Thus both types of cooking pots

now play essential roles in the village kitchens, and all but the poorer households will have at least two different sized members of each of these two cooking pot categories.

6.2.3. Eating Vessels and Eating Utensils

One occasionally hears chilling accounts of rural Haitian eating habits that depict a level of poverty so extreme that:

1) people have no plates from which to eat; and
2) adults are so hungry that they deprive children of food.

Such accounts leave one with the impression that in rural Haiti when the cooking is done, there is a mad dash into the kitchen as family members elbow their individual way to the pot to scoop out a few morsels of food with their bare hands before other family members beat them to it.

Needless to say, such schemes are not part of the daily routine of village kitchens, nor have we ever witnesses such an intrafamilial free-for-all. Every village house has a variety of bowls, plates, and gourdes and in fact the plat manjé ("plate of food") is one of the most appreciated gifts that has become a local symbol of solidarity. We shall see below that the food is spooned out onto the plates (or plate equivalents) by the cook in a fairly fixed, traditional order. But for here it is only necessary to point out that eating does not as a rule occur directly from the cooking pot. As is true in most human societies, there is an intervening distribution process in which the cooked food passes first from the pot in which it is cooked to a bowl, plate, or some other functional equivalent that will be handed to the individual family members.

The rule is that each family member eats from a separate plate. Even children will each be given their own separate plates of food. If children are observed eating from the same plate, probably one of two things is happening:

1. An older sibling is allowing a younger sibling to eat some of the food from his or her plate. Such food sharing is a very common scene. But the younger child will have received his or her own plate as well.

2. Neighbors' children have been given a plate of food. When children from outside the compound "happen" to be present when food is being given out, they may receive a collective plate from which they can eat. There are strong rules governing such food gifts, and they will be discussed below.

The "plate of food" that each person in the family receives may not be dished out onto an object that an outsider would literally call a "plate". In fact most food is dished out onto deeper rimmed vessels which in English are more akin to the "bowl" than to the "plate". These deep-rimmed plates are more suitable to the serving of corn meal and liquid bean puree, which is such an important meal in the village. But other objects can be used make shift as plates as well, especially koui (hollowed-out half shells of tree-grown gourdes) and the flat lids that come with the earlier-described bom cooking pots. Women and children are more likely than adult males to be given food on such substitute plates.

6.3 Cooking Fuel: From Firewood to Charcoal

We were impressed at the manner in which fuel scarcity had become a nutritionally relevant issue in the period between our earlier and later research. Formerly taken somewhat for granted, the availability of fuel at any given moment is now a delicate factor that can influence not only the thoroughness with which a given meal will be cooked, but even the frequency with which meals can be cooked. The increasing status of fuel-as-a scarce-resource is merely one new element in the stress that has come over the rural economy.

For the most part, charcoal is an urban fuel. Most cooking in rural areas, even areas which supply charcoal, continues to be done

with firewood. But the very charcoal economy itself undermines the local firewood base in regions of intensive charcoal exploitation. Kinanbwa is located in an area that used to be an important supplier of charcoal to Port-au-Prince. But charcoal is made from trees that grow wild. Never has any Haitian peasant community grown the wood from which charcoal is made. The disappearance of original wood stands, and the competitive, premature cutting of secondary stands before full maturity, has resulted in the virtual disappearance of large stands of tress. This has undermined, not only the charcoal economy, but also the traditional patterns of firewood gathering.

The conomic response of villagers was to become occasional purchasers of charcoal themselves for their own domestic fuel needs. But what began as an occasional behavior (which was already present during our research in the early 1970's) has become now a regular and essential expenditure for many village households. And now the presence or absence of fuel in a house has become one of the dimensions which distinguishes better-off from worse-off families. In the following sections we shall discuss the manner in which villagers now manage their domestic fuel supply. As with so many other domains, what unfolds before the observer in the village of today is not "traditional fuel use patterns," but rather the evolution of traditional patterns toward a situation of increasing scarcity.

6.3.1 Traditional Firewood Gathering

Firewood gathering has traditionally been the work of women and children, especially the latter. Children would go out in small groups to gather small amounts of firewood. The major traditional source of firewood was the deadwood gathered from wild growing trees. The ownership of the land was never an obstacle in traditional firewood gathering. Most land in this part of Haiti is privately owned. Public land or "community woodlots" are unknown in this particular region.

Much land on which trees stand is collectively owned by a kin group, since local practice subdivides land that is good for cropping but frequently leaves intact land that is not used for agriculture. But even persons with no ownership rights can gather wood.

Some people push these rights somewhat further and will actually chop branches off trees for firewood. But the practice of chopping entire trees down for firewood, which is the prevailing practice in much of Central America (where firewood provision is a male task), is unknown in this part of Haiti. Widespread tree chopping is, rather, associated with the charcoal economy. Firewood gathering has traditionally been directed toward dead wood or toward branches of living trees.

Not all dead wood is material for firewood gathering. There are about half a dozen dead trees whose trunks and branches lie untouched right in the residential compound of Kinanbwa. These dead trees, however, are saved from the firewood gatherers by their status as boua sèvis ("service trees"), that is, trees inhabited and claimed by one or another group of locally venerated spirits. The wood can be used to light fires only for ceremonies directed toward those spirits.

6.3.2 The Making of Charcoal

Most charcoal has traditionally been made by peasants who continue to use firewood for their own domestic use. The making of charcoal has never been done on any large scale with a view to domestic use. Any domestic use of home-made charcoal is generally in the nature of a marginal utilization of a small portion of a product that was made principally with a view to sale. But as firewood has become scarcer, those individuals in the community who make charcoal will extract increasingly large portions for their own home use.

The favorite trees for making charcoal locally are the gayak and the bayaonn trees. The charcoal made from these woods is superior in at least two senses:

1. A given volume of charcoal from these trees lasts longer. It is "heavier". Lighter woods have charcoal which burns too fast.

2. Charcoal from these trees is almost completely smokeless. Inferior brands of charcoal emit smoke and leave larger quantities of ashes.

The charcoal from the bayaonn and gayak trees is thus able to fetch a higher price on the market.

Kinanbwa villagers who make charcoal use the traditional earth kiln that is found all over Haiti. The tree is chopped down and the wood is split into smaller pieces. These pieces are stacked in horizontal layers on top of a base of smaller wood. Depending on the number of layers, occasional levels of small kindling wood may be inserted When all the wood is stacked, the entire structure is covered carefully with pay (vegetal debris) to block out all air, and this pay is in turn covered with a layer of earth. Care is taken to leave no apertures through which wind could enter. A small entry hole is then made at the bottom of the pile and some kerosene will be poured over the kindling wood accessible through the hole. A fire is then struck and the hole once again covered up. Depending on the size of the wood pile, the carbonization process may take two or three days. The kiln is then demolished and the charcoal maker rakes out (ralé) the charcoal, generally with a hoe, and puts it into sacks.

The producer will get a better price if he sells the charcoal in one of the three regional markets within several hours travel from the village. But persons with a small amount of charcoal will rarely undertake long distance transportation expense and will prefer to sell their charcoal for about three gourdes less per sack to the unending stream of itinerant merchants who scour the countryside looking for charcoal.

6.3.3. Growing Scarcity of Wood

Most of the trees in the region have been cut down because of this charcoal making activity. In fact the entire Cul-de-Sac Plain has lost its former status as the principal supplier of charcoal to Port-au-Prince, a role that has now fallen to the Northwest. But not only has wood for charcoal grown scarce. Essential house-building wood has also become scarce and expensive. The wood to build the frame of an ordinary village house now costs nearly $100.00. Older informants recall when it could be purchased for $10.00.

In view of the growing scarcity of wood and its increasing value, at least some farmers have begun taking a more jealous proprietary interest in the bavaonn trees remaining on their land. Neighbors still have rights to dead wood without asking the owners' permission. But a stranger slashing a living branch may now be challenged.

Farmers who have such trees to protect may themselves use the branches for charcoal. But if the trunk is straight it will be saved for use in house frames. The general principle with respect to tree care is: trees will be used for charcoal only if they are not good for lumber.

But what is important in this is that the scarcity of wood has not led to the spontaneous emergence of the planting of wood trees. They are still seen as something that leve pou ko-l, grows by itself. The suggestion of growing wood trees, which we discussed with peasants, was one which they found promising and somewhat intriguing. But our own notions that they would plant them for charcoal were quickly corrected by most informants, whose own view of the matter was that, if they took the trouble to plant the trees, they would wait the extra time necessary to have the tree usable as lumber. Only the crooked growing trees (krochi), or the branches of the straight trees would be used for charcoal. It is also interesting, and revealing of the cash-orientation of the farmers, that no informant spontaneously mentioned the use of

trees as firewood. They would undoubtedly use some of the wood for this purpose, but they entertain the ideas of new technologies principally insofar as these innovations are viewed as a possible direct source of new cash income. Their response is palpably less enthusiastic concerning suggestions whose effect would be to enhance their own domestic self-sufficiency without simultaneously generating more cash. This response pattern should be taken into account by planners of nutrition interventions.

6.3.4. Charcoal vs. Firewood: Patterns of Change

The turn to charcoal has occurred principally because of the growing scarcity of firewood. People would prefer the return of the good old days, when wood was so abundant that nobody had to cook with charcoal. Firewood is now so scarce that children would have to spend several hours a day in ranging longer distances to find increasingly smaller amounts of wood. Families without cash to purchase fuel are now forced into the use of brambles and thorn bushes as fuel, with disastrous results to the efficiency of food preparation. Now men themselves have become scavengers of wood. It is now a common sight for men to lug large quantities of wood from the fields to their homes, a behavior that would have been most unusual in the wood-abundant days of yore.

But though the turn to charcoal has occurred only through necessity, the turn has definitely occurred. There is no family in the village which uses only firewood or only charcoal. It is a matter of the balance. Out of 204 houses, 166 (81.4%) reported using more charcoal than firewood. This charcoal is in its vast majority purchased. This means that the purchase of fuel has now become a central element in the village food economy. In this sense the village of Kinanbwa has probably gone further along the road to commercialization than most other rural communities. The purchase of food is an essential part of the economy of most Haitian communities. But now even the purchase of fuel is working its way into the rural economy of at least some regions. That is, increasing economic stress in rural Haiti does not lead to withdrawal from the cash economy, but rather to deeper, more disadvantageous involvement.

6.3.5. Charcoal vs. Firewood: Patterns of Preference

The incorporation of charcoal in the rural economy has occurred by economic force. But villagers concur in their views that it is superior to firewood in its cooking properties. In the first place, the food cooked with charcoal is viewed as having a better taste: less smoke enters the meal. Secondly, it is easier to cook as well, smoky firewood causing smarting eyes. Thirdly charcoal permits unencumbered cooking in all weather. During heavy rains water enters the kitchens, which are left purposefully with openings to achieve at least some ventilation. This interferes with the cooking process. Furthermore, since eating is not done in the kitchen, at least not by adult males, rains make the transfer of food from the kitchen to the house a very wet and muddy process.

One option is to cook in the house itself. But the smoke emitted by firewood makes cooking in the house impossible for families who depend on that fuel. A family with charcoal in contrast will simply move the rechos to the house and do most of their cooking there during heavy rains.

This means that the disapperance of wood has led to dependence on what is viewed as a superior fuel. But the expensiveness of this new fuel led to the evolution of new cooking practices, which are worth discussing.

6.3.6. Conservative Cooking and Reduced Meals: Effect of Fuel Scarcity

We can identify at least four effects of the increasing scarcity of firewood and the dependence on charcoal. Three of these could exert negative nutritional impact.

1. Fuel Conservation Strategies. People recall the days when fires would be kept lit all day long, at least in the form of embers. Such perpetual fires reduced the time invested in the starting of the fire to the lighting of the morning fire. Persons with abundant charcoal may

still do this. (It will never be done if little children are to be left alone for any time, out of protection, not only for the child, but also for the kitchen and the house). But most people now put out the remaining embers after cooking to use them again the next meal. Now cooks have to calculate precisely how much charcoal they need, and the most frequent error now is to underestimate. Children are constantly being sent across the village to purchase emergency quantities of charcoal in the village boutiks discussed earlier, to keep the cooking fire from extinguishing, thus delaying the meal preparation time. The delays are frequently prolonged when an adult in the house finds that the quantity of charcoal given by the boutik owner is insufficient with respect to the money paid and the adult himself will return to discuss matters. When the mother is absent and the cooking is being done by a daughter, admonitions will be given to make sure that the fuel lasts until the cooking is done. Fuel conservation is a new skill that cooks in times past never needed to learn.

2. Cooking with only One Fire. Discussions of rural cooking generally refer to "the cooking pot and the fire", a practice which we have followed. In reality, however, many households will simultaneously light two fires. It will be recalled that the ideal meal consists of both a viv and a vyann. These are virtually never cooked simultaneously in the same pot. When fuel is abundant, two fires will be lit. Cornmeal, for example, will be cooked over one, while bean sauce will be cooked over the other. Where there is fuel scarcity, however, the family will light on fire, cooking first the bean sauce in the bom and only then cooking the chodve of cornmeal. This can lengthen the cooking time by nearly an hour. But such one-fire meals now appear to be the most common practice in the village.

3. Undercooked Meals and Less Boiling of Water. Fuel scarcity can simply lead to removing the food from the fire before it is adequately cooked. Furthermore earlier reference has been made to the practice of boiling all water given to young infants under three months old. But such water boiling becomes more difficult under conditions of fuel scarcity.

4. Smaller Meals or One Meal Days. We also have evidence that the absence of sufficient fuel may actually lead to the cooking of smaller meals. Under normal circumstances, of course, it is the quantity of fuel that is adjusted to the quantity of food. But where fuel is lacking, the opposite may be the case. Furthermore at least some "one-meal" days in certain households were produced, less by absence of food, than by absence of fuel. Ordinarily households will be able to make the fuel match the food. But now it is becoming less unheard of for the contents of the cooking pot to be downwardly adjusted to the absence of sufficient fuel.

6.4. Water in the Domestic Economy

Food, fuel, and water are the three key ingredients in most human kitchens. We have seen the increasing stress that has come over the first two resources in Kinanbwa. We are also familiar with other settings in which water is a scarce resource during certain times of the year and have been told that in certain regions of Haiti cooking may be constrained by the scarcity of this resource. In Kinanbwa, however, water is still abundant and readily available for domestic use during the entire year.

6.4.1. Sources and Uses of Water

There are three major sources of kitchen water in Kinanbwa : wells, springs, and rainwater. The latter is used by only very few families, who capture it from tin roofs in drums. Thus domestic water can be said to come basically from wells and springs.

All families get water from both sources. The water table of Kinanbwa is very high and there are some half a dozen wells in the community. The wells are associated with the names of the householders who dug them, but there is no restriction of access to any of the wells. This is at least partially due to the fact that houses in Kinanbwa are almost all built on commonly-owned inheritance land. Village custom allocates exclusive usufruct to the builder of a house, but not to the digger of a well.

Virtually all of the wells in Kinanbwa have saline water which is virtually never used for drinking. Certain of the wells in the nearby town, located on higher ground, have fresh water which many consider to be potable. But for drinking and cooking, the villagers will rely on the water from one of two springs located between twenty minutes and a half an hour by foot from the village.

In discussing the different taste of water, villagers use the same dichotomy that they were found to use in comparing the tastes of different foods: light (leje) vs. heavy (lou). The fresh water of the springs is light; the saline water of the wells is heavy. Fortunately for the village, there is a fairly regular supply of "light" water for drinking, which is threatened only when exceptionally heavy rains inundate the area around the spring.

The four major uses to which water is put are not, of course, substantially different from uses found in other cultures:

1. Drinking
2. Cooking
3. Bathing
   a. of young children
   b. of older children and adults
4. Washing
   a. pots, dishes, and utensils
   b. clothes
   c. sprinkling down the patio

As we have indicated, all drinking water must be dlo dous (fresh water) in terms of the absence of salinity, and leje in terms of its taste. For neonates, drinking water must not only be leje but also boiled.

Cooking is also done only in fresh water. But this is principally because saline water causes the cooking process to be prolonged. The perceived disadvantage of this is less in terms of time less than in wasted fuel.

Bathing is done either in local irrigation canals or — quite frequently -- in large basins of water brought to the house. The water may be saline. Most bathing is done in saline water, not because there is a preference, but because such water is available right in the community rather than through a twenty minute walk. Even young children will be bathed in this local well water. But in the earliest weeks of life the water will be heated up on the fire. Then for several months more, the daily-afternoon bath will be done with dlo soley -- water placed in basins and left to warm in the sun. Adult males and females will frequently bathe from basins. Males will always go inside the house. But custom permits females to bathe outside of the house or on the front porch, the only social restriction being that they cover their lower genital area.

The washing of clothes is done also with more easily available salty water. Most clothes washing is done in standing water several hundred yards from the village. But on other occasions water will be brought to the house and the clothes washed in a basin. Part of daily housekeeping also entails sweeping floors and the open space in front of each house. But water will be first sprinkled on the ground of the floor. This is one of the first tasks done each morning.

The washing of cooking and eating utensils, pots, and pans is also done first thing in the morning. Village practice treats this as a task to be done before a meal rather than after. The prevailing technique is to place all the dirty dishes and other objects in a large plastic basin,

which is filled with water. Soap is also used, but with skyrocketing prices its use has become visibly more conservative (as was seen to be the case with fuel as well). Sometimes a local leaf (lyan savon) will be added to the wash water, and the cleaning itself may be done using leaves. Sticky foods will be removed either using sand or a type of scouring pad made of leaves. Families that can afford it may buy a metal pad from the market. The rinsing will be done either in the same or another basin once the washing of all objects has been done. Water use is sparing in the rinsing, since the same young girl who is doing the washing and rinsing may be the one that will have to fetch an extra bucket of water if her use of the water is too prodigal. The pots, plates, cups and utensils are dried and stored in huge baskets.

6.4.2 The Fetching and Storage of Water

Water is brought to the kitchens by women and children. A common village sight is a group of children of both sexes, each carrying a vessel suited to his or her size, parading off together to fetch water. Children about to go after water may stop by the houses of friends to look for company in this task. Along with their empty buckets or pots, they will also have clothes or twisted leaves which they will interpose between their heads and the filled water vessels. Carrying is done on the head.

Young boys will quickly "outgrow" water carrying. Teenage boys, and even pre-teens, will be very self-conscious about being seen carrying out this activity defined as a female task. Girls may not hesitate to laugh at an older boy who is seen carrying water, a practice that results in the effective extinction of water-carrying behavior in boys. Older boys may congregate near the sources of water, but this is to bathe (always "downstream") or to joke with the girls. The absence of females in certain houses because of female trading activities, will sometimes result in water carrying by adult males. Only lower status males would do this, but it does not appear to be exceptionally embarrassing. But despite these exceptions the vast majority of the water that enters Kinanbwa

kitchens is brought there by young females. Sometimes, especially in larger families, a girl may have to make up to eight trips for water on a given day. Younger girls have been seen to cry in protest when they have been ordered back for yet another bucket of water. After the third or fourth trip, the socializing function of water gathering can no longer compensate for its tediousness. And the girl may find no companions to accompany her in any case.

There are four major vessels used in the domestic water system. Two of these are for both carrying and storage; the other two for storage only. Both buckets and large bom (the aluminum cooking pots) will be used to carry water. The bom may be preferred for getting drinking water because the bom comes equipped with its own lid and can be covered. Drinking water is generally covered. The well water brought in buckets, used for cleaning and bathing, will not generally covered.

But much water is transferred from the carrying vessels to clay containers. The larger of these is referred to as a kanari and will be used to store water for common use. But many families also have smaller clay jugs, called krich, which are used exclusively for drinking water. These krich each come equipped with their own clay lids. They are able to cool the water. Visitors may often receive portions of krich water poured into special glasses reserved for visitors.

7. THE VILLAGE FOOD SUPPLY

The preceding section of this study has dealt with the feeding of a particularly vulnerable, but at the same time a particularly priviledged, subset of community members: neonates and weanlings. Their vulnerability stems of course from the exceptionally high degree of behavioral helplessness that makes human infants so different from the offspring of other mammalian species. But this vulnerability is buffered by protective feeding and child-care rules of the kind that we have documented in the village of Kinanbwa.

Because they constitute the touchstone by which people judge their own parental behavior and that of their neighbors, these publicly articulated rules do have the power to affect behavior. But at the same time rules can be broken and outcomes can fall far short of community ideals. The high degree of infant morbidity, mortality, and malnutrition that has been documented with depressing regularity in different parts of Haiti indicates that her symbolically rich and behaviorally precise inventory of child care rules is on the whole not being successfully implemented.

With respect to child nutrition, explanations of suboptimal outcomes can be seen as points along a continuum flanked by two opposing theoretical stances. At one end are those who posit deficiencies in the rules and understandings themselves. "Educate the people and malnutrition will disappear". At the other end are those who place causal emphasis on the material factors leading to an insufficient food supply. "Remove the objective barriers to an adequate food supply and none of your nutrition education' will be necessary. Current village food concepts and food rules would be perfectly adequate to produce well-nourished children if there weren't food supply problems."

Most positions fall somewhere in between these polar extremes. But our exposure to some of the "inner workings" of village belief and behavior make it frankly difficult for us not to tend very strongly toward the second of these positions. We will attempt a balanced, integrated formulation of the problem in the conclusion of the study. But we must state that the food related "belief system" and"rulebook" of the Kinanbwa villager are much more impressive in both their detail and their explicit emotional concern for the child than other analogous rural New World complexes with which we have firsthand familiarity. If so many children end up malnourished, it is because of deficiencies not in the rural belief system, but in the rural food supply.

Focusing on issues of food supply, this section of the paper will address itself to the factors that determine the availability of food in village houses. We will begin with a discussion of the types of foods that are consumed in the village and of the sources from which these food types are derived. We will then discuss the manner in which food is prepared, paying particular attention to the structure and functioning of the rural kitchen. This will be followed by an analysis of the very important question of how the food is distributed within and between households once it has been cooked. We shall then take one final look at the children again, showing the manner in which village socialization patterns have been deeply affected by increasing nutritional stress and have evolved in a direction which attempts to prepare children for a lifetime of possible food scarcity.

7.1. Definitions of the Rural Food Dilemma

Most observers recognize that the problem of food scarcity in rural Haiti cannot be accurately discussed apart from the issues of land shortage, population growth, and soil erosion. The task of analysis is to identify the way in which these factors interact. The following paragraph is a brief summary of an integrated approach espoused by many analysts.

"The Haitian peasant is a subsistence cultivator. His main goal in life is the growing of his family's food on his tiny plot of ground. But the size of the individual family plot has now shrunk because of the process of population growth. Through a combination of cultural preference and agricultural labor needs, high family aspirations have been the rule. The resulting population pressure has reduced the size of the family plot below the threshold where the cultivator can meet the nutritional needs of his family. Soil erosion has further undermined the productivity of this plot. Integrated development projects can assist the peasant by helping him to produce greater quantities of more nutritious food from his plot, by teaching his wife better food preparation techniques and child fe practices and by convincing both husband and wife of the advantages of a two child family."[1]

The above paragraph should be read carefully because 1) it constitutes an integrated conceptual model that joins agricultural experts, nutrition experts, and family planning experts into a joint endeavour; 2) it constitutes a synthesis of much current thinking on the nature of the rural dilemma; and 3) it is either dead wrong or substantially off base on almost every single point.

A more accurate view of the rural dilemma can be approached through a point-by-point reexamination of several of the key propositions of the above paragraph.

1. In a technical sense, the Haitian peasant is not "subsistence oriented." A subsistence cultivator is one who grows most of what he eats and eats most of what he grows. This characterization is certainly not true of Kinanbwa and probably not true of any Haitian peasant community. Haitian peasants throughout the country purchase substantial amounts of their food, including not only essential cooking oil, salt, sugar, and seasoning, but also many of the basic staples themselves. Furthermore peasant households channel substantial amounts of what they grow into the local market system. In Kinanbwa, for example, some major crops such as sugar cane and shallot are planted almost exclusively with a view to sale. But even the locally consumed crops such as rice, beans, and sweet potato are grown with a view to marketing substantial proportions of the crops. Peasants who behave in this fashion -- and

most Haitian peasants to greater or lesser degrees do — cannot be called "subsistence oriented". Some observers who use the term "subsistence" are merely using it as a synonym for "poverty level". But this is a technically inaccurate and potentially misleading use of the term.

2. The peasant's main "goal in life" is not the growing of his family's food. If one had to choose a "main goal" in an economic sense, it would probably be the "earning of a decent cash income", at least for the peasants of Kinanbwa. Some would go further and suggest that even the earning of cash is merely a step on the way toward an even more important "goal in life", which is the purchase of land. But in either case, any analysis which depicts the peasant as a self-enclosed cultivator whose only major economic concern is to grow the crops which will directly feed his family are writing about the wrong part of the world. Caribbean peasants in general, and Haitian peasants in particular, are deeply interested in money. The humid-mountain peasants are more successful in producing significant amounts of their own domestic food supply. But even these peasants could be called "subsistence oriented" only by closing one's eyes to the enormous amounts of coffee, cacao, and other salable produce that are constantly making their way down from the hills into the nearest towns.

3. The notion of the "tiny plot of ground" is also misleading. Any peasant that relied on only one plot of ground would be deemed as either extraordinarily unfortunate or improvident by his neighbors. The typical holding has several plots, cropped with a view to diversifying land types and protecting against crop failure. The very inheritance procedure endows most peasants with some rights to land in different places. But observers have also been impressed by widespread practices of supplementing parentally transmitted land with purchased, rented, or sharecropped plots, creating a situation of feverish, creative local land manauver that has little to do with the vignette of the humble, resigned peasant peacefully hoeing away at his tiny little plot.

and is compatible with peasant views of life in the romantic, distant past. But the point here is that the dilemma of the peasants is not one of suddenly being unable to grow all of their family's food. The current generations of peasants have for the most part never been growing all of their family's food and would probably not even want to try.

6. The three programmatic recommendations at the end of the summary paragraph represent standard developmental approaches to the issue of malnutrition. Yet each should be treated, if not with suspicion, at least with circumspection. The notion of the "two-child family", which is still heard in many circles, is simply out of touch with local Haitian reality. Given current mortality rates, mobility patterns, and old age insecurity, the peasant couple who wish to ensure themselves of care in their declining years would be insane to settle for two children. Though the matter will not be pursued here, the standard family size aspirations (four to five children) of the Kinanbwa peasants seem perfectly reasonable and realistic from the point of view of their own domestic interest. Family planning programs should not encumber themselves with the conceptually questionable task of "changing family-size preferences." They should rather assist in achieving the quite reasonable parity levels to which most couples already aspire.

7. The notion that Haitian mothers have to be taught how to cook food and feed their children is the most controversial of the three suggestions from the point of view of this research. For nutrition planners aware of widespread malnutrition, the need for nutrition education is almost axiomatic. For ethnographers even remotely familiar with current levels of food knowledge and child concern in rural Haitian mothers, the thought of launching a program of rural cooking lessons seems frankly, unequivocally, and blatantly ridiculous. An effort to develop a balanced approach to the matter of nutrition education will be made in the final section of the report, after the information on current practices is presented.

8. Equally controversial, in our opinion, but substantially more plausible, is the recommendation that the peasant should be assisted to *increase his agricultural production with a view to directly improving* the content of the family cooking pot. Despite the attractiveness of this suggestion, however, those familiar with the changes that have come over rural Haiti in the past decades will have to point out that most innovations adopted by the peasant have been accepted with a view to improving, not the content of the cooking pot per se, but his own domestic cash flow. Peasants will take most readily to new cropping alternatives when they improve his position in the marketplace. Those interested in agricultural innovation for nutritional purpose might do well to consider carefully the following hypothesis: improvements to the domestic cooking pot will come most readily as the secondary effect of changes whose primary function from the point of view of the peasants is the generation of a higher immediate cash income.

One example of this can be seen in the vegetable economy of Furcy. There entire peasant communities have turned to fertilized vegetable growing as the principal economic mainstay. The shift was made principally because of the enhanced cash income that this cropping practice produced. *The improvements to the family food store in terms of a greater variety* of vegetables came as a secondary effect of a technological shift that was made principally from cash motives on the part of the peasants themselves. The cropping decisions of the peasants of Kinanbwa are likewise made almost exclusively on the basis of the marketability of the crops, rather than their edibility.

To sum up the preceding: the most realistic mind-set which nutrition planners can adopt when approaching the Haitian peasant is one which fully recognizes the peasant's involvement in a cash-cropping and marketing system which place a heavy emphasis on cash incentives and payoffs. The attention of cultivators and their commercially active wives is constantly drawn to the marketplace. Educational attempts to draw peasants' attention on other matters, including nutrition, stand a greater chance of success to the degree that program designers have succeeded in linking these new areas to the strong pre-existing concern which rural men and women feel toward their deteriorating economic situation.

7.2. The Identification of Nutritionally Relevant Variables

The preceding paragraphs have argued for the nutritional relevance of the market oriented character of Haitian peasant economic organization. But local nutrition planning has to be able to deal not only with the Haitian peasant in general but also with specific regions. The planning process will be more realistic to the degree that the planners are capable of identifying region-specific features that may have nutritional relevance. To exemplify this type of observation, we shall introduce the particularities of the research village by showing the manner in which certain apparently unrelated "anthropological" variables can in fact exert a strong impact on the local food supply or on the manner in which food is prepared and distributed to children.

7.2.1 Lowland Ecology

Unlike most Haitian communities in which research has been carried out, Kinanbwa is a lowland community on the Cul-de-Sac Plain. The village contains a population of some 1,300 individuals spread out into some 225 households. The nature of local ecology creates a paradoxical double bind situation with respect to water. On the one hand the location of the village several kilometers to the south of an east-west mountain chain places it in a rain shadow and gives it a low annual precipitation of only some 800 millimeters of rainfall a year. This means that the agricultural potential of land is extremely constrained on plots that have no access to additional water.

This problem is solved in two ways. Much of the land cropped by the villagers is irrigated by a groundwater irrigation system dating from the French colony, supplemented by more recently created systems drawing water from local springs. Dry land that has no access to irrigation will generally not be cropped. But in addition to this irrigated land, there is also a great deal of local land that is naturally marshy. Such land is considered as having very high cash generating potential, especially with respect to the planting of rice and sweet potatoes.

But irrigated land is vulnerable to scarcity of groundwater, and marshy land is vulnerable to flooding when the rain comes. In years of scant rainfall the river that feeds the main irrigation system that serves the village will have insufficient water to satisfy the needs of all users. In years of abundant rainfall the rice and sweet potatoes planted on marshy land is frequently destroyed. Furthermore the village is located on a part of the Plain that has some sections actually below sea-level, creating a very high local water table. This high water table has two effects: it creates serious drainage problems and standing-water problems during heavy rains (problems for which local technology has come up with its own mound-building system), and it creates frequent salinity problems because of leaching. This salinity in turn has led to the planting of sugar cane rather than food of many places. Thus the food production system of the village is heavily influenced by certain features of low land ecology which create challenges unknown in the mountains.

7.2.2 Nucleated Settlement

But other more "remote" anthropological variables can also exert an impact. Communities can generally be characterized in terms of the density of settlement and the proximity of houses to one another. The modal pattern throughout the mountains is residential dispersal. But in the region where Kinanbwa is located, the modal pattern is for houses to be built close to each other and for farmers to move out each day into surrounding fields. Villagers explain this pattern as simply a custom. But an ecological reason can also be found. The communities tend to be located on stretches of ground that are slightly higher than the surrounding fields and which are therefore slightly less vulnerable to the inundations that plague the region during especially heavy rainy seasons.

But if the causes of this nucleated settlement are somewhat arguable, its possible nutritional consequences are nonetheless clear. In the first place the proximity of houses to each other and the formation of a large nucleated compound has led to the suppression of the "vegetable garden" tradition which characterize many mountainous regions of Haiti. In this latter setting the pattern is for households to plant vegetables and other foodstuffs next to the house with a view principally to domestic consumption. The rightly packed proximity of houses precludes such a tradition in Kinanbwa, and the contents of the family cooking pot reflect this ecologically determined absence. Secondly, however, and of perhaps even greater nutritional significance in the opposite direction, the presence of large numbers of contiguous houses means that children are always within visual and auditory reach of an adult or older child caretaker. The lonely young children that one frequently sees in mountain communities in houses where both parents are momentarily absent are rarely to be found in Kinanbwa. Children are almost constantly within visual distance, not only of parents, but also of close kin and nighbors.

On the one hand this means that they will be regularly in groups where they can benefit from the food sharing that goes on within the village. This presence in groups would alone be at least a slight nutritional boon, especially to children in poorer families. But of equal importance, the constant visibility of children to other kin and neighbors places an additional pressure on parents not to leave the child hungry. The hunger cries of the child and the constant appearance of the child asking for hand outs at nearby kitchens is a source of embarrassment to parents and is in fact one insult that participants in a village argument hurl at their adversaries. Thus we see that nucleated settlement patterns may play an important positive role in the nutritional status of the child by adding an important element of social pressure to buttress the child care norms that village custom holds up as an ideal. Ideals are more easily ignored when several hundred meters and a grove of trees separate your house from your neighbor's. But the constant visual contact between neighbors under conditions of nucleated settlement renders such violations more vulnerable to social criticism.

7.2.3. Uxorilocal Postmarital Residence

Another prominent anthropological feature of this region of Haiti is the practice whereby couples, after establishing a conjugal union, set up residence close to the house of the woman's parents rather than the man's. These uxorilocal residence patterns of the Plain differ from the more common virilocal patterns prevalent in the mountains, by which couples live close to the house of the man's parents. Under the more common virilocal patterns residential clusters entail the proximity of adult male siblings. But the uxorilocal patterns in Kinanbwa produce residential clusters that are more likely to be protective of the child: clusters of adult sisters. Children are more likely to receive supplementary care from aunts than from uncles or uncles' wives. Under virilocal patterns, aunts however will have married out. Under the uxorilocal patterns of Kinanbwa, in contrast, the child's next door neighbors will frequently be his mother's sisters, under whose surveillance and care he will regularly fall. The even the postmarital residence rules, which nutrition researchers rarely have occation to examine, may in fact exert some impact on the nutritional status of children.

7.2.4. Caribbean Conjugal Patterns

Throughout the Afro-American Caribbean there exists a mating system in which most procreation takes place in the context of extralegal, consensual cohabitation, and in which legal/ecclesiastical marriage tends to be the more "proper" alternative to which individuals will turn either later in their conjugal career or when economic conditions permit. The rural Haitian is a variant of this broader system and is characterized by the prepoderance of two locally recognized union types: legal marriage (mariaj) and informal unions (plasaj). In Kinanbwa some seven out of ten unions are of the consensual plasaj type, and though the vast majority of individuals will have entered one or more unions in their lives, most will never "marry".

The majority of individuals will have had children, not by just one, but by more than one partner. This creates a pattern in which large numbers of children spend parts of their childhood in a house in which one of their biological parents is not present. To a growing degree, of course, with increasing divorce rates, this is true of children in industrialized countries as well. But we will present evidence showing that in the food-scarce context of Kinanbwa the absence of either biological parent from the house results in statistically significant lower nutritional status, even controlling for the economic status of the household. Thus the mating system itself, incorporating a high degree of conjugal instability especially in the early years of the mating career, constitutes yet another pre-existing social pattern that exerts an impact on the nutritional status of young children.

7.2.5. Female Trading Activities

Earlier reference was made to the heavy cash-cropping orientation of the Haitian peasant. But an additional design feature of rural life is an exceptionally heavy involvement by rural Haitian women in the physical transportation and marketing of agricultural produce, a generalized practice which creates an economic career that is quite different, for example, from the economic career of the rural Dominican woman just across the border.

These marketing patterns frequently entail long-distance travel and extended absence from the home. The first part of this study showed the manner in which increasingly early weaning in Kinanbwa is directly related to the increasingly stressful conditions of trade, making thus the marketing system one more important "determinant" of toddler nutrition. But extended absences can also exert an impact on the feeding of older children as well, making children dependent on other caretakers. But the generally negative nutritional impact that could be expected from the use of maternal surrogates can be simultaneously compensated by the ability of the mother to supply her family with food purchased on her trading voyages. We shall see that in Kinanbwa long-distance food shipments from itinerant marketwomen constitute during several months of the year the mainstay of the diet of virtually the entire village.

To sum up the preceding sections, the nutritional well-being of children is here viewed as an outcome variable affected by a complex of intervening economic and social patterns which influence the way in which adults produce or distribute food. On the one hand, there is the general cash-cropping orientation which to a greater or lesser (usually greater) degree dominates the food-producing activities of Haitian peasant households. But on the other hand, certain "anthropological" variables such as settlement, pattern, postmarital residence, conjugal patterns, and female trade, may serve to enhance or depress the likelihood of positive nutritional outcomes in children.

The very nature of these variables--their inaccessability to program modification--generates impatience in certain planners, who would prefer analyses which attribute causal power rather to variables that can be manipulated by benevolent institutional intervention. Where villager "ignorance" is identified as the cause, for example, the nutrition planner can simply pull out his flip-chart and swing into energetic pedagogic action. But analyses that point to the impact of such exotic variables as postmarital residence and conjugal patterns seem to leave the planner quite frankly in the dark.

But in these matters nutrition planners should get used to the dark, because in fact the problem with which they are professionally concerned is unfortunately caused by a cluster of remote variables most of which cannot be controlled by standard program intervention. There are promising programmatic "short-cuts" which should be explored buy they should be undertaken in full awareness of the nature of the causes, rather than by a sleight-of-hand opportunistic redefinition of the causes along lines more in line with planning bias. The two types of variables discussed in this section--the overall domination of Haitian peasant economy by market considerations and the behavioral implications of certain pre-existing region-specific economic and social patterns--should be accepted as constituting the basic framework which ultimately determines the types and quantities of food that are fed to children. It is now time to show how the food supply system generated by these variables actually functions in Kinanbwa.

7.3. Food Acquisition Options that are Little Used

Looked at from the point of view of the individual household, villagers can recite a long list of strategies that can be used to provide food for the family cooking pot. Though not all of these are employed, the list itself is interesting:

- Grow the food
- Buy the food
- Receive gifts of food
- Receive food as a form of wages
- Borrow the food
- Gather the food wild
- Extract the food from one's animals
- Hunt the food
- Fish the food
- Steal the food
- Draw the food from a neighbor's garden or storeroom (by magic).

Of these eleven food-acquisition measures, only three contribute in any significant way to the diet of Kinanbwa villagers: growing food, buying food, and receiving gifts of food.

The other eight strategies are deserving nonetheless of brief comment. Food received as wages is common in those parts of Haiti where Food for Work programs are in effect. But even in these settings most of the food thus acquired tends to be sold in local markets. The Kinanbwa villagers, however, have not had recent or regular access to this form of food. Borrowing food from neighbors is extremely rare, as is gathering food wild. There are few remaining edible items in Haiti that grow wild and are not defined as somebody's property.

One's own animals could theoretically be a source of food either through:

1. slaughtering and butchering:
2. drinking the milk; or
3. eating the eggs.

But what is possible in theory occurs little in fact. The cows, pigs, goats, sheep, and chickens that are raised are raised almost exclusively for sale. There are only two special occasions on which animals will as a rule be killed and immediately consumed. We have already seen the custom of killing goats (and chickens) after the birth of a child. And we have also mentioned that villagers dedicated to the cult-service of the spirits of the local folk-religious pantheon will also make occasional sacrifices of animals. When these sacrifices occur, the meat is cooked and consumed by family members and neighbors. But these events occur with too little frequency, and the food consumed by each participating individual is too small in quantity, to warrant classing these rituals as a significant source of protein in the village. The milk which one's cows provides is likewise generally sold rather than consumed. And chickens who lay eggs are appreciated, not because they are providing another element for the family's food, but because they are providing an item that can be sold.

The disappearance of wild animals throughout virtually all of Haiti has of course eliminated hunting as a significant food gathering strategy, though it was an important element in the diet of the aboriginal population. Fishing in contrast is done locally from large bodies of fresh water not too far from the village. The quantities of fish caught are small however, and are almost always destined for sale in the nearby town market. Most fish found in village cooking pots enter there via purchase.

There are two forms of food theft which villagers discuss: ordinary theft and magic theft. Thievery has become a problem in recent years, most food thefts occuring from the gardens themselves. Bananas and plantains

nearing maturity will be cut at night, and other types of food approaching harvest will be removed by thieves. Probably the most frequent occurences of such food removal occur when adolescent sons will "preharvest" some of the food growing in their father's gardens. The logic is: " the food is on land which I will inherit somedav, and besides I have sweated to help the old man grow the food. I have a right to some of the food". Fathers disagree, and though such removals when discovered are rarely brought to the local authorities, they nonetheless tend to be considered as "thefts" by the offended parent. But again, such thefts -- be they by outsiders or by family members -- cannot be considered a significant element in the village food distribution system.

Nor, of course, can the magical thefts which villagers attribute to sorcery. If one's sweet potato garden has produced little and that of one's neighbor is bulging with produce, it may be assumed of the neighbor that he has used magical means clandestinely to transfer some of the produce from the neighbor's garden to his own. This is called "drawing a garden" (ralé jadin). It is occasionally claimed that individuals who practice this will draw produce right from their neighbors' food depots. If you hear funny crackling sounds coming from the depot at night and nobody is there when you go to investigate, it may be suspected, not that there are animals or smaller parasites at work in your food, but that somebody is "drawing your depot". When you investigate in the morning, you may be certain that there is less food there than the last time you looked. As with ordinary theft, however, it is unlikely that this ritual maneuver is a significant element in the local food supply system.

7.4. Home Production of Food and Post-Harvest Sales

This leaves us with the three remaining food acquisition options which constitute the major strategies by which the villagers of Kinanbwa provide food for themselves and their children: growing the food, purchasing the food, and becoming involved in exchange networks where food will frequently be received as a gift. We will discuss each of these three options in turn.

In an earlier section we have already identified as highly questionable the still-widespread practice of referring to the Haitian peasant as a subsistence cultivator. Neither the peasants of Kinanbwa, nor the peasants of most other regions of Haiti, can be accurately characterized as "producing what they consume and consuming what they produce". They are instead deeply involved with the market, both as an outlet for what they grow and as a source of food for the family cooking pot . During the post-harvest period, a greater proportion of the contents of the Kinanbwa cooking pot will be home-grown. But there are other months when all foodstuffs must be purchased.

Is this pattern really any different from what is found in peasantries around the world? Are not all peasants, by anthropological definition, economically linked to the outside world through markets? A certain degree of market orientation does characterize virtually all modern peasantries on which information is available. But the case of the Haitian peasant in general, and even more strongly the Kinanbwa cultivators in particular, must be placed toward the far end of the cash-oriented continuum. We have firsthand experience, for example, in mountain communities of El Salvador and highland Guatemala. There peasant involvement in the cash market took the form of seasonal labor migration. But in terms of their food producing activities their corn plots and their bean plots were planted principally with a view to producing the annual food supply of the family. Not all families manage to do this, but a substantial number of families in such communities do. And what is very important, the goal of producing one's annual food supply is still the economic ideal which guides the basic cropping decisions of these Central American corn and bean growers. It is to such communities, whose economic behavior and ideals include practical attempts for "growing what they eat and eating what they grow", that the term "subsistence peasantry" may appropriately be applied.

No peasant household in Kinanbwa even attempts to grow its food for the entire year. The following generalizations would be an accurate characterization of the Kinanbwa strategy.

1. During the entire year the cooking pot will contain some staple items that have been purchased, in addition to the purchased seasonings, salts, oils, and sugars that peasantries in most world regions purchase.

2. During certain months of the year the staples in the cooking pot will all have been purchased.

3. Most of the produce from the gardens will be sold rather than home consumed. Even locally consumed grains such as rice and beans will for the most part be sold off at harvest, only a small percentage being saved for home consumption.

4. For peasants under 50 years old, the notion of homegrown nutritional self-sufficiency is part of the legend about life in the distant past, but is no longer seen as possible nor even desirable in any practical sense. Peasants with enough land to grow all of their food will still opt for involvement in the market and the subsequent dependence on food purchase which that entails.

These generalizations are certainly valid in Kinanbwa. But our research in other parts of Haiti, our experiences in the rural areas of the Dominican Republic and Puerto Rico, and our familiarity with the literature on Cuba, Jamaica, and other islands of the lesser Antilles, leads us to suspect that these generalizations are valid of the entire rural Caribbean. However, they are certainly not true, for example, of many mountain peasant communities in Central America. That is, they are not "trivial" generalizations that apply to all peasantries, but rather empirically important distinguishing characteristics of Caribbean peasantries in general, and of the Haitian peasant in particular.

But to say that homegrown self-sufficiency is no longer either the rule or the community ideal is not to state that all home-production of food has been eliminated in Kinanbwa. Dependence on the market is seen as being intimately associated with hunger, and the "favorite" times of the year are the postharvest times when there is abundant food in the family depot and children are given liberty to make extra meals on their own with small quantities of recently harvested food which they are allowed to take from the family store while parents indulgently "look the other way."

At a general level this interest of the village children in between meals "snacks" is no different from the habits of children in industrial society. But whereas urban/industrial children pressure parents for sweets and other pleasure foods that are seen as a relief from the ordinary staple fare, the children of Kinanbwa view it as their most sought-after privilege to be given extra between-meals quantities of the same foods that are prepared in the family cooking pot. Non-staple snacks, such as mango and sugar cane, are also sought and appreciated. But parental indulgence reaches its heights in the postharvest season, when the door to the family depot, ordinarily kept closed under lock and key, will "accidentally" be left open and groups of young children will "surreptitiously" abscond with small quantities of food which they will cook on special fires of their own. Such parental indulgence is practiced only with the homegrown food. When food has been purchased with hard-earned money, then the door to the family depot is kept carefully locked and attempts by children to abscond with uncooked staples will be met with vigorous reprimands. Children learn quickly that they can take these liberties only with manjé ki sot nan jadin, "garden food".

If this garden food were available all year long, the nutritional status and general well being of the village children would be quite different from what it is. But this garden food is restricted both in types and seasons. With respect to types, the only major foods which home-grown production supplies to the family cooking pot in Kinanbwa are rice, beans, and sweet potato. Two other staples commonly grown in other parts of Haiti -- corn and millet -- have not been traditionally grown in large quantities by the peasants of this part of the Cul-de-Sac Plain. Though the past five years have seen the introduction of some improved corn seed into the region and the efforts on the part of some lowland peasants to grow corn, the overwhelming majority of the cornmeal, which constitutes the most important item in the Kinanbwa diet, comes not from one's gardens but from the marketplace.

The period of greatest abundance in Kinanbwa comes toward the end of the year. It is in this period that rice and bean crops will be harvested, and that households will simultaneously be earning cash from the sale of their sugar cane. The months of November, December, and January are months of plenty. The largest amounts of food will be in the family depot, and the greatest amounts of cash will flow into the domestic coffers during these months. Incontrast, the months of July and August are the hardest months in the village, the sézon grangou ("hunger season").

The quantities of rice, beans, and sweet potatoes produced by some households would be large enough to cover substantial parts of the annual food supply. But there are at least three factors operating to discourage *against efforts to store food.*

1. Absence of Adequate Storage Techniques. All three of the major homegrown food crops -- but especially beans and sweet potatoes -- are subject to rapid infestation with a variety of pests. Farmers know they are taking a serious risk if they attempt to store beans for more than several weeks. Cultivators will frequently be "tempted" to store beans -- not for home use, but for sale when the postharvest glut will have receded and prices will have begun to rise. But the dangers of infestation are too great and the safest path will generally be taken: that of selling the beans. Beans that are piké (infested) are of little use, either commercially or nutritionally.

2. Need to Pay off Debts. Recent years have seen an increasing tendency on the part of Kinanbwa households to go into debt during the off months of July, August, and September. Creditors lend money knowing that harvests are coming in. But this means that the crop allocation decision is already constrained beforehand. The harvest must be sold, at least in part.

3. Need for Capital for the Domestic Economy. But even if infestation dangers were removed and farmers had no debt to repay, most families would still sell off substantial parts of their harvest, even knowing that this will entail purchasing back the same foodstuffs at higher prices later in the year.

This is simply because they are participating in a rural economy where economic advance cannot be aspired to without substantial amounts of capital. There are two general strategies by which a household can move forward or upward, and both require money. The first strategy is agrarian in character and entails the purchase of land. The harvest profits will be invested in livestock (which serve as a rural banking system, the production of offspring). These livestock will be sold when the opportunity to purchase a plot of land arises. The second mobility strategy entails the amassing of money to permit the women of the house to engage in trade. (In many parts of Haiti, a third capital-demanding strategy entails financing the migration of a family member. This has not yet taken on the importance in Kinanbwa that it has in other regions of Haiti).

This involvement of the peasant in a system where capital is the sine qua non of economic advance means that he will simply be on a "wavelength" that is substantially different from that of well-meaning nutrition educators. The nutrition educator may find it either irresponsible or insane for the peasant to make post-harvest food sales that will result in subsequent hunger periods for his children. But the peasant knows well that his economic future — and that of this wife and children-- depend on making one's capital grow, even if it entails tightening one's belt for several months of the year. The nutrition educator may erroneousl interpret post-harvest food sales as the absence of "future orientation", whereas in reality this willingness to take economic risks comes only because the peasant is future-oriented. His own view of where the brightest future lies merely happens to differ from that of the well meaning but uninformed (and economically secure) outside adviser.

8. THE PURCHASE OF FOOD AND THE RURAL DILEMNA

Hunger occurs when something begins to go wrong with a society's food supply system. But the food supply system of any society consists not only of the arrangements underlying food production, but also of the market strategies used to move food from the control of the producer to the plate of the consumer. Where marketing is important, then local hunger can occur because of bottlenecks in the marketing arena, somewhat independently of problems in the production sphere (though in final analysis the two are linked). And if hunger and malnutrition are perceived by a population as linked to marketing variables, then an exclusive focus on food production patterns by planners and educators will create communication barriers between them and villagers, whose own view of the problems (and the solution) may heavily involve trading activities. The two groups may then talk past each other. The villagers of Kinanbwa are fully aware of the gradual deterioration of local agricultural production that has affected their ability to supply food. But their understanding of the sources of their hunger, and their view of the solution to this hunger, is as closely linked to the market place as it is to their gardens. Outsiders interested in problems of hunger would do well to follow their conceptual lead, and to try to get an analytical overview of the market component of the rural Haitian food supply system.

8.1. Principles of the Female Trading Role

The "commercialization" of the domestic economy of Kinanbwa will be seen to have evolved to a degree far beyond that of most mountain communities, and the local deterioration of food streams is perhaps a coming attraction of what may happen in other regions.

To understand the current food-flow crisis in Kinanbwa, the best starting point is to examine the economic role of village mothers. Traditional rural domestic organization allocates to the Haitian wife and mother a series of income generating activities that go far beyond the

cooking, washing, sweeping, and child-care activities to which Hispanic traditions would limit her rural counterpart across the Dominican border. The Haitian peasant female is expected to be the principal generator and manipulator of cash in the rural household. There are four rights-and-duties which the tradition economy gives to her.

1. Marketing home-grown produce. The produce grown by the husband and children will be marketed by the woman of the family. This will either be done by physically transporting the produce to the nearest town market, or by at least being the negotiator of prices with traders who come to purchase food at the farm gate.

2. Investment of capital in the purchase of produce. It would be inaccurate to limit, as some descriptions do, the role of the woman to the marketing of her own husband's produce. In addition it is seen as perfectly proper -- indeed as admirable and even perhaps somewhat obligatory -- for the woman to be a purchaser and reseller of commodities. The woman who purchases and resells has gone a step beyond the woman who merely sells homegrown produce. The former has become a professional trader and has entered the highly admired ranks of those who fè kòmès , who "do business". Many Latin American village traditions place a negative value on women whose poverty forces them to enter trade. But in the value system of rural Haiti, the woman who enters trade has not stepped down, but has rather "moved up" and has begun filling one of the most important roles appreciated in the rural wife and mother.

3. Absenteeism from home. Her involvement in trade lead the woman into long distance travel. Trading sorties may involve only short travel and daily return to her own home. But they may also involve overnight and extended stays away from home. Such absences, far from being viewed as a violation of her role as wife and mother, are considered by most husbands as a sign that he fè youn bon afè, "has found a good wife for himself".

4. Direct supply of domestic food from her trade. In theory the woman could carry on trade but the family garden could continue to be the main source of domestic food. As can be predicted, however, it is an easy step from carrying on simple trade to shift into the direct supplying of at least some foodstuffs to the family cooking pot. The items which the woman supplies will, of course, be purchased in large part during her trading excursions.

8.2 Evolution of the Trading Role in Kinanbwa

The above-mentioned cluster of permitted behaviors can, for purposes of this discussion, be viewed as underlying principles that frame the female role in rural Haiti. But the particular role which emerges in a given region will be an elaboration and crystallization of these four guiding principles. Regions will differ in terms of how far they take the principles to their logical conclusion. The women of Kinanbwa have pushed them to their limit.

As the crow flies, Kinanbwa is only several hours away from Port-au-Prince by mule. In the days before regular vehicle transportation became available in the nearby town, village women had already begun to make trading excursions to Port-au-Prince. For reasons that are lost even to the memory of the villagers, the women had for decades specialized in the purchase and resale of beans in Port-au-Prince itself. Thus long before the current generation of female traders was born, the village economy had already capitalized on the four trading principles mentioned above to involve the village women in urban-based cash-generating commercial activities.

1. Women continued to market the produce of their husband's gardens at harvest time and would be physically present in the village to assist in planting and harvesting/processing tasks.

2. But at the same time women came to view it as part of the "normal" adult female role to purchase and resell produce in Port-au-Prince.

3. These commercial activities involved extended absences from the village because both the purchase and resale of their stock was geographically independent of their home community.

4. But though these extended absences caused readjustments of traditional child care and domestic patterns (husbands and children would remain in the village), a particularly heavy value came to be placed on the sending of regular food shipments back to the village. Thus the sending of food from far away came to be a central part of the maternal role in the village.

Thus, without violating any of the basic principles underlying the rural Haitian female trading role, the village women of Kinanbwa elaborated these principles into a widely shared traditional economic career one of whose important nutritional effects was to make regular shipments of food from Port-au-Prince a central element in the diet of the village. Their trading activities continued to unfold in close coordination with the agricultural activities of their husbands. Not only did they market many of the crops planted by their spouses. More importantly much of their trading capital was raised largely through the sale of these crops, to such a degree that part of the village "husband" role became that of providing capital to the wife for her trading activities, a norm that continues in full force today at least in village ideals.

8.3. Dependence on Female Food Shipments in the Village Food Supply

The situation in the contemporary village is fundamentally similar to that described in the preceding paragraphs. The presence of vehicular transport, and the recent improvement of the road between Port-au-Prince and the nearby town, have led to an abandonment of mule trips and an almost total dependence on the trucks. Furthermore women have expanded their trading operations to include other grains, especially rice, in their trading stock (though at a given point in time a trader will generally deal in only one product). There has in addition been an internal role differentiation between the women with more capital and those with less capital. The former actually ride the trucks to distant towns and purchase produce, playing thus the traveling intermediary role of madam sara. Those with less capital, in contrast, will continue to play the humbler revandèz role, purchasing and reselling their smaller quantities of stock right in Port-au-Prince.

But all women involved in trade will continue to absent themselves from the village for long periods of time and to send back regular shipments of food. There has been a local institutionalization of these food shipments, in that all the women will now make the shipments on the same days

of the week. The largest shipment will be made on Sunday. A smaller (but nonetheless nutritionally critical) shipment will in addition be made each Wednesday. And thus each Wednesday and Sunday there is a steady stream of Kinanbwa children who walk the two kilometers from the village to the town to await the trucks that bear the provisions which they know their absent mothers will have sent them from Port-au-Prince.

These food packets will differ both in size and in contents by season of the year. The guiding principle that determines the mother's behavior in this matter is the need to ensure that her husband and children back in the village have enough food to last them through the next food shipment. When the harvest has just come in, the packet will be smaller -- and the absent woman may in fact be the recipient of food from her husband in the village. But during most months of the year the flow is in opposite direction. The woman is the one that must send food, and to an increasing degree, during the "hunger season" of July and August, most households in the entire village are totally dependent for their survival on these twice-weekly food shipments. The underlying dependence on purchased food will be little different from what is found elsewhere in Haiti. But the Kinanbwa variant has two features -- purchase in Port-au-Prince and bi-weekly shipment of domestic packets in trucks -- which are unusual products of a region-specific economic evolution.

In determining the content of the package which she will send to her family back in the village, the woman is guided by the food categorization scheme which prevails in the village. There are three major types of foods -- Viv, Vyann, and Legim -- and a number of other categories as well. The meanings of these fold-categories will be discussed in a later section of the report. In general the category of "viv" corresponds to bulky carbohydrate foods; the traditional village category of "vyann" corresponds in an astonishingly precise way to foods that modern nutritionists recommend as high in protein and includes milk and eggs as well as meat and fish; and the category legim includes those vegetables which are commonly used to make sauces and which do not fall into either of the other two categories.

Even poorer women will try to include at least one vyann in their package, in addition to the basic staple viv, which is cornmeal. If this is not possible, beans will be sent. Though beans consumed as grains are considered vivs, village tradition recognizes a higher nutritional power to beans that are consumed as a liquid sauce, to such a degree that sos poua is considered to be a vyann, and not just a simple viv. Thus a woman who ships cornmeal and beans is giving at least the basic raw ingredients of what in the village would be the equivalent of a "square meal" in English. Food types and meal classifications will be further discussed below.

Figure 3 presents information on two types on packages that would be sent from Port-au-Prince to Kinanbwa on a Sunday during the month on August when the family is totally dependent on purchased food. One is the package that a well-off trader would send. The other is the package that a woman with little money might send in order to meet the minimum requirements that village opinion imposes the marketing wife-and-mother. More of the food packages sent tend more toward the poorer variant than the ideally well stocked package. The quantities of each item in either package will be a function of both the amount of money the woman has and the ages and number of family members that depend on the package for their food. The purpose of the Sunday package will be to get the family through till the arrival of the Wednesday package.

We have observed that at least some women, in their Port-au-Prince shipping, keep in mind the nutritional needs, not only of their husbands and their children, but also of the family livestock. Our next door neighbor's pig was the grateful recipient of weekly shipments of wheat chaff purchased by the thoughtful woman of the house in Port-au-Prince. The animal's afternoon meal was prepared each day by the husband with a thoroughness and solicitude that left no doubt as to the importance of the animal to this family. Thus the commercialization of the local economy has even affected the food supply of at least some livestock.

Figure 3

Contents of Abundant and Meager Sunday Food Packages

Well-stocked package	Poorly stocked package
"VIV"	"VIV"
- Cornmeal	- Cornmeal
- Rice	- Beans
- Plantains	
- Beans	
- Malanga	
"VYANN"	"VYANN"
- Aransel	- Aransel
- Powdered Milk	
"LEGIM"	
- Tomatoes	
- Onions	
"BLE"	"BLE"
- Biswit	- Biswit
- Bread	
Other	Other
- Sugar	- Sugar
- Seasonings	- Coffee
- Coffee	
- Kola	

8.4 The Role of the Town Market in the Village Food Supply

In the town located some two kilometers from Kinanbwa there is a large regional marketplace which meets twice a week (on Mondays and Thursdays). Why do not villagers use this closer market as their source of purchased food rather than the markets in Port-au-Prince? The most obvious reason is: those responsible for purchasing the food — the village women — are physically in Port-au-Prince.

But there is an even more important reason. Food purchased in Port-au-Prince will be substantially cheaper than food purchased in the village itself or the nearby town, and the package can be shipped back to the village either free (if a friend or relative is going) or for a minimal charge on one of the many trucks that now make daily trips between the nearby town and Port-au-Prince. This phenomenon of lower food prices in the capital city and higher food prices in the rural areas is one of the unfortunate but cross-culturally common effects of the operation of internal market systems in countries such as Haiti. Regional specializations occur as rural communities become habituated to selling their own produce and purchasing some products from other regions. But food that reaches Kinanbwa from another part of the country will first have passed through Port-au-Prince. Thus, though the "rural areas" are where food is produced in general, in most specific instances food purchased in these rural areas will not therefore be priced lower than food purchased in the city. On the contrary, basic foodstuffs will cost more because of the urban circuits through which they will have flowed on their journey "back" to the countryside.

There are a few items, however, that will be purchased in the town markets. Meat is virtually never shipped from Port-au-Prince to Kinanbwa. Goats' meat is rather purchased from butchers who man stalls on Monday and Thursday in the town market. Likewise fish caught in nearby lakes are purchased in the town. And finally the increasing number of villagers who depend on charcoal for their fuel needs will almost always purchase this charcoal in the town. Simple price diffentials explain this preference for local purchase in the case of these three items. The region supplies

the items to Port-au-Prince, and as a result then price is lower in the town than in the capital.

There is a small subgroup of houses, however, who will in fact be heavily dependent on the town market for much of their food. These are generally the poorer families in the village whose income level is too low to permit trading activities in Port-au-Prince on the part of women of the house.

Such families will in fact have to purchase their food in town. They have nobody in Port-au-Prince to make purchases for them. Such households are particularly hard up. They have less capital to start with; otherwise they would have somebody in Port-au-Prince doing commerce. And to make matters worse, the little money that they can scrape together has to be spent on food which costs substantially more than similar items in Port-au-Prince.

This paradox reveals an important pattern about life throughout much of rural Haiti. Participation in active marketing activities by a rural woman will be positively correlated with wealth, not negatively, as in certain other New World rural settings. The role-model toward which the rural woman in many regions strives is not the image of the woman who stays quietly at home tending her children and dedicating all her time to their personal supervision and feeding. The rural Haitian woman has in addition something else to attend to, and something else on her mind. The programs designed to reach her must accept as a given the basic economic orientations and behaviors that govern her life.

8.5 The Role of Village Boutiks in Local Food Supply

The food-supply chain described above is one of the ways that rural Haiti differs from most Latin American villages that have become involved in food purchase. In these latter settings, most food purchased by rural households is purchased directly from stores located in the villages themselves. In Kinanbwa, and through most of rural Haiti in contrast, we

have seen that it is not the village store but the regional or urban open-air market that is the major supplier of foods.

But there are also village stores in rural Haiti that supply foodstuffs directly to village homes. Several such boutik function in Kinanbwa. They arise and survive because they perform at least two useful functions for which people cannot count on the open-air market system which handles the bulk of foodstuffs.

8.5.1 Rural Consumption Credit

In the traditional internal market system of Haiti, it is extremely rare for a retailer to give out foodstuffs on credit to a consumer who arrives without cash. The credit relations that exist are generally found between traders, who will give and take stock for later payment, or between traders and moneylenders. But the consumer in rural Haiti who has no cash can rarely walk into a marketplace and ask for several pounds of rice and beans on credit.

He can however walk into a village boutik and get this type of consumption credit for short periods of time. The prices he pays for such items will be slightly higher than those in the marketplace. The prevailing rules of the game in Kinanbwa entail repayment before the boutik owner (always a female in Kinanbwa) makes her weekly purchases of stock. If the borrower cannot repay any or all of the debt, he must at least approach the boutik owner and explain the situation.

This short term consumption credit is extremely useful in village life. It helps tide a family over any small delays in expected cash flows that would jeopardize the family cooking pot for a few days. Probably about half of the volume sold by village boutiks is sold thus on credit. (This accounts, of course, for only a small percentage of the village's food supply, most of which comes from Port-au-Prince).

8.5.2 Unexpected Short-term Food and Fuel Shortfalls

The Port-au-Prince market is far away and food shipments arrive only twice a week. The town market is also several kilometers away and is likewise limited to two days a week (Monday and Thursday). The village boutik serves as an easily accessible, convenient source of supplies. A well-stocked village boutik will have at least some quantities of all the major foodstuffs consumed in the village: cornmeal, rice, beans, millet, aransel, and biswit. In addition it will have the spaghetti and macaroni that are becoming an increasingly important supplementary element in the rural diet. It will also stock canned milk, cooking oil, butter, tomato paste, sugar, coffee, and rapadou. The major foodstuffs will be bought in greatest volume from the boutik on Tuesdays and Saturdays. These are the two days preceding the arrival of the food shipments from Port-au-Prince, and are thus the days on which villagers are likely to run short of basic foodstuffs. They are also days on which there is no market in the nearby town.

But in addition to these foodstuffs the boutiks also stock a varied supply of non-edible items. The major such item is charcoal. As will be seen below, the village has become increasingly dependent on the purchase of charcoal for cooking fuel, and women and girls are constantly underestimating the precise amount of charcoal that will be needed for a meal. Last minute purchases of charcoal to finish the cooking of an already half-cooked meal are daily occurrences. There are also regular supplies of other nonedible items such as soap, starch, kerosene, tobacco, and cigarettes. In short, even those households that do not need consumption credit will nonetheless have frequent occasion to make small purchases in these convenient village boutiks.

8.5.3. Overview of the Organization of Boutik Commerce

The volume of sales and overall profit margin from boutik commerce is substantially lower than can be had from the "real" kòmès which most village women carry on in the markets of Port-au-Prince. For this reason the half dozen or so boutiks that function in Kinanbwa generally are run by older women or by younger girls who for one reason or another cannot leave the village to carry on urban trade.

One such boutik owner is a 20 year old woman who began her trade at the age of 14 with money made from the sale of rice which she had been given in repayment for help at harvest time. At that time her total capital-in-stock came to $4.00, and her major items were biswit and kerosene. Over the years her capital has built up and her total stock may now come to as much as $80.00 at a given moment. The boutik is run from a simple one-room depot, and the items are carefully arranged on two tables in this depot.

The young woman knows that she could make more money, with the capital she already has, carrying out the same type of urban retail trade that most village women do. But her mother is carrying on trade in Port-au-Prince, and thus the young woman must stay in the village to take care of her two younger brothers who are still in school there. As soon as she can, she will sell off all her village stock and join her peers on the dusty streets of Croix Bossales.

But even women with virtually no capital will -- to the admiration and astonishment of visitors -- somehow find a place for themselves in some marginal niche of the village food-marketing economy. A teenage girl we knew would sell boiled corn in the village. She hardly broke even, but in the process she was able to give some of the corn (which she purchased) to her siblings and to other household members, and to purchase little snacks such as cassava bread and avocado for herself. Another acquaintance of ours was in the business of selling manje kwit

(cooked food) in the town market on Mondays and Thursdays. She earned little from this activity, but on those two days she and her children ate well. A girl who had left Kinanbwa to live with relatives in a nearby village would astound us by coming back with small quantities of avocados to hawk in Kinanbwa. But though such activities entail much labor and little profit, they allow women to supplement their diet and that of their children from small quantities of the items which they sell or from purchases made immediately with the profits from the sales. We suspect that this may be a common survival strategy among truly undercapitalized households. That is, if you have tittle food at home and little money, the "temptation" would be to purchase your own food with the money. However, if you purchase instead small quantities of food items and "pull in your belt" for a few hours, you may have made enough sales either to warrant eating a bit from your stock or purchasing other foodstuffs with the receipt form the sales. The goal will be to reach the evening, not only with at least some food in your stomach, but also with at least the same amount of capital with which you started. If you can make a small profit, so much the better. But if not, you at least try to avoid "eating all your money" (manjé tout lajan-ou). Persons at this level of economic existence, of course, can scarcely afford to be concerned with the niceties of the "balanced meals" so prettily portrayed on nutrition-education flipcharts. But here we are dealing with two sets of lenses to see the same phenomenon. The nutrition educator may be horrified that these market women feed their children so little during the day. The ethnographer, in contrast, stands in awe at the microeconomic maneuvers that people have devised to get themselves through one day with enough remaining capital so that the same survival maneuvers can again be tried tomorrow.

8.6 Food Gifts in the Village Food Supply System

Besides garden produce and purchased food, a third important source of food in the village diet was identified above: food gifts. These are an extremely delicate matter in Kinanbwa and would be "dismissed" by informants as occasional good-will gestures rather than being assigned

the important food-supply role which our own observations suggest that they in fact have.

There are two ways of making food gifts: in uncooked form and in cooked form. By far the overwhelmingly more important of these two modes is the widespread customs of sending out plates of cooked food from one's own kitchen to that of close relatives and neighbors. These plates of cooked food are usually always sent out to the same households. That is, villagers get involved in a rather small number of dyadic exchanges. But once a household is involved in such a network, it will be the frequent recipient of cooked food, but must also be the frequent giver of such food as well, even when one's own cooking pot may be meagerly stocked. We decided against collecting survey data on this locally sensitive topic, but our observations indicate that most households are involved in such exchange relations.

There is another form of quasi-disguised interhousehold food gift which also takes place with impressive frequency in the village -- gifts of cooked food given directly to other village residents who "happen" to be near one's kitchen when food is being spooned out from the cooking pot. Again, there are two general modes in which this takes place. The visitor may be an adult, in which case he or she will get a plate of food. Or the visitor may be a neighbor's child, in which case the gift may take the form of a handout of cooked food placed directly in the palm of the visitor. There are subtle but strictly followed rules governing this behavior. As a child you learn quickly that you may appear at the kitchen door of only a small number of households, whose children will then be able to appear to your kitchen door. Thus these apparently sporadic food gifts are also in fact controlled by rather small exchange networks

The workings of these food gifts will be discussed in more detail in the section on food distribution practices. Here we wish merely to indicate that, wehreas such gifts of course do not increase the total supply of food available to the village, they do serve as a mechanism to circulate food in such a way that a household involved in such dyadic food exchanges will be partially buffered against the effects of a sudden shortage of food in its own cooking pot.

8.7 Short-term Food Supply Fluctuations: Seasonal Variation

The preceding pages have presented the major features of the food supply system which constitutes the lifeline of the particular Haitian peasant community in which we did research. Despite the particularities which can be found to characterize any community, the basic three-pronged food-supply system -- home grown food, purchased food, and food gifts -- servicing most Kinanbwa households is in many specific ways similar to the system found in other regions in Haiti and, in its broadest outlines, not unlike the multi-faceted food-supply system characterizing other peasantries as well.

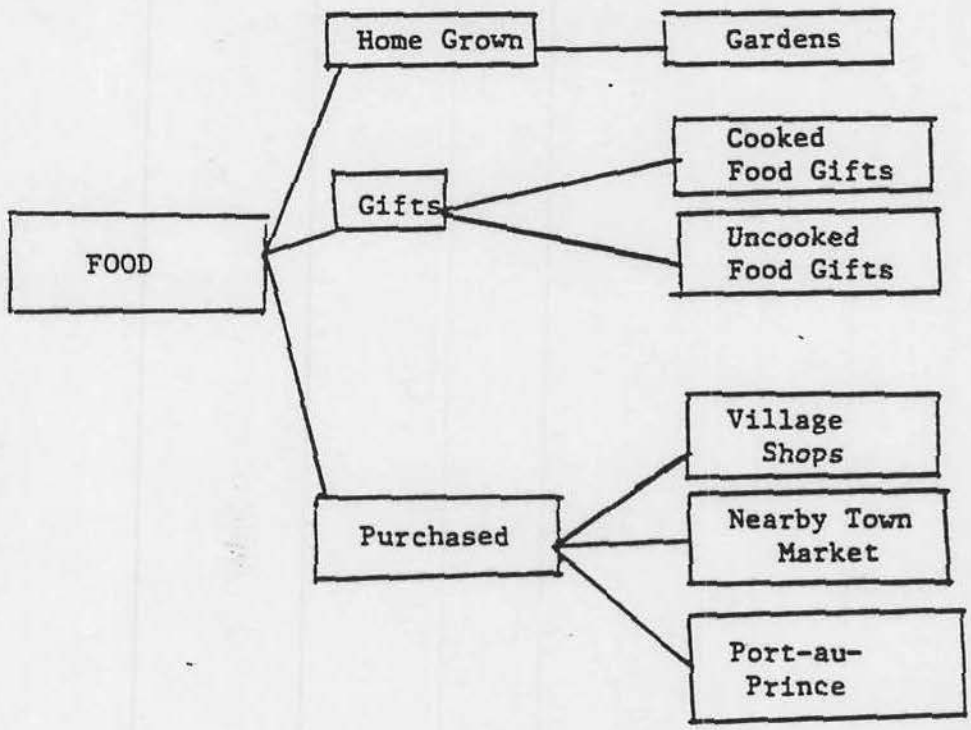
But this system, far from being static, is characterized by constant patterns of change and internal adjustment. The most immediately visible changes take the form of seasonal oscillation between relatively greater and lesser dependence on the different food-supply options at different times of the agricultural year.

Figure 4 schematizes the three major options, with their more specific suboptions and gives a highly impressionistic estimate of the relative importance of each of the options in January and June of a "typical year". The most significant trade-off is between homegrown food and food purchased in Port-au-Prince. During months when rice, beans and sweet potatoes are available in local gardens, village households will depend less on food purchased in Port-au-Prince. But at no time in the year will home grown food even account for half of the food (in terms of the market value of the items in the cooking pot) consumed by the typical family.

FIGURE 4

Relative Importance of Different Food Sources

At Two Points in the Year



	Month	
	January	July
Gardens	40%	2%
Cooked Food Gifts	8%	8%
Uncooked Food Gifts	2%	2%
Village Shops	5%	8%
Nearby Town Market	15%	10%
Port-au-Prince	30%	70%
	100%	100%

9. DIACHRONIC DETERIORATION OF THE RURAL FOOD SUPPLY

9.1. Hunger in Village Life

If the seasonal fluctuations described in the preceding chapter constituted the only changes in the Kinanbwa food economy, the community would have little trouble in adapting. Peasant societies around the world have devised perfectly effective belt-tightening strategies to deal with the seasonal food-availability oscillations that are an essential part of most small-scale agrarian economies. Unfortunately for the peasants of Kinanbwa, however, and for the Haitian peasantry in general, there has been another type of nutritionally more dangerous shift simultaneously taking place throughout the country for at least four decades and probably longer. To a degree unknown in the past, the Haitian peasant -- and his children -- have had to deal increasingly with the phenomenon of hunger as an integral part of daily life at certain times of the year. And reference is not being made, of course, to the pre-meal "appetite" that members of any human society feel. The hunger that we are talking about here in contrast is the much stronger pain felt, especially by children, when a mealtime has simply been missed or substituted with some light snack for lack of adequate food. It is perhaps unfortunate that languages tend to refer to both of these sensations -- the pre-meal appetite and the missed-meal pain -- with the same vocabulary item.

For though they both may be called "hunger" in English, "faim" in French an "grangou" in Creole, the physiological experience of the two hungers is fundamentally different. The missed-meal hunger is recognized by the peasant to produce in his child a sharper, much more painful variant of grangou which he describes as a gaz ("gas") that enters the child's stomach and is further believed to prevent the food subsequently served from having its ordinary nutritional effects. "Pitit-la deja gin gaz nan vant-li. Manjé ou ba-li-a pap fèanyin pou li. Li vin tro ta." This is a very

special type of hunger about which several perhaps obvious but not-always remembered points can be made.

1. It is not part of traditional life in Haiti. Kinanbwa peasants do not see it as "normal" to feel this second type of hunger. Most did not feel it regularly as part of their own growing-up experience. It is only more recent cohorts of children who have begun to fell this hunger on a large scale. The economic deterioration which has characterized Haiti for several decades has only recently taken the form of food shortages in Kinanbwa. Something new is happening, and the peasants are aware of it.

2. The problem is first experienced as crying children. Though the peasants are aware of negative physical effects of moderate food intake, their own discussion of the problem emphasizes the crying of their children. Stated somewhat differently, whereas the outsider emphasizes somatic symptoms such as small arm-circumferences and sub-standard height-for-age or the like, the peasant is most immediately concerned with the crying of his young children and the silent glances toward the kitchen of his older children. These older children will have learned to suppress crying in the face of hunger. But the constant crying of hungry younger children has become the most frequent image invoked by villagers in discussing the differences between the better-off past and the increasingly stressful present. Putting it perhaps somewhat more harshly, the Kinanbwa parent has no need of well-meaning outsiders to remind him about the ill-effects of hunger. His young children take constant charge of this task.

3. Patterns of paternal shame. But the neighbors also have their own say as well. The feeding of children is, in rural Haiti as in most other human societies, a collaborative effort involving inputs from both parents. But with respect to the crying of hungry children,

we have over and over received the impression that if anything, village fathers are more concerned with the crying than are the mothers themselves. This concern is perfectly understandable in view of the fact that "paternal instincts" are buttressed by strong community norms which make it first and foremost the husband/father's duty to provide food, even if that be done through providing his wife with trading capital. The absence of food in a house, and the crying of hungry children, are more a source of social shame for the father than for the mother. Men who fall into an argument with a neighbor will often have the crying of their hungry children cast in their face. We have never heard this insult hurled at a village woman. It is the man, not the woman, who in the last analysis has the duty to chaché manjé pou ti-moun you, "go get some food for the kids". If a woman has no husband, and her young children go hungry, the woman is seen as unfortunate. If a man, in contrast, is living in the same house with his hungry offspring, it is seen, not only as unfortunate, but as shameful and disgraceful as well.

4. The known physical effects of hunger. Village discussions of malnutrition may emphasize the cries of children and the shame of fathers. But the peasants are also perfectly aware that lack of adequate food will produce stunting in children. They also know that red hair and swollen bellies can also be the result of insufficient food intake. Outsiders sometimes can be heard to say that "the peasant attributes swollen bellies to the spirits," and rapidly conclude that the peasant is ignorant of the physical symptoms or effects of malnutrition. What is happening, however, is that the peasant knows that the same physical symptoms can be produced by different causes (including spiritual ones). But he knows perfectly well that inadequate food intake will result in stunted or swollen children. (The stunting is believed to come from lack of food, the swelling from "gas" that enters the underdeveloped child.)

In short the adults of Kinanbwa not only experience the annual plenty/scarcity food fluctuations that characterize many agrarian settings. In addition they are painfully aware of the unidirectional slide downward that has simultaneously begun to manifest itself in the food economy of their community.

9.2. The Causes of Increasing Stress: Outsider and Peasant Models

In assessing the causes of this malnutrition, it is instructive to compare the causes which outsiders emphasize to those which the peasants posit. Different groups of outsiders will tend to search for the principal cause in terms of their own bailiwick. Agronomists will attribute the malnutrition of children to the inadequacy of the agricultural techniques of their parents. Family planning professionals will in contrast blame malnutrition on the failure of parents to have fewer children. Nutrition educators may emphasize the ignorance of rural parents; missionaries may emphasize their lack of parental responsibility as witnessed by the failure of many to get married in church. And the social scientist may, of course, want to ultimately blame the malnutrition of the peasant child on the exploitative machinations of some other social group. The particular theoretical models, career interests, and peer-group fads of each benevolent observer will combine to shape his perception of the principal cause.

The peasants of Kinanbwa are also interested in discussing the causes of the increasing food stress that is rapidly undermining the viability of village life. They tend to posit general types of causes, over none of which they have any real control.

1. Deterioration of land quality. A given unit of land will today yield less than it used to. The land back then was pi bẽni, "more blessed." Whatever you used to plant-- rice, plantains, shallot-- you could count on a good harvest. Now you plant with fear either that

the land will totally destroy the harvest or that the harvest will be less than expected. The deterioration of the overall quality of land tends to be attributed less to overworking than to the effect of several natural disasters that have occurred in the past decades. The garden land on the surrounding plain has frequently been inundated following hurricanes, causing two sorts of problems: the washing away of the better soil and the depositing of layers of salt.

2. Parasitic infestation. These decreases in soil quality are also believed to be associated with a much larger degree of parasitic infestation, especially of the most important root crop, the sweet potato. The problems experienced today from the ti-landeng were virtually unknown in the past, and the arrival of this parasite is believed to be associated with the above-mentioned deterioration that has simultaneously occurred in the physical quality of the land itself.

3. Changing rainfall patterns. The only increase in rainfall that villagers notice is that associated with increasingly destructive hurricanes. But ordinary rainfall has decreased in quantity. This means not only less rain falling directly on the land, but also less rainfall to feed the irrigation systems on which local plains agriculture so heavily depends. This decrease in rainfall, while ultimately believed to be the work of God, is also known or thought to be linked to the fact that most trees in the area have also been cut down. Finally it is believed that even the quality of the water that constitute the rains has deteriorated. That is the rains are not only less frequent, they are also less healthy for the crops.

4. Overworking of land. The peasants place priority on the degradation caused by deteriorated soil, increasing pest infestation, and changing climate. But they also know that reduced per-karo yields come also as a result of insufficient "rest" periods.

5. Inflation. But perhaps what most leaps to the fore in peasant explanations of the increasing rural food crisis is the unabated pattern of food-price increases that has steadily been undermining their food purchasing power over the past 10 years. The price of a mamit of beans has increased by over 1000% in the memory of some farmers now in their fifties, and much of this increase has happened in the last decade.

That is: farmers' views of the causes of nutritional stress take into account changes in both of the major pipelines of food on which they have traditionally depended: the gardens and the marketplace. But the impact of increasing food prices is clearly perceived as the most serious immediate cause of their current situation. If they had a choice between miraculously increasing the productivity of their lands or miraculously decreasing the prices they have to pay for food, the majority would opt for the lower food prices.

One might ask: since the farmers sell agricultural produce, and since their wives market agricultural produce, why are they not beneficiaries of inflationary food prices? A number of reasons conspire to keep them on the short end of the transformation.

1. Reduced stock and stagnant profit margins for female traders. The female trader in the family may not be benefitting from the price increases. She has to have a substantially larger amount of capital now to purchase the same amount of stock. If her capital has not increased she may end up with substantially less stock. Furthermore, though the purchase and resale price are higher in absolute terms, her profit margin may be basically the same per volume unit as it was traditionally. If she earns roughly the same profit margin on a lower volume of stock, her revenue will be dropping, even in absolute terms. And in real terms, her earnings may in fact be plummeting.

2. Decreasing production. The declines in productivity discussed above work toward offsetting the additional income they would otherwise reap. That is, if per-unit productivity were constant, rising mark prices would increase gross revenues. But where rising food prices are accompanied by a dwindling output on his part, the farmer's gross revenues may be remaining near constant. But this means a substantial drop in real income when inflation has been taken into account.

3. Time lags between food sales and food purchases. But the very scheduling of sales and purchases would of itself tend to make price rises burdensome. Even if the farmers' gross food output were remaining steady and his gross revenue therefore increasing because of higher market prices, he would still perceive the higher food prices as an overall disadvantage. This is because he will be forced to buy back during times of scarcity when a) the prices will be even higher than when he sold after harvest and more importantly, b) he will already have spent or invested the revenue earned from postharvest sales. Now he has to generate income to purchase extremely expensive food. And the price paid for his labor (if he chooses wage labor options) have clearly not increased at the same rate as the food prices.

The result of all of these processes can be summed up in one sentence: there is less food today per-capita flowing into the homes of Kinanbwa than in times past. Both major pipelines, the gardens and the biweekly good packets are experiencing a dangerous diminution of the amount of food they are carrying into the village.

A number of the patterns that one sees in the village today should be seen, not as parts of the traditional village life, but as adaptations to these increasing nutritional stresses. The more important of these can be briefly mentioned.

9.3. Increasing Dependence on Purchased Food

The traditional dependence of village households on a mixture of homegrown and purchased foods is shifting. There are now periods of the year when the entire village economy is dependent on purchased food. In former times animals would be killed, bananas cut, and root crops harvested in the periods of the year when there was no grain harvest. But the diminution of agricultural production has created a situation where these traditional standbys are no longer present in the village. The biweekly food shipments from Port-au-Prince have become the only source of food for many households during these off months. This is not a traditional pattern, but the product of recent economic shifts.

9.4. Intensified Trade and Maternal Absenteeism

Women were traditionally involved in trade. But what has changed over the years has been the intensity of involvement. It used to be the case that the women of better off households, though still valuing female commercial prowess, could afford to spend more time at home and withdraw from commerce for longer periods of time. But now virtually all adult females have to go into urban trade, especially during the hungry months. Households that have no members in Port-au-Prince will have to purchase food locally at higher prices. And whereas the marketwoman in Port-au-Prince has the advantage of purchasing food with money that is at least slowly growing, households purchasing food from inactive village money are literally eating away their capital. To avoid this, virtually all households now send representatives to trade in the city.

But not only are more women involved in trade. They now in addition spend longer periods of time in the city. Their returns to the village are less frequent than before. There are months of the year when visitors to the village are astounded at the absence of adult females. This

increasing female absence intensifies the dependence of young children on maternal surrogates for their nutritional and other needs. This should all be seen, not as a traditional pattern, but as the evolution of a traditional pattern toward a more extreme variant under the pressure of nutritional stress.

9.5. Increasingly Early Weaning of Children

The weaning of young children has been discussed earlier. Traditional practices called for an 18 month withdrawal of the woman from trade. This is no longer possible. Rather than take their children to the marketplace or even to Port-au-Prince, however, most mothers simply opt for a substantially earlier weaning of children.

9.6. Emergence of Consumption Debts

In times past it was unheard of to borrow money to eat. But now the borrowing of money has become a much more common strategy into which households fall. Figure 5 is a schematized (and highly impressionistic) breakdown of the "credit portfolio" of a village household with respect to food related items. Even in traditional village life borrowing was not unknown in all three major domestic/economic domains (Trade, agriculture, and Consumption). The percentages in the left-hand column of Figure 5 represent the relative amount of total debts incurred for items in times past. The percentages in the right-hand column represent the approximate present importance of that same item in terms of a household's entire debt portfolio.

FIGURE 5

Evolution of the Rural Domestic Credit Portfolio for Food-Related Items

	Sector		Type of Credit	Past		Present	
CREDIT	TRADE	Cash	In kind	50%		15%	
			Interest free	10%		10%	
			With interest	10%		15%	
			Trade Subtotal		70%		50%
	AGRICUL-TURE	Cash	In kind	5%		5%	
			Interest free	8%		2%	
			With interest	2%		8%	
			Agric. Subtotal		15%		15%
	CONSUMP-TION	Cash	In kind	8%		10%	
			Interest free	5%		5%	
			With interest	2%		20%	
			Consumpt. Subtotal		15%		35%
				100%	100%	100%	100%

There are four important shifts which have taken place and which appear to be intensifying. In the first place the entire debt portfolio has increased substantially for the typical household. (This is not represented in the diagram, which deals only in percentages). Even discounting inflation, the debts incurred by the rural households today are substantially greater in terms of their overall capital than was true in times past.

Secondly, the relative importance of the different sectors or domains has also shifted. Consumption credit used to be minimal, whereas now families are borrowing frequently for the direct purchase of food. In times past the borrowing was focused principally for trading capital, and food would be purchased from the revenues of the trade. But now an increasing (and, for the peasants, frightening) percentage of what they borrow goes directly for food purchase.

Thirdly, the relative preponderance of "in kind" vs. "cash" loans is shifting. Female traders have always gotten some of their credit in the form of stock lent by the supplier to be paid for after sale and some of their credit in the form of cash loans from a third party. Likewise, consumption credit was always partially in kind from the supplier and at least partially in the form of cash loans from a third party. But now the cash loans, which were formally of lesser importance, have become more important than loans in kind in terms of the overall credit portfolio.

Fourthly, the conditions under which these cash loans are made has also undergone a dangerous shift. It used to be that money was readily available interest-free from relatives and close friends. People would simply <u>prêté lajan</u> a term which in the village lexicon generally refers to interestfree borrowing of money. But now cash-needy villagers are to a much greater degree being forced to <u>eskonté lajan</u> or <u>loue lajan</u> (to "rent money") at high rates of interest. Local moneylenders

tend to be well-off females who are known in the region. (None happens to live in Kinanbwa). Interest rates are at least 120% per annum, and some informants reported loans at rates as high as 240% per annum. Even intracommunity loans between friends and relatives are now made with interest, though at rates lower than those just cited.

In short the increasing food-and-money shortage described in this chapter has been the principal spur in the evolution of drastically altered borrowing patterns in many rural households. Community response has been, not a withdrawal from cash involvements, but a microeconomically dangerous and burdensome intensification of involvement in the most disadvantageous types of debt arrangements. And what is perhaps most striking in this process from the point of view of standard economic analysis is that only a small section of the rural credit portfolio is aimed at production. Rural "food-related" borrowing has traditionally been, and continues to be, dominated by loans made for consumption and trade.

9.7. Increasing Husband/Wife Economic Tensions

The arrival of increasing nutritional and overall economic stress is not without effect on intrafamilial relationships. The emergence of a strong female trading role as a normal part of the domestic economy of the village had long ago led to a balance of domestic power in which the men, while retaining their role as public "head" of the house, nonetheless refrained from "raising their voices" to their wives. But the increasing deterioriation of the food-supply chain has meant that both partners to the domestic endeavour are having a harder time in filling their own particular part of the conjugal bargain.

The response of the males has frequently been to get involved in the more burdensome debt relations mentioned above and to get in a situation where they owe many people a great deal of money. The response

of the females, in contrast, has frequently been to succumb to pressure to use part of their trading capital to purchase food to send back for their husbands and children in the village. The absent wife/mother must constantly find a compromise between two competing sets of pressures. On the one hand she must at minimum keep her capital intact, so that at the end of each week or month she does not end up with less capital than she had started with. But on the other hand she must purchase food to get her husband and children through several days back in the village. If the food packet is too small, her husband will have to borrow money or food on the final day before the next food shipment and go deeper into debt himself. If, on the other hand, she spends too much money on the food, she will be eating into her capital. At minimum, she must make enough profit in trade not only to permit nutritionally adequate biweekly food purchases to be made independently of her trading capital. But in addition her capital itself must increase enough to keep up with inflation, to permit her to continue handling at least the same volume of stock.

Thus the woman is under two sets of pressures. On the one hand, niggardly food packages will result in hunger for her children back home and complaints from an increasingly harrassed and indebted husband. On the other hand generous food shipments can mean a slow erosion of her capital and of her ability to trade and a concomitant gradual deterioration of her own business. The tragic finale comes when the woman shows up in the village one day and sadly announces to her husband that she has no more money with which to trade, that they have all been forced to "eat" the money with which she hoped to make a profit, and that they have to start from scratch again (frequently by the sale of land or of livestock that were being raised with a hope of future land purchase).

9.8. An Increase in Thievery

Thievery was already an issue in village life when our first research was carried out. But the importance of this theme had increased during the most recent research. There were two major types of thievery: that directed against villagers and that performed by villagers.

Thievery of the first type principally affects market women. During the past eight years, organized gangs of thieves have begun intensifying their activities in the urban streets where the women sit and sell their produce. Women protect their money in cloth bags (sakit) which they carefully keep tucked in front under their dress. Yet many women have been the victims of robbery in the streets. The thieves are believed frequently to have purchased magic charms that assist them in their activities. The more skillful ones are believed to be able to rale ("draw") your money while they are talking with you. If thievery occurs early in the day when the female's capital is in stock, little harm is done. But if the theft occurs after stock has been sold off and before new stock has been purchased, the effect can be devastating to the already delicate economic balance which many village households must struggle to maintain.

But the theme of thievery has also increased in the village. Men particularly can be heard to say with astonishing frequency that "no matter how hungry your children are, you can't just go out and steal." The very frequency of this assertion is itself a testimony to the salience of theft as a possible response to increasing economic pressure and hunger. The attitude toward thievery in the village is clearly ambivalent. In traditional times the worst epithet that could be hurled at someone is vole, "thief". And the person caught stealing will be tainted with a social black-mark that even a lifetime will scarcely be able to erase from village memory. The shame appears to be especially

intense if the thief is an adult male.

But on the other hand there seems to be at the same time an increasingly strong sympathy (though certainly not tolerance) for papa pitit (fathers) who get caught stealing in the rural areas. Such thievery is seen as being qualitatively different from the thievery committed by younger people with no domestic responsibilities. Fathers frequently say that they hope they never have to steal.

The growing importance of the theme of thievery in village conversations is related to another noteworthy pattern that distinguishes Haiti from most other settings in Latin America with which we are familiar: the absence of openly stated anger against the government itself in the face of the economic decline that has been affecting virtually the entire rural sector. Whereas some would initially interpret this silence as the self-protective surpression of an anger, others familiar with rural Haiti will also recognize that in fact we may be dealing in many cases with the absence of public-sector expectations, an absence which is rooted in the objective historical experiences of the Haitian peasant. Though the peasant will be to some degree aware of the frequent expressions of paternal solicitude made by the rulers of Haiti, no Kinanbwa villager expects the local town authorities even to care about the hunger of his children, let alone to take steps to remedy the economic conditions which create this hunger.

This chapter can be briefly summarized. The food supply system of the village is characterized not only by seasonal oscillations linked to annual agricultural and trade cycles. In addition there has been a unidirectional deterioration of the local economy and a dwindling of the amounts and varieties of food being funneled into village cooking pots from the gardens and the marketplaces. The themes of childhood hunger, parental shame, and general desperation have worked their way into the fabric of local life to a degree

unknown in the past. The dwindling of agricultural production has forced villagers into even greater dependence on the food sent back home by itinerant female traders. But the commercial activities of these traders, and their ability to purchase food, is being undermined by rapid inflation. The villagers are eating less homegrown food, but at the same time finding it more difficult to purchase food as well. This double-bind situation is leading to intensified borrowing of money by fathers, the use of trading capital for food purchase by mothers, and the sense of entrapment in processes over which they have increasingly less control by the villagers in general. People are desperately treading water in their attempts to fulfill what virtually all adults accept as their principal immediate duty, to chache manjé pou ti-moun yo, to " go get some food for the kids."

This chapter and the preceding ones have been concerned with the basic food supply of the village. We are under no illusions that we have studied a "traditional" food supply system; rather we have studied a traditional system in a state of rapid change. Many of the behaviors that people engage in are recent adaptations of traditional practices. The discussion will now leave issues of food supply and turn to the questions of food preparation and food distribution in the village. We shall see that in these domains as well, the practices currently prevailing must be seen, not as a manifestation of untouched rural Haitian tradition, but as a compromise between the mandates of tradition and the pressures of an increasingly stressful present.

10. THE PREPARATION OF FOOD: Ideals and Actual Behaviors

In this chapter and the following, we will discuss the preparation and the distribution of food in village households. But earlier information presented on the impact of increasing food scarcity should make it clear that an observer in Kinanbwa is not witnessing a traditional food preparation or food distribution system, but rather an evolving system whose current state is a compromise between what people would like to do and what actual circumstances permit them to do.

Stated differently, food related behaviors are either linked to, or are emergency deviations from, local beliefs, ideals, and standards. Both for the ethnographer and the nutrition educator, it is useful to have at least an overview of this cognitive dimension, of the beliefs and folk-categorization principles from which food related behaviors flow and/or deviate. Our discussion of general village food beliefs will here focus, not on the special perinatal and pre-weaning spheres that have been discussed earlier in the report, but on the general categorization principles that influence the preparation of meals for adults and for children who have already been weaned.

10.1. The Major "Food Groups" of the Traditional System

Our familiarity with the literature had led us to believe that the major classificatory principle which peasants would invoke in distinguishing between different types of foods would be the well known "hot/cold" distinction. But we quickly learned that the peasants of Kinanbwa, from as far back as the oldest village informants could remember, have employed a substantially different food classification system, one which in terms of its general categories bears an absolutely astonishing similarity to the principles which many modern nutritionists employ.

The villagers of Kinanbwa place most of their important, locally consumed staples into one of three traditional food groups. The labels which they apply to these groups are Viv, Vyann, and Legim. It will be useful to examin each of these groups separately.

10.1.1. The Viv Group

From the point of view of the ordinary village meal, the backbone of the local food system is the viv. All three major locally consumed cereals--corn, rice, and millet--are classified as members of the viv group, as are the three major root crops (sweet potato, manioc,and yam). The locally popular plantain ("cooking banana") is also a viv, as are most varieties of beans. Malanga and mazonbel are somewhat less important but are also classed by peasants as members of this group.

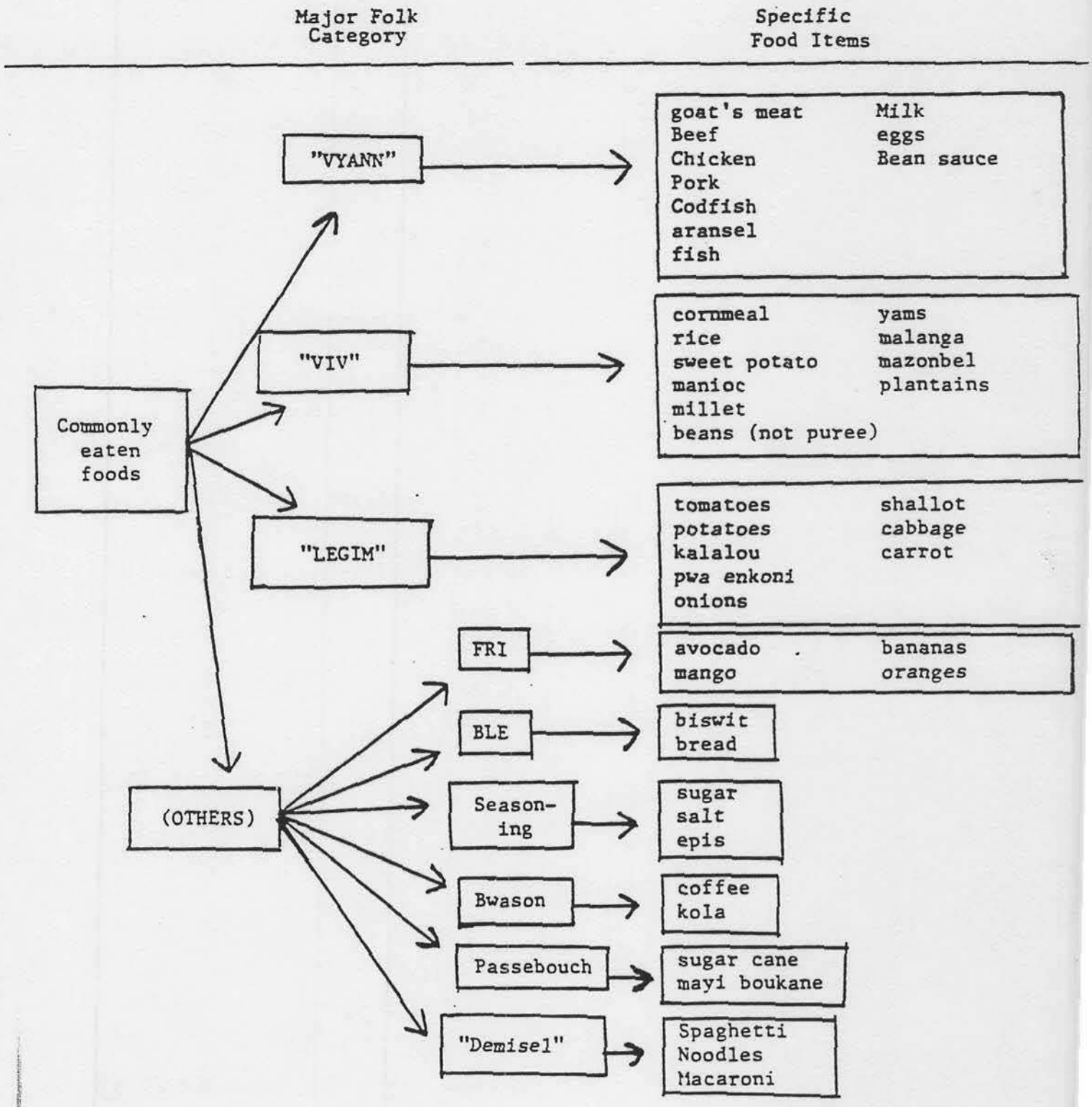
The viv is the backbone of the ordinary meal. In a sense a person has not "eaten" if the meal did not contain a viv. And though a meal with only vivs would not be considered a good meal, the person consuming it would nonetheless consider himself to have manjé, to have "taken a meal".

The status of what are perhaps the two most important items--corn and beans--is particularly interesting. They are classed as viv only when prepared a certain way. Corn will generally be classed as a viv only if it is consumed in the form of cornmeal. If it is roasted and consumed on the cob, it "descends" into the category of snack (pasé-bouch) to be discussed below. By a paradoxical (and nutritionally on-target) twist, beans are treated just the opposite. They will be considered a viv only if prepared in their normal granular form. When they are pureed and prepared as a sauce, however, (as is done with great frequency in the traditional system), they are "graduated" by local classification principles into the "higher" cateogry of vyann which will also be discussed below.

Figure 6 gives a breakdown of the entire system. It is clear that the viv group for the most part consists of items which modern nutritionists would rate as high in carbohydrates. We are aware of no analogous commonly used term in English, French, or Spanish which, with such uncanny inclusiveness, succeeds in lumping together under one traditional category those foods which are high in carbohydrates. The closest contender is the commonly used folk-category of víveres found in the neighboring Dominican Republic and in several other Latin American countries. However, whereas the víveres includes root crops and plantains, it does not include the cereals. Of the more than half-

Figure 6

Traditional Taxonomy fo Major Foods



dozen New World societies with which he have direct familiarity, only the rural Hatians have a traditional system which correctly places all locally grown high-carbohydrate foods under one commonly used lexeme.

There are, of course, other high-carbohydrate foods in Figure 6 which local tradition does not place into the viv group. But virtually all of these (biswit, bread, spathetti, noodles, macaroni) are made from imported, rather than locally grown, materials. They have come too late to "invade" the already established traditional taxon. The other item high in carbohydrates but not a viv is, of course, sugar. But this is a very special type of food item which by itself could not form the "backbone" of a meal. Perhaps this term "backbone", or a term such as "meal base", would be the best English translation of this nutritionally incisive and ethnographically interesting traditional food group.

10.1.2. The Vyann Group

The second major traditional food group is the one referred to by the villagers as vyann. Literally translated as "meat", the major members of this group are in fact the different types of meat consumed by villagers: beef, goats meat, pork, and chicken. But the group in addition includes fish, locally caught as well as dried and imported.

But in addition to these items, which are literally the flesh of mammals, birds, and fish and (which are also called chè i.e. "flesh" by villagers) the traditional food-group vyann also includes three other non-flesh items: eggs, milk, and bean sauce. Informants regularly asserted that each of these items, sé you vyann li yé ("is a type of meat"), that they belong in the same general category as the flesh items mentioned above.

It is ethnographically somewhat astonishing to see that traditional village food categories have succeeded in lumping together under one word all those commonly used local foods which modern nutritionists would place as high in protein, in a manner analogous to the carbohydrate grouping into the above mentioned viv category. We are aware of no traditional term in English, French

or Spanish which so explicity lumps meat, fish, milk, and eggs together into a "protein" group in the way that the Kinanbwa villagers have lumped them all into the vyann food group.

The question of bean sauce is particularly interesting. Beans are prepared both as grains which are cooked whole and as a quasi-liquid thick puree. When cooked whole, the beans are considered to be a viv. But it is believed that the process of preparing them as a puree (sos poua) has the effect of releasing certain vitamins that are used by the body in a way that they cannot be used when the grain is cooked intact. Thus sos poua is explicitly referred to, not as a viv, but as a nutritionally superior vyann. The distinction between whole beans and pureed beans, and the assigning of higher nutritional value to the latter, was part of village tradition long before those recent nutrition campaigns which attempt to teach Haitian mothers to puree the beans they feed children so that less of the nutrient content will be expelled in the child's feces. The Kinanbwa women have never been exposed to these educational messages, nor do they need them in this particular matter. The food categorization principles which they learn from village tradition has already taught them to treat as "rough equivalents", not only meat and fish, but also the eggs, milk, and bean sauce which modern nutritionists place into a general protein group.

When we have discussed these astonishing similarities between the viv/vyann distinction and the modern carbohydrate/protein distinction with nutritional and medical professionals, we have on occasion received polite inquiries as to whether the villagers might not have devised their categories on the basis of exposure to one of the several nutrition programs that have been launched in Haiti. We have verified this matter with a broad variety of older village informants and can state with assurance that this nutritionally incisive categorization scheme is part of village tradition. We have no explanations as to why village tradition has come up with this protein/carbohydrate dichotomy as the central axis of local food beliefs, in contrast to the hot/cold dichotomy which is reported to be the guiding principle in other parts of rural Haiti (and which bears little if any relationship to the vyann/viv distinction). But we can only point out that it is the dominant classificatory principle and that it is

not the product of contact with either modern nutrition messages or the urban milieu in general. Furthermore, brief conversations with villagers in other parts of Haiti lead us to suspect that the vyann/viv distinction may be a central element in the traditional food system of many regions in Haiti.

Nutrition educators may feel some ambivalence towards this finding. On the positive side it means that the population has a pre-existing readiness for "modern" insights. On the other hand, however, if "traditional" village categories are already so incisive as to teach food grouping principles which industrial children must go to school to learn. then an honest observer must question the relevance of any "education-based" nutrition intervention program that posits (either explicitly or implicitly) villager "ignorance" as a major cause of malnutrition.

10.1.3 The Légim Group

There is a third food group which forms an important part of village meal-planning: the category of légim. Literally translated as "vegetable", the légim group in village tradition is in fact a group of foods which are used to make the sauces (sos) in which the vyann are generally prepared. We shall see below that, in evaluating the adequacy of meals, the presence or absence of a légim-based sos is one of the major factors.

10.1.4 Other Food Groups

In addition to the "big three" major traditional food groups of viv, vyann, and légim, there are other foods also consumed in the village. Figure 2 breaks these down somewhat arbitrarily into different sub-categories. Villagers are explicit in excluding these other foods from the "big three", but are not explicit in subcategorizing them into smaller subgroups. They are included in Figure 2 for inclusiveness.

10.1.5 Water as a Valued Food Item

There is one particular complex of beliefs in which village opinion places strong emphasis on a practice which, while not harmful, appears to have little basis in biological fact. It is thought that the nutritional value of even a good meal will be weakened or nullified unless the person downs a glass of water after the meal. Water drunk even by itself in the day is viewed as being to some degree nourishing. But it is in combination with food that water is most helpful. It helps you digest the food, and it is the water which is what helps children grosi (grow) It is the water which fòtifyé ("fortifies") the child. Thus children are taught to consume great deals of water after each meal. This is taught by explicit training, and in fact it was village children who were most articulate in explaining to us the nutritive value of post-meal water.

In line with this belief, there is a corresponding belief that places a particular value on foods that make people thirsty. And it is this belief in the nutritive role of water that perhaps underlies the practice of referring to adult food as manjé sel, literally "salt food". It is the power of solid foods to make you thirsty and to force you to drink water that endows them with at least part of their nourishing effect.

This belief in the need to follow eating by drinking can be found throughout Haiti. The general emphasis is on liquids, rather than on water per se, and persons in urban areas will say that meals should be followed by a juice, a kola, or even coconut water. But the rationale is the same: without liquids, the food itself will not have its effect.

10.2 International Ranking of Items Within the Vyann and Viv Group

The categorization of items as vyann and viv by villagers merely places the items into certain classes whose principal behavioral relevance is in terms of meal planning and meal preparation. But by no means are all of the items within each group considered to be equivalent. On the

contrary, there are widely shared and quite explicit rankings made of the different food items along at least two somewhat independent local dimensions: perceived nutritional value of the item and the tastiness of the item. In discussing the relative nutritional value of items, villagers frequently use the verb kinbé (to"hold" or "support"). A nutrutionally solid food is praised because lap kinbé ou tout nan jounin ("it will hold you up all day long"). A nutritionally inferior member of either group is given a low ranking either because la fè ou mal (it can hurt you) or simply (and more usually) li pa kinbé-ou, li pa fè anyin pou rou ("it doesn't hold you up, it doesn't do you any good"). In discussing the second evaluative dimension, that of taste, villagers may simply use the adjective gou ("tasty"). Another dichotomy is sometimes heard with respect to taste: lou ("heavy") vs. léjè ("light"). Good taste is associated with lightness.

But the villagers distinguish between the gustatory dimension of "lightness" and the nutritional dimension of "holding power". An item can be high on holding power and lower on taste -- and vice versa. That is, village food assessment criteria avoid a simplistic association of tastiness with nutritional worth. Traditional discriminations are somewhat more differentiated, being made along at least two axes. (As we will see below, the adequacy of cooking techniques adds yet a third evaluative dimension).

Within the viv group, the two undisputed champions in terms of holding power are cornmeal (mayi moulin) and plantain (banan). And of these two cornmeal is seen to be the leading viv. Its holding power is believed to be so great that, if a family is planning to cook two grains on a given day, the cornmeal will generally be given in the morning, because of its superior power to help one through a heavy work day. The other grain will be saved for later in the day. Only in matters of postpartum feeding will villagers prefer the plantain over cornmeal. As was seen in an earlier section, the plantain is the viv which village tradition mandates as the best food for filling the recently vacated stomach of the woman and for placating the wandering lamè. But for daily life, cornmeal is accorded the highest nutritional value.

In terms of taste, in contrast, the favorite viv is rice. It is not seen as having the holding power of cornmeal, but is seen as having an inherently better taste. Millet is given a generally low rating both on nutritional power and taste. In terms of beans, villagers make discriminations between the nutritional worth of different varieties of beans. The highest is the poua noua (black bean). Toward the lower end of the scale would be the drought resistant but low-valued poua kongo. The most common red bean is somewhere in the middle in terms of village nutritional ranking.

Similar preferential rankings are also made within the vyann group. It appears that in terms of holding power, the favorite and most highly appreciated meat is goat's meat. Goats meat is to the vyann group what cornmeal is to the viv group, in terms of perceived nutritional worth. In terms of taste, however, goats' meat is ranked as somewhat low. Food preparations norms emphasize that goats' meat must be washed thoroughly with sour orange and lemon. Otherwise it will "stink" (santi di).

In contrast to goats' meat, chicken is thought to be less nutritious, but inherently better tasting (as rice is preferred over cornmeal in the viv group). And just as in the case of rice, it is the "lightness" of chicken in comparison to the "heaviness" of goats' meat which produces its superior taste, in spite of the nutritional superiority of the goats' meat. Beef is also appreciated in the village, but is generally thought to be less sustaining than goats' meat.

Pork is assigned a generally low nutritional value in the village. The scavenging habits of the pig, and its tendency to eat garbage and other unclean items, constitute one factor in the perceived inferiority of its meat, in contrast to that of the two more highly valued ruminants. The recent epidemic of African swine fever has merely added to village perceptions of the "dangers" inherent in pork. As a postpartum food we have seen that pork is viewed as being of little value to the woman. Some villagers would go further and say that it is dangerous for the woman

and should not be eaten until three months after delivery. And then it should be eaten only in dry, well-cooked griot form by itself, rather than being cooked by simmering in liquid sauces, as is true of other meats. That is, one behavioral effect of the low nutritional value and health hazards which village tradition assigns to pork is to create tighter cooking constraints, an attitude that is well in line with modern medical advice as well.

This differential rankings of meats, it could be added, is also carried over to the religious sphere. The folk religion of the village ("Voodoo") involves frequent sacrifices of animals. The world of the local spirits is divided into two groups: gentle spirits ("sweet loua") and violent spirits ("bitter loua"). The most gentle and "lightest" of the spirits have a preference for the meat of white chickens and pigeons. Pork, in contrast, is fed only to the violent spirits. Goats meat and beef will straddle both groups of spirits. But the strict confinement of pork to the violent "bitter" group merely gives ritual manifestation to a dislike and fear of pork that is part of the more general village food preference system.

But there is one meat that is disliked by villagers even more intensely than pork: mutton. The meat of sheep is believed to be dermatologically dangerous, causing skin to break out in white blotches. But many sheep are raised locally for sale in Port-au-Prince markets. In recent years, however, sheep owners have taken to killing sheep and selling the meat in the town market as though it were goats' meat. The trick is to place the meat next to the head of a slaughtered goat in the market stall. The flesh of the two animals is sufficiently similar to deceive all but the most experienced buyers. This fear of being duped into eating mutton is one of the stated reasons for the infrequency of meat purchase (and meat consumption) in village life. One can also suspect that this danger in some cases provides a not-unappreciated rationale for not spending scarce money on this somewhat expensive food item. But the fear of mutton in the village is intense. Recent regulations enforced in the town mandate for the actual slaughter of the animal to take place in the market itself to reduce the likelihood of switching.

In summing up this discussion of food preferences within the traditional categories of vyann and viv, we are impressed at four patterns:

1. The expliciteness of the contrasting nutritional assessments
2. The assumption of inherent, collectively perceived taste.
3. The differences between these preferences and those found in the urban areas and in the rural areas of the neighboring Dominican Republic.
4. The manner in which barbaric food preferences are attributed to whites.

With respect to the first point, we have found the Kinanbwa villagers to be much more explicitly concerned with the matter of the nutritional value of a particular food item than is true either in our own respective subcultures or in other settings where we have carried out research. In our own subcultures, for example, the choice between different meats or vegetable appears to be made much more on the basis of the different tastes of the meat rather than on a knowledge of their different nutritional values. Though our intercultural comparisons here are admittedly impressionistic, we suspect that few people in our own subcultures would have an explicit theory about the different nutritional value of beef as opposed to pork, of corn as opposed to potatoes. Unless such matters are explicitly studied in school, such nutritional comparisons are either non-existent or on the periphery of concern. In Kinanbwa, in contrast, these nutritional comparisons are a cognitively salient element of local socialization, and even many pre-teens (perhaps especially pre-teens) can elaborate at length about the different nutritional value of cornmeal as opposed to milet, or of goats meat as opposed to chicken.

Secondly, we have also noticed that in terms of taste, there tends to be an assumption that some items taste inherently better than others. Chiken, for example, seems to be considered inherently tastier than goats meat. Persons are known to differ in their tastes, just as they are in

our own subculture. But whereas in our groups, the person preferring pork over chicken would be seen as choosing between two equally plausible alternatives, the person expressing this preference in Kinanbwa would be seen as making a strange (but entirely acceptable) choice. Stated differently, there appears to be not only an emphasis on folk-nutritional knowledge, but also at least a light tendency to pre-structure "tastes" themselves toward certain directions and away from others. But this pressure is light. Everybody is seen as having a right to his or her own preferences.

With respect to the third observation mentioned above, we are impressed at the manner in which the judgements and preferences of the villagers emphasize the desirability at least some items which just across the border in the Dominican Republic, for example, are considered highly undesirable. Cornmeal will be rejected as virtually subhuman by peasants in many parts of the Dominican Republic, whereas it is valued as the most nutritional viv (though not the tastiest) by the villagers of Kinanbwa. The favorite meat in the village — goats' meat — is considered virtually inedible by many foreigners visiting Haiti (who may never have had opportunity to try it). We are not in a position to comment here on the scientific accuracy or inaccuracy of the nutritional judgements made by different groups. But if one group says cornmeal is better than rice, and the other group says that rice is better than cornmeal, either one of the groups is wrong or each is simply operating on a different definition of the term "better". We leave in abeyance the question of the precise accuracy of the villagers' comparative ranking of different items nutritionally. But the presence of this nutritional sensitivity should itself be seen as a strength.

Finally we were also impressed at the manner in which many villagers assumed barbaric food preferences on the part of whites. More than once we have had to decline the offer of a "low priced" dead crocodile killed in a nearby lake by a would-be seller who suspected that our interest in the creature's meat might possibly exceed our interest in its skin. An we have likewise had to decline offers of the carcasses of a number

of locally killed birds of whose genus we had not the faintest idea but whose meat was thought to be possibly attractive to us as blan. This attribution of repulsive food preferences to the blan can be seen as a paradoxical type of unintentional village retaliation against the equally erroneous attributions of incorrect food preferences which so many well-meaning, flipchart-toting blan will frequently level against the villagers.

10.3 Ranking Meals: Excellent Meals vs. "Dry Meals"

Societies not only teach their members that some food items are better than others, but also that it is important to combine food items and to eat a variety of items at each major sitting.

This general notion of "balanced meals" is by no means an invention of modern nutritional science. It is an ancient principle deeply built into traditional cultures. Modern nutritional science merely systematizes and rationalizes a combinatory strategy that is a virtually universal element in human dietary practices.

This notion of the balanced meal is a principle which exerts a strong influence on the meal-planning and food-preparation activities of Kinanbwa villagers. Prevailing village beliefs emphazise that a meal will be most nutritious if it contains a combination of some viv and a vvann which has been cooked in the sauce of some legim. It is becoming increasingly rare for families to have such three-pronged meals and a number of compromises have been instituted. Every meal will have at least a viv. But if there is no vvann available, the meal will still be considered acceptable if it has at least some sauce available, generally from a legim. Lacking this, the meal can still be considered acceptable if the viv is at least accompanied by an avocado. This particular fruit has come to play the role of minimally acceptable accompaniment to vivs such as cornmeal and millet.

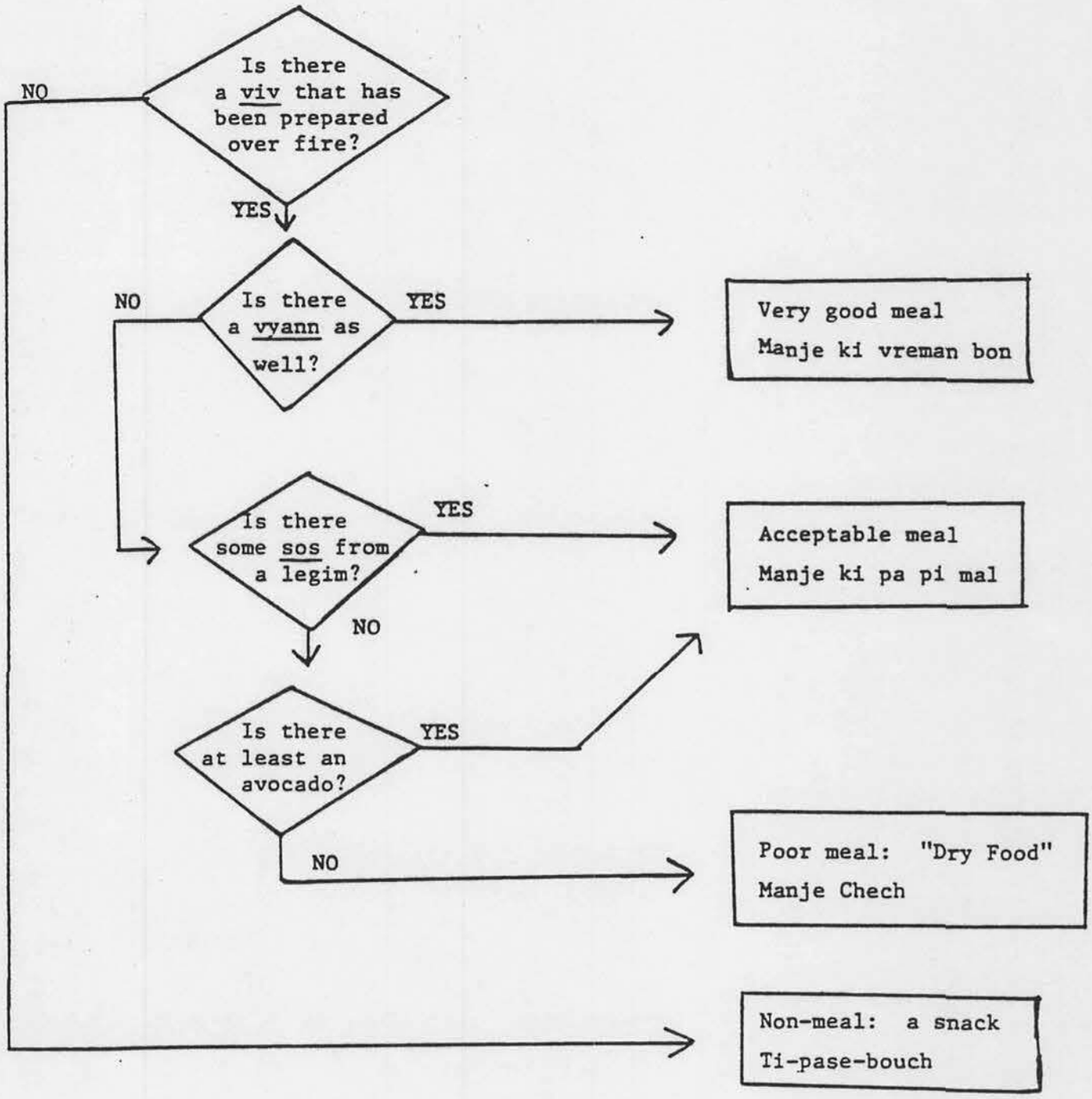
If, however, the household has only cornmeal, millet, or some other viv, but nothing with which to accompany it, family members will accept it and will consider themselves to have "eaten". But such an unaccompanied viv meal is referred to as a manjé chech (a dry meal). The "dry meal" is considered to be inferior, not only in taste, but also in terms of its nutritional value. The major exception to this is the practice of preparing early morning portions of cornmeal with no accompanying sauce of any sort. This is viewed as a good way to begin the day, especially for children. But in general, after late morning, such an unaccompanied meal will be referred to despectively as a "dry meal".

But there is a form of eating that is seen as being less adequate than the "dry meal". During the worst months of the year, the poorer village families may not even have, on a given day, a viv to cook and will be obliged to get by on biswit, sugar cane, roasted corn, or some other such item on that day. In such cases people will not consider themselves to have had a meal. These emergency (or in-between meal) items are referred to as pasé-bouch, literally "mouth-passers," perhaps best translated as "snacks". In Figure 7 we have attempted to schematize these distinctions in an approximate fashion.

Further elicitation would permit refinements to Figure 7 . But what is important here is that local traditions already endow villagers with strong beliefs concerning the need to balance meals, and concerning the inferiority of meals that are not balanced. The particular combinations may vary from one part of the country to another, but the evidence is strong that one or another variant of the meal-balancing principle can be found throughout rural Haiti. Nutrition professionals, be they Haitian or foreign, are merely exposing their own lack of familiarity with rural Haiti when they make well-meaning but uninformed pronouncements about the urgency with which peasants must be taught to eat a nutritious combination of foods.

Figure 7

Village Criteria for Ranking the Adequacy of Meals



The problem stems in part from the fact that visitors to a rural community may in fact observe plates of food being eaten that contain only cornmeal or millet. But such meals are done, not out of obedience to local beliefs, but rather in spite of local beliefs, a deviation that in virtually all cases is caused by scarcity. The peasants themselves are fully aware, not only of the inferior taste, but also of the nutritional deficiencies of such "dry food". If a community of peasants really thought that such one-item meals was adequate, then the educator could swing into action. Such one-item meals, however, stem not from flaws in the village belief system, but from the earlier discussed stresses in the village economic system.

10.4 Food Preparation Standards

There are standards not only with respect to the combination of items whithin a meal, but also with respect to the manner in which the food should be cooked. There are three basic standards for cooked food: tastiness, safeness, attractiveness. Expectations are placed for food to taste good. Steps such as mariné enhance the possibility of making food taste better. Much time is allocated to cleaning fish, a process that may take over an hour and a half cutting off unwanted parts, and cleaning each fish carefully with lemon or sour orange. Even young children learn fast how to season foods and what are acceptable and unacceptable tastes. Yonal, age 2, threw some unsugared coffee to the floor, in disgust. Only under their father's threatening remarks did a set of siblings drink the unsugared tea. Likewise, surprising even her father, a five-year-old went into the food dépo , got a little salt, mortared it, and put it on the avocado she had just been given before she proceeded to eat it. People are also very aware of how things should taste. Diluted coffee immediately elicits comments of "pa fò" (not strong) or is treated as a "ti dlo"(a little water). Likewise with soups, sauces and other things that can be potentially watered down, people complain when the thinning is excessive.

The other standard for food is safety. There are certain foods that are recognized as being dangerous, unless properly cooked. Adults repeatedly warn young children as to the importance of cooking food well and as to the consequences of their failing to do so. Corn that is not well roasted can make children feel ill.. Young girls learning to cook for the family are also closely supervised to make sure they have prepared the foods to the desired doneness and have followed the proper steps of cleaning both foods as well as pots and pans before proceeding with the cooking. The safery standards also extend to the water used for drinking and cooking. There are various sources of water in the village that are recognized as not being appropriate for drinking or cooking. This has been discussed earlier.

Family cooks do their best to make the food look attractive. And to this effect, again, there are certain standards to be met. Coloring is very important, especially in the case of sauces. People buy extra ingredients such as tomato paste just to give a sauce a deeper coloring, to make a "bon sos jòn". Sauces should also have the proper thickness, which is yet another dimension along which the attractiveness of foods is evaluated.

10.5 Actual Cooking Practices: The Time Factor

The cooking process in Kinanbwa is time consuming even under ideal circumstances. Given current cooking technology, even light meals such as porridge (labouvi) take an average of 60 minutes to prepare. Major meals, normally extend between 3 and 4 hours. Of 10 major meals carefully followed in two households, 6 exceeded three hours preparation time, while none was completed before two hours.

What factors actually contribute to lengthen the process? First of all, the food preparation task is itself elaborate. Let us consider the seemingly simple task of preparing the morning coffee. Before one even begins water has to be fetched, and pots and cups that may have been

visited by rats and roaches the previous night have to be carefully washed. Fire has to be assembled and lit, a process that takes a good 20 minutes. Then the water has to be put to boil, after which coffee powder and sugar are mixed in. After several minutes the mixture is finally strained. By the time you send for the accompanying biswits, over an hour may have elapsed. Other processes are even lengthier, as the preparation of bean sauce, or preparation of foodstuffs such as fish, that require careful cleaning.

Secondly, the lack of an ingredient usually contributes to extend food preparation time. In recent years, charcoal and even fuelwood have become less and less available and the prices have reached unprecedented levels. A direct result of fuel scarcity and dearness has been that most families have to do all their cooking with one source of fire. Thus, a family has to wait for the bean sauce to be ready before they can cook the accompanying cornmeal, a process that adds almost a full hour. Other pitfalls concern running out of fuel in mid-process, having to send for more, and perhaps upon arrival finding your child has not brought what you consider to be your money's worth and having to go all the way to re-negotiate the transaction.

Most missing ingredients, however, can be done without if unavailable. If vegetables, beans or fish are missing to make a sauce, a family may settle for a "manjé chèch" and may go ahead and eat whatever they have. Likewise, if no sugar is found one may substitute for rapad or may have to drink the cooffee or cook the labo without it. Other unvailable ingredients may be borrowed, especially salt, garlic, and various herbs. Cooking oil, however, is essential and people find it difficult to do without. Since it is not the kind of item neighbors usually borrow from one another, people may have to buy it on credit if they lack the cash. This constant need to send for items, whether free (water), borrowed, or brought contributes to lenghthening considerably the process of food preparation.

10.6 Norms Governing the Timing of Meals

The preceding sections have discussed the local variants of three virtually universal human food rules:

1. Foods are divided into different groups.
2. Meals should provide a combination of foods at the same sitting.
3. The foods should meet certain basic esthetic cooking standards.

But there is yet a fourth rule that appears to prevail in most human societies and which is certainly the ideal in rural Haiti: you should eat several times a day.

Many observers have correctly noted that some families in rural Haiti may eat only one meal a day. This is becoming increasingly true, especially at certain times of the year. However, it would be quite erroneous to attribute these one-meal days to faulty knowledge on the part of the villagers. As is true of the "dry meal", the spread of the one-meal day is an adaptation to increasingly serious seasonal scarcity.

In terms of beliefs and ideals, it is felt both desirable and proper for people to eat throughout the day. But people distinguish between what would be called snacking or munching in English and the eating of meals. We shall see that the concept of "meal" itself is somewhat problematic from a linguistic point of view. But there is no question concerning the existence of cooking/food-distribution/food-consumption sequences that in English would be called a meal.

When food and money are abundant, better off rural families may give themselves the luxury of what is probably the most widely-held village ideal: three meals during the day, framed by an early morning snack and a pre-bedtime tea or porridge.

Thus village ideals emphasize eating five times a day: three meals and an early morning and late afternoon snack. This is all in addition to the continual snacking on sugar cane, roasted corn or sweet potato, or seasonal fruits that is seen as perfectlv appropriate. If such village ideals were followed throughout the year, there would be little malnutrition in rural Haiti.

But a number of factors, including the growing fuel crisis discussed earlier, appear to be producing a modification even in terms of village ideals. Probably the ideal toward which most families now strive is the day in which there will be an early morning snack, generally entailing biswit and coffee, a late morning heavy meal containing viv, vyann, and legim, and a late afternoon meal also containing at least two of the food groups. There will also be a pre-bedtime tea or some other light snack. That is, current village food-timing ideals emphasize the two-meal day framed by early morning and early evening snacks.

10.7 Actual Eating Schedules

We have seen that village norms strongly mandate eating more than once a day. Traditional ideals emphasized three meals framed by an early breakfast snack and a post-retirement tea or porridge. More recent shifts in ideals have come to settle for a two-meal day -- one in the late morning, the other in mid- or late afternoon.

In examining actual eating schedules, however, as well as meal contents, it is obvious that the much sought - after ideal can seldom be put to practice. As will be seen below, either the timing, or the food consumed fail to meet desired standards.

Ideal Meal Schedule and Menu		Actual Meal Schedule and Menu	
07:00	Coffee and Biswit	7:30	Piece of Avocado
10:00	Cornmeal with avocado	1:15	Cornmeal
01:00	Diri/pwa kolé with sos meliton	3:30	Cornmeal and sos pwasson
05:00	Plantains with sos arancel		(couple of snacks in between second and third meals).
06:00	Tea with Sugar		

People end up eating less often than they would want, and the time that elapses between one meal and the other differs from day to day even in the same household. But the major differences are to be found among households of different economic levels.

Table 8 represents the cooking of meals or snacks in three different households (HH) during a five day period. Each "meal event" is here defined as the lighting of a fire for cooking. The first meal is generally only a snack of coffee and biswit, but is included because of the lighting of a fire. Such a breakdown, while giving no information on the contents of the meal, shows interhousehold differences in timing and even intrafamilial variation from one day to the next. As we shall see, this staggering of meals within and between households, though partially random, is at least partially engineered around the interhousehold cooked-food exchanges that constitute such an important element in the village food system.

In the table HH1 represents a family among the more economically stable in the community. HH2 is representative of median income families, while HH3 falls among those less well-off families.

TABLE 8

Timing of Meals in Three Households over a 5 Day Period

Households	Meal Schedules Days Observed				
	Day 1	Day 2	Day 3	Day 4	Day 5
HH1	6:00	7:10	7:30	8:00	7:30
Better-off	7:00	12:30	11:15	11:00	1:30
	10:00	5:00	3:30	4:00	5:25
	12:00				
	4:00				
	6:00				
HH2					
Intermediate	6:20	7:10	7:10	8:00	7:30
	1:10	10:30	11:40	12:15	11:45
	4:25	12:15	6:30	5:30	3:30
		5:00			
HH3					
Worse-Off	8:00	9:30	8:15	9:00	7:45
	9:30	4:25	10:15	1:50	12:25
	2:15		5:45	4:35	5:15

From the table, it becomes clear that the better off family from time to time achieves the ideal of eating many times a day. The worse off family never does but rather occasionally has to settle for two-meal days. Spacing of meals seems more regular in the better off households than in the poorest one. This is both true if one looks at the day to day regularity of mealtimes as well as at the time that elapses between one meal and the next.

Even if it is an ideal not often attained, much emphasis is put upon spacing meals adequately. For instance, when the last meal of the previous day has been early in the afternoon, say around 3:30 p.m., people do their best to provide an early breakfast. Adults may comment the children have to be given food early that morning because they have not eaten in a long time and will be hungry. Likewise, if a family can only provide one major meal on a given day, they will schedule it for the early afternoon, and may send the children to bed early that evening, to make sure they fall asleep before they get hungry again. Adults are also very concerned about the time that will elapse between one meal and the next, and do their best to speed up the process or find some hunger-mitigating"passe-bouch"

Families with young children are under special kinds of pressures. It is widely held that young children are not as able to withstand without food as adults and older youth are, and children often contribute to reinforce this widely held view by applying a series of pressures that may take various forms. It is also feared that hunger may drive children to stand at other people's kitchens thus putting the family publicly to shame. In this way, parents are not only under strong pressure to provide for their children but to make foods available at the right times. Sometimes, time between meals lags are filled by different "passe-bouchs": sugared water, a biswit, a spoonful of the rice or fish being cooked, a piece of sugar cane brought from the garden by the father in anticipation of the children's needs, a seasonal passe bouch such as mango , corn, avocado. Families with older children or without children are under less

pressure. Adults are able -- and expected -- to subsist on less food and also able to withstand longer intervals between meals. Thus it is not uncommon for a family to prepare a meal exlcusively for the children, a meal from which the adults do not partake at all. In fact, a pregnant woman in the community who had been given a bag of flour at the dispensary to supplement her diet, allocated all of this to her children and never ate of it herself.

11. THE DISTRIBUTION OF FOOD WITHIN AND BETWEEN HOUSEHOLDS

Nutrition researchers are aware that increases in domestic income in the village do not necessarily lead to short-term increases in the nutritional well-being of children. Increments to the family cooking pot may not be equitably distributed among all household members. A frequent observation is that adult males appear to appropriate for themselves the bulk of any caloric improvements to the family pot. These dynamics occur within the context of the intrafamilial distribution of cooked food.

Earlier mention has been made of misleading images of the rural family competitively hand-feeding themselves out of a pot of recently cooked food. In actuality, there is a very carefully calculated intrafamilial food distribution procedure that appears to hold throughout rural Haiti. The variant prevalent in Kinanbwa will be described here.

11.1. Calculating Food Gifts

The basic procedure is for the cooked food to be spooned out onto individual plates in the kitchen when the cooking is finished. This distribution of cooked food is a task that requires much experience and finesse. While young teenage girls may have done all the cooking, at the moment of food distribution, a more experienced member of the household takes over the task. Balancing the proportion of sauce to main staple (i.e. rice, corn, etc.), so that nobody is left over to eat a mangé chèch, is only one of the intricate techniques to be mastered.

The first critical decision to be made is whether any plate or plates of cooked food will be set aside for people living in other houses. Most village families exchange cooked food with a small number of neighboring households on a daily basis. The technique consists, not of inviting the neighbors over for a meal, but rather of sending over plates of hot food to the recipient's house. Households involved in such dyadic exchange

relationships may set aside two or even three plates of food for their "trading partners" (though the entire process unfolds in the idiom, not of exchange, but of neighborly generosity). The nutritionally adaptive character of these patterns will be discussed further below. For here it suffices to say that such plates are faithfully separated. Only if there is truly little food will a stern order come from the man of the house to "separate the food of those who sleep in the house first," to the effective exclusion of the neighbors for that meal.

Having settled in her mind the issue of food gifts for that particular meal, the woman must then determine whether there are any visitors to the house or kitchen who "happen" to be present when the food is being separated. There are very strict rules of etiquette making absolutely mandatory the offering of food to visitors.

It is for this reason, paradoxically, that food distribution is a very private matter. Most visitors will discretely leave if they realize the process is about to begin, and those that stay will become self-effacing, but will eventually be given something, as is customary in the village. Thus, people who do not want to be criticized will either not accept the offer claiming they have just eaten or something of that sort, or discretly leave at this time. Visiting adults may stay and eat from time to time but never on a regular basis, as they risk public criticism. People in the house are also put on the spot by visitors. When they are in no position to offer food they will publicly comment how they sent for a certain number of biswits, for example, but even people in the house had not been able to eat because the amount was insufficient. In any case, any deviation from the accepted and expected standard of conduct appears to deserve an explanation. When outsiders are offered food, however, it is usually half of what family members get. In a case observed, family members got four biswits each while the outsiders got 2 each. In another case, the food portion appeared to be about half of what family members had received.

11.2. Separating The Food of Family Members

But, in any case, before actually separating food for the family members, the woman in charge must take into account these socially mandated food gifts. The separation of food for the family members then begins. The father's food is generally separated first. Because most meals have more than one food item cooked separately, the decision must be made as to whether to spoon all foods onto the same plate or to serve the individual's food on two or more plates and allow him to mix it. Etiquette calls for serving the adult male's food on separate plates rather than mixing it. The man himself will then spoon the yyann and sos onto the plate containing the viv. It is when this etiquette of two plates is followed that the man will be served at table inside the house. But most other family members will receive their food pre-mixed on the plate that is handed to them.

In terms of quantities, the adult males get the largest plates of food. But, we have never seen them appropriating to themselves all of a given item such as meat, leaving the women and children with none. Meat eating is rare, and when done enough will be placed in the pot to give each person at least a little. The one exception will be the witholding of fish from very young children. This is done merely because the bones are considered dangerous. For this reason also, very young children will not be allowed to clean off meat bones. But such strategies have a genuine protective function, not a protein monopolizing function.

Females and children in approximate order of age will then be served their own mixed plates of food. It is exclusively young children's priviledge to protest when they feel they have been unfairly treated. Their demands usually lead to concrete increases in their rations, either from the family pot, or from an older member of the family. Passed a certain age, however, people have to settle for whatever they have been given without protest. Food distribution time is also a time when some disputes may be settled. A child that has violated the family pot by

surreptitiously having taken a sweet potato or helped him or herself to a spoonful of whatever was being cooked, may be given less food than the others, the separator claiming they have already helped themselves, and to prevent something similar from happening again.

Very young children are generally the last in the food separation process. But, their precarious situation is alleviated somewhat by the privilege they have of getting small bits of food placed in their hand either during the cooking or at the beginning of the food separation.

In separating the food, the woman in charge must be very careful to prepare plates for family members who happen to be out of the compound at the moment. Women washing clothes, or young girls fetching water or doing some other errand have a right to their own food plates. If they are not given cooked food, there is nowhere in Kinanbwa where they could buy a meal when they return, even assuming the availability of money. They would have to settle for biswit purchased in one of the village boutiks. Returning from Port-au-Prince, we have on occasion served as messengers to village households to save food for a family member who would be coming on such-and-such a day.

Occasionally, the person separating the food may miscalculate. The sudden appearance of a visitor just after the food is being distributed will automatically result in small bits of food being taken off of the plates already spooned out. It is usually adults, rather than children, who have to supply the visitor with food. But, villagers are categorical in insisting that the person coming has to be offered something.

Different women will use somewhat different food separation techniques. Some will shoo everybody out of the kitchen at the moment of distribution, spoon out the food, and send a child to deliver each plate to its intended recipient. Others adopt a more lenient system and allow the children to come and extend their own empty plates.

There are very strong norms against male involvement in the food distribution process. It is considered in bad taste for the man even to show up in the kitchen during cooking, let alone to challenge his wife's prerogatives during the separation of the food. Men who show an inordinate interest in kitchen activities will be teased. These norms are relaxed frequently in Kinanbwa due to the frequent absence of adult females doing business in Port-au-Prince. Thus men will be seen as having a right to supervise the cooking activities of teenage daughters and to personally supervise the taking of food items and fuel from the family depo. They themselves may keep the key. When the mother arrives, however, the man backs off, and will certainly not supervise her food distribution activities.

11.3. The Absence of "Meals": Eating as Individual Behavior, not Social Event

Once the plates of food are distributed, household members tend to disperse. Eating itself is not construed as a collective event. The practice of sending food to neighbors houses rather than inviting them to join you in a meal is indicative of this same general orientation toward the consumption of food. Several observers have commented on the apparent absence of the social dimension to meal eating that is so important in many other settings, particularly urban middle class.

There is at least some factual basis to this observation. In middle class settings, the "meal" is a social event. More concretely, the biological act of eating is accompanied by the following social patterns.

1. All three age/sex groups (men, women, children) sit together at the same table.
2. Conversation is mandated, governed by general rules, and inclusive of all three social groups.

In Kinanbwa, in contrast, and throughout most of rural Haiti, one could say that:

1. The three age/sex groups almost never sit together at the same table, nor are there any genuinely salient notions that they are supposed to. Men occasionally sit at table, but women and children never do. Each group eats by itself, nor are there even any strong rules that say that members within the same group should eat together. Physical contiguity during eating is neither mandated nor socially engineered.

2. There are likewise no norms that people are "supposed" to converse with one another while eating, and certainly no notions that mealtime should be an occasion for conversational interaction between husband, wife, and children. There are no injunctions against conversing, of course. But, we found absolutely no trace of the "middle class" notion that eating should be the occasion for intrafamilial dialogue consciously involving the children as well.

This difference between "middle class" and "village" norms is, we believe, subtly but decisively reflected in linguistic usage. The word "meal" in English can be interpreted as a type of event, in the way that the word "food" cannot. But whereas village Creole has a word that corresponds to the English word "food," there is no word in Kinanbwa that truly corresponds to the word for the social event that we call "meal".

Since this point is likely to be disputed by students of Creole, it is important to clarify the basis for this claim. The following two sentence frames will be useful.

A. English: "_____here begin at 9:00 and end at 11:00."
   Creole: "Isit_____-yo konn komanse a neve epi yo konn lagé a onzè."

B. English: "There's not enough_____.Pretty soon there won't be any left."

Creole: " "_____ piti. Talè pou-l fini."

In both languages, the blank in sentence A can be filled by words referring to social events, such as party, dance, wedding, funeral, meeting, and the like. (The corresponding Creole words that would fit perfectly into sentence A are fet, bal, nos, lanteman, reinyon.) These words cannot, in contrast, be used to fill the blank in sentence B. The result would be nonsense sentences rejected by native speaker informants. For sentence B, food and drink items would be perfectly appropriate. The English words meat, rice, sugar, water, and milk would fit perfectly, as would the corresponding Creole words vyann-nan, diri-a, sik-la, dlo-a, let-la. But these mass object-nouns could not in turn be used to fill the blank in sentence A.

The point is this. The English word meal could be used as an event word to fill slot A, the English word food could be used to fill slot B. In Creole, the word for "food" that could fill slot B is manjè-a. But, there is no word for "meal" in rural Creole that could fill slot A. The word manjè would be rejected. We defy anybody to come up with a word for meal that would be used by villagers with the event-verbs "begin" (komansé) and "end" (lagé). The peasant will not say manjé-a lagé. He may say manjé-a fini, but, in this case, he means, not that the "meal is over", but that "we've run out of food." When he says lantéman-an fèt dépi katr-è, he means that the "funeral takes place at 4:00." But when he says manjé-a fèt dépi katr-è, he means, not that "the meal takes place at 4:00," but that "they begin cooking the food at 4:00." Manjé refers to the physical food objects, not to the social event. To repeat, though rural Creole is rich in collective social event-nouns that can be said to komansé and lagé, there is no such event-noun for the concept "meal."

We believe that this linguistic gap is not accidental. These event-nouns refer to socially recognized collective events. But, we have indicated above that in fact in rural Haiti, there are no regular occasions when men, women, and children sit at the same table, eat together, and converse together. That is, though there are strong norms to prepare several balanced plates each day, there are no "meals" in this social sense that form part of the daily routine of rural domestic life.

Does this mean that food-related behaviors in rural Haiti are totally individualistic? Absolutely not. It would be much more on-target to say merely that, whereas middle-class society emphasizes the social dimensions of food consumption, rural Haitian society focuses much more social attention on the preparation and distribution of the food. It is at the preparation and distribution phases, rather than at the moment of consumption of the rural meal, that the most important social dynamics are worked out in rural Haiti.

11.4. The Etiquette of Eating: Hands vs. Spoons

Related to this is the question of eating etiquette. The absence of interactional norms during food eating itself is perhaps related to another noteworthy difference between village and middle class eating habits: the rapidity of food consumption. When a drink is offered to a villager, the middle-class practice of sipping it while conversing is rarely followed. More often than not, conversation will be suspended while the guest or guests quickly down the drink. Food will also generally be eaten in this determined manner. Conversation is frequently suspended while eating, and people may actually move somewhat apart from others eating. The tendency to give psychological or biological ("food scarcity") explanations to this approach to eating should be held in abeyance. What is occurring is that eating itself is treated as though it were an individual task rather than a social event. The somewhat rapid pace of eating and drinking is perfectly compatible with this orientation. Given this basic mind set, there is no more reason to dawdle over eating and drinking than over bathing, mouth washing, or other biological functions performed in the course of a day. To repeat a point made earlier, village social

etiquette focuses much more strongly on the distributional aspects of eating. What is of social concern is who gets the food, not how it is eaten.

This raises the oft-noted practice of eating with one's hands, a behavior which the villagers view as less proper than eating with utensils. Village households have two types of spoons: larger ones (frequently made of wood) used to stir food during cooking and to spoon out the food onto the individual plates after the cooking is done; and smaller spoons used by household members to eat. Knives and forks are in general not used at all as eating utensils in the village.

Virtually all eating of reasonably solid foods by children under 10 is done with the hands. Children will use spoons for the most part only when the food being eaten is highly liquid in content. Even when spoons are available, most children will eat solids with their hands. The washing of hands before meals in not part of common village hygiene norms, which for other areas is quite strict. But mothers will vigorously call the attention of children who attempt to eat with obviously dirty hands.

In the case of adults, the use of a spoon as opposed to hands appears to be governed by a combination of three factors:

1. the physical consistency of the food.
2. the immediate availability of a spoon.
3. the presence or absence of visitors at the moment of eating.

If a) the food is liquid or b) a spoon is handed to the individual with the food or c) there is an outside visitor present, then an adult (especially an adult male) will eat with a spoon. If, however, a) the food is solid and b) the individual would have to make a special effort to get a spoon and c) there are no outside visitors, then the person will probably eat the food with his hands. There are rules of etiquette, but they are simply different from those prevailing in middle class settings. The middle class child learns that eating even solid rice or cornmeal with the hands is "bad." The village child learns that both forms of eating are acceptable, but that one is slightly more "proper" than the other.

But village etiquette rules are weak in this matter of how to consume food. As we have seen in an earlier section, village tradition places its emphasis on the preparation and, above all, the distribution of food. When the middle class person calmly eats in front of another person without offering a plate to the other person as well, the villager sees that as barbaric behavior, even though the person may be daintily transferring the food to his mouth with a shiny fork. The laxness of villagers with respect to spoon use is merely the rural counterpart of the middle-class laxness with respect to their own notions as to food sharing. Both groups have both sets of rules. The middle-class person takes the eating utensil rules seriously, the food-sharing rules lightly. The villager takes the reverse emphasis. And readers will make their own value judgments as to whether one of these emphases represents a more advanced behavior proper to the species Homo sapiens.

11.5. Children's Prerogatives: Not Eating and Saving Food

A very important nutritional question concerns the attitude of parents toward children who do not want to eat. The prevailing practice is to let the child do as he or she wishes. There is little notion that children have to be forced to eat. It is our strong impression that in this food-scarce village, there is very little of the mealtime resistance to eating that goes on between children and parents in middle class homes. Village children await meals with an eagerness not found in settings where a regular supply of abundant food is assured.

But, for those children, for whatever reason, who show little inclination to eat, we have seen that parents' tend to accept the child's lack of appetite as something that cannot be combatted, that must go away by itself. This is one area where village custom and nutrition advisers would come into clear disagreement.

Somewhat different is the behavior of those children who may not eat all of their food but will "lock it up" for later or for the next day. Children are aware of the irregularity of meals and quickly learn to predict when they will feel hungry. At least some children prepare for this by tucking away part of their food, still in its plate, for later use. In such cases, the food will generally not be reheated, another

pattern which will raise the eyebrows of physicians aware of the dangers from microorganisms.

When discussing the laissez-faire stance of parents toward children's rights to save food or not to eat at all, there is no question here of parental ignorance of the need for eating. Children who do not eat heartily are known to be sick, and the absence of eating is an occasion for parental concern. Here village parents differ little from middle class parents. Where the two groups differ is rather in the tendency for village parents not to force their children to eat.

11.6. Interhousehold Exchanges of Cooked Food

Reference has already been made to the manner in which even food-scarce households might become involved in regular food-gift relationships with other households, by virtue of which they will send out plates of cooked food from their own cooking pot. Families that do this are literally taking the food out of their own mouths and those of their children.

These food gifts are regularly reciprocated, and they function as "money in the bank", a security against the sudden food shortfalls that frequently afflict village households. The importance of these gifts in the local food economy is perhaps a partial determinant of the tendency of households to be very flexible in the timing of their meals, almost to the point where it is difficult for an analysis to assign "normal times" for the different meals. But, rather than being the "absence of a system," such meal-staggering behavior may in fact be part of an adaptive food-exchange process. What we know for certain is that for many families, these plates of cooked food sent from a neighbor's kitchen -- though sent over as a friendly pase-bouch (snack) -- may in fact function as the principal meal for that particular time of that day. The system is not explicitly formulated in the village. It is almost in "poor taste" even to mention the possibility of calculation in these manifestations of "spontaneous generosity." But there is no question that these plates of food that crisscross the community are playing some important function. They do not, of course, increase the total amount of food in the community.

But they certainly do spread out this food over time.

There is a certain etiquette to be followed in this as well. Older recipients of such plates will generally be given the vyann and the viv on separate plates. It is somewhat less courteous to send the food pre-mixed on the same plate. And oftentimes the food will be sent over covered with a cloth. The rule is to prevent people from "knowing your business" (pa kite moun konn afe-ou).

These food gifts can function only because they are in fact carefully circumscribed to a small number of trading partners. And these relationships are dyadic in character. Every household will have its own partners. And the partners are not groups per se, but rather a series of criss-crossing dyads.

11.7. Cooked Food Gifts to Neighboring Children

But village children have even more agressive tactics for increasing their daily food intake. When the food is being separated, the woman in charge will notice a number of children from other houses standing around, "playing" with her own children. Such children must also be given bits of food, though not with the same serious obligation or in the same quantities as visiting adults.

But even these visits from neighbors' children are carefully circumscribed by strong social and parental pressure. The general pattern is that

1) children from a small number of households will come to my kitchen;
2) my children also have a right to go to their kitchens. Households exchanging plates of cooked food will also "exchange" child visits as well (though there are no explicitly formulated rules to that effect). But, in addition, these child-visit exchanges can also be entered between houses not involved in a dyadic food-plate exchange. But the numbers are kept restricted.

Children are strongly socialized not to go to the kitchens of strangers or even of neighbors not on intimate terms with their parents. The parents fear two possible outcomes:

1. Their child could be a victim of sorcery or direct poisoning. There is a fear of poison in the village and many deaths are attributed to such maliciousness on the part of persons ostensibly proferring food gifts.

2. The constant visits of their child to another person's kitchen could be used as a theme for public mockery or criticism if the parents ever get into a disagreement over anything.

We suspect that it is this latter fear which is paramount, but the sorcery/poison danger also has an impressive salience in village social relations.

Thus there are two conflicting sets of norms balancing the child's behavior. The permissiveness with respect to showing up at certain kitchens, in combination with the "unintentional" but quasi-engineered meal staggering in the village, provides yet another food circulating mechanism protecting children against really serious food shortages in their own homes. Adults have to wait for the plate of cooked food to come from the neighbors. But, children, in addition to eating from these plates, can take matters into their own hands and meander over to the neighbor's kitchen at a nutritionally strategic moment. Such behavior is permitted up until about the teens. But a strong series of norms strictly limits this "scavenging" to the confines of carefully predetermined social dyads. These constraining rules keep the system from becoming unworkable. And the surprising prominence of beliefs in sorcery and poisoning should perhaps be partially viewed as cognitive mechanismisms ensuring the continuing viability of a nutritionally important food circulating system operating for the benefit of village children.

12. SOCIALIZATION FOR SCARCITY: CONCLUDING OVERVIEW OF VILLAGE CHILD REARING

This preceding insight opens the door to a realistic assessment of what is happening to child rearing practices in the village. Human populations are concerned about their children. The village-internal food circulating mechanisms described above constitute one very direct measure buffering the children against nutritional scarcity.

But human societies protect their children, not only by providing them with resources, but also by training them in the necessary survival skills to cope with their material and social environment. The material environment into which the children of Kinanbwa have been born is marked by increasing food scarcity.

But living with little food is not something that "happens" casually. Rather, it is the product of careful teaching on the part of adults and painful learning on the part of children.

It takes much effort on the part of adults to socialize children and equip them with the tools and knowledge essential to survive under conditions of food scarcity. Likewise, it takes much learning on the part of children to adjust to life under these circumstances. It requires, in effect, a socialization for scarcity.

12.1. Principles of Food Socialization

This socialization rests on three main pillars: sharing, moderation, and respect for cooked as well as raw food. Of all three, sharing is perhaps the most important, although the three function like the legs of a tripod and each is thus as essential as the other.

12.1.1. Sharing

Sharing is taught directly as well as acquired through modeling. It is not rare to see 15 children drink out of a bottle of kola, or to watch over a dozen children eating from a piece of corn.

Sharing is reinforced, and when children engage in this behavior, they are socially rewarded and people are in good terms with them (byen ave ou). Misanthropy, on the contrary, is publicly criticized, and those that do not share are reprimanded as "gro voras."

But if the value of sharing does not come across through this rather elusive, "social" form, its concrete dimensions soon become obvious. In a situation of scarcity, it is to one's own advantage to share with others whatever one has. If one were always assured of having something to eat, there would be no need to reccur to whatever a neighbor can provide. But this is definitely not the case in the village. The plate of food sent by a neighbor may at times constitute "the" afternoon meal for a family who otherwise would have to send their children to bed on empty stomachs. A child who shares one of his small sweet potatoes with a playmate, may find his gesture more than compensated when that very playmate gives him a portion of biswit at a later time, which may coincidentally be, a time, when it is badly needed to relieve hunger pangs. Thus, children learn the value of sharing very early in life and engage in much sharing themselves. Sometimes sharing is used as an expression of thankfulness. If a neighbor has let a child broil a sweet potato under their fire, the child automatically repays the service by sharing part of his possession. Likewise, if he has to borrow a knife to clean up the fishes, or a container to cook it, the favor is immediately repaid upon finishing the cooking.

Children are daily exposed to models of sharing. Almost every family in the village sends food gifts to a set of families on a daily basis. In turn, they receive plates of food from these other families. But this exchange of food has repercussions beyond the very act of sending the plates on a regular basis. It also constitutes a declaration of intimacy between families and forms a special bond between them. Children whose families exchange food gifts are actually allowed to stand at these kitchens and may also receive little bits and pieces of what is being cooked and distributed there. This is virtually impossible to do on a regular basis when there exist no such bonds. In fact parents are very strict to

let children run loose to stand at others' kitchens. It is heavily criticized when children stand at other people's kitchens. The family will be criticized for letting their children hungry, and this will be carefully noted and publicly exposed if ever there is a rift or argument.

There are, then, limits to sharing. It is restricted to people who are intimate with each other, in the case of main meals. And in the case of children's sharing with one another, it is restricted to the little "passe bouches" found throughout the day, and definitely not to major meals. Children do not share their assigned portions with others. It is neither encouraged nor expected. They may request for a larger portion, but it is usually an adult that will take from their plate to supplement a child's assigned portion, never another child.

Other restrictions involve the ritual domain. Concomittant with the popular view that one is obliged to offer food to whoever is at one's house at the time of eating, there are taboos against accepting foods from non-intimates and distant acquaintances. There is much fear of food poisoning in the community, and the victims are usually believed to be children who for some reason or another will be targets of an ill-intentioned person's attack.

Thus, from very early, children are taught not to take food from strangers and non-intimates, no matter how hungry they are. This acts almost like a levelling mechanism to protect the brotherly feeling among peoples living in an isolated community. People still have the feeling that neighborly sharing goes on between them, but at the same time the taboos against taking food from non-intimates actually prevents this being put to trial and failing. Proof that people do take food from one another is offered by the fact that they will partake of the foods offered at funerals, weddings, and other occasions, when people are traditionally expected to provide those items for large numbers of community people and more distant acquaintances.

There are then, very fine dimensions in sharing, and all will have to be gradually mastered by children as they grow up.

12.1.2. Moderation

The second major aspect in the socialization for scarcity is moderation. It is important for children to learn to conserve and to eat with moderation. It is essential for a family to distribute its weekly food allocation with sound planning. Most of the village families receive their supply of major foods two times per week when the mothers send them provisions from PAP, where they are engaged in business activities. These provisions usually come on Wednesdays, and on Sundays. Sunday meals are reported to be the largest of the week, as only two days will elapse between Sunday and Wednesday, when food is sent again. As the package of food reaches the home, its contents are carefully assessed by a responsible adult in the household, and from that time on, this person assesses how much and how many meals will be able to be had from the portion.

Children learn to eat scarcely. Those that don't are reprimanded as "vìsyé", and publicly criticized, whenever they insist on requesting what is thought to be unreasonably large portions. They are also reprimanded when they make unwise distribution of food resources, say, when they eat a piece of corn, or a sweet potato simultaneously with the main meal provided at the home. This awareness and need for moderation will later become so ingrained that it is not rare to see even very young children setting aside food from the major meal to be eaten at a later-more needed--time of the day. A popular adage perhaps summarizes effectively this basic principle: "Grangou sé mizè; vant plein sé traka."

12.1.3. Respect for Food

The third leg in the socialization for scarcity tripod is respect for cooked as well as raw food. Taking food that is meant for the family is sanctioned and children are reprimanded for it. When young, childr punishment is more leni nt, but when older, they may be later punished by being given smaller portions on account of their having violated the family pot. Much respect is also instilled for food that has been set apart for family members that did not find themselves present at the time of food distribution, a brother in a garden, or a sister that has gone on an errand. Heavy sanctions are likewise applied for children that

take from the food stored in dépos. It is well accepted and even encouraged for children to procure themselves little portions of foods throughout the day, some of which even entail their cooking them. But, there is a clear understanding that these foods will have to come from a source other than the family's provisions.

12.2. Investment of Time by Children in Food Related Activities

It is clear that meals provided by a family in the majority of cases fail to meet the food needs of children, whether we are referring to sheer quantities or to nutrients. This forces children to be constantly on the look for opportunities that will supplement the insufficient diet their families provide them with. In Fig.9, we can observe the proportion of time two preschool children (a boy of 5 and a girl of 3) allocate to food related activities. It takes up almost 25% of their day. Eliminating from consideration that portion of the day the children spend sleeping or resting--which in the cases observed reached a total of about 12 hours--and only taking into account the times of the day children spend awake, it then becomes evident that these children spend about 40% of their day in food related endeavors. This, of course, does not mean that they spend all of that time eating. They do not. But they spend it looking for things to eat, observing what is being cooked or will be cooked, or attending to what others are eating. Or they spend it involved in tasks indirectly related to food such as looking for fuelwood, fetching water, going to buy the missing ingredient. Furthermore, a large portion of this time is spent by scrounging around and developing strategies that allows them to supplement their diets. Children carefully assess the foods given to animals especially pigs, just in case they come across something they can utilize themselves; they may collect the bones of a recently consumed fish, may put them to dry, so they can later be roasted; they see potential in the little bird that by chance has entered their home, may kill it, take the feathers off, and cook it; they may make various trips to the garden to verify whether there are any small sweet potatoes left from the ones just recently harvested; or they may set aside food from their noonday meal, to be eaten later at a time when they feel hungrier, so that the waiting for the next meal can be made less painful.

FIGURE 9

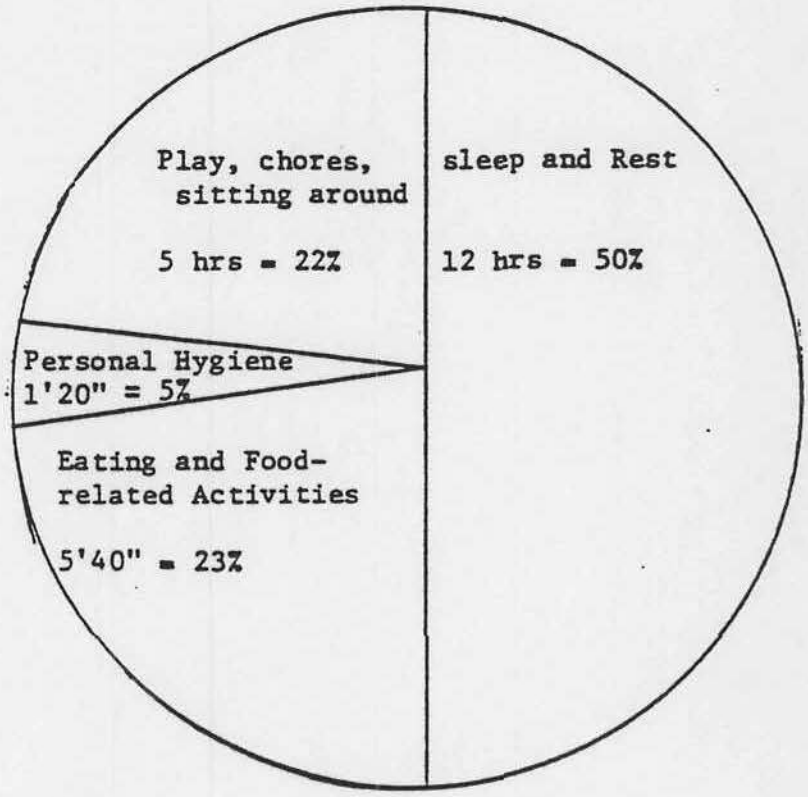


Fig. Distribution of the hours of the day of two preschool children (ages 3 and 5) observed over a 24 hour period.

It should be pointed out that the time each child allocates to these various activities varies in relation to age, family composition, sex, economic level of parents, and the time of the year. Because of the local agricultural cycle there are times of the year more abundant in food than others. A child's age is a very important factor. Up to age 5, children are not assigned too many tasks, either domestic or agricultural. Furthermore, until approximately that age, children are thought to be very vulnerable to the effects of hunger. Adults are very aware of the fact that children cannot withstand as much as adults on an empty stomach (ti moun yo pa ka kenbe), and they are painfully aware of their inability to provide as much as the children need or with the frequency that they need it. Children are accordingly allowed to roam around in search for different edibles, and their efforts are facilitated whenever they are in search of a lighted fire to their sweet potato or boil up the few ounces of milk obtained from the family goat. In fact, some foods such as certa parts of fish are recognized by all as child's foods and a 9 or 10 year old cleaning a fish will set aside those parts so that a four or five year old in her family will prepare with it a little sauce. In older children, however, the time allocated to these various activities gradually diminishes, while time allocated to various domestic, agricultural, or educational tasks, augments.

12.3. Pressuring of Adults

But it is obvious that children could not survive only on what their ingenuity and creativity allows them to procure. What other mechanisms do they utilize? What other strategies do they use to supplement their diet? One of the most commonly used strategies is to pressure adults. Crying is often resorted to. A reflex mechanism in the infant and toddler, crying is later well manipulated by the older children. Pre-schoolers cry when they are hungry, when they see food being prepared, or when they see others eating. They also cry when the portion allocated to them has been small, or when after finishing their meal they are still hungry. This automatically puts pressure on adults, who in some way respond to the complaint; either they offer something of what is being prepared, or they take food out of their own plates, depending on the case. They may also send to buy something additional for the child, a biswit,

a bonbon. But it also happens that next time food is separated, this child will be given first or a larger portion. Older children who have mastered language already, usually verbalize their disapproval at the same time that they make their needs known more directly. Some declare with disgust that they could eat three times the assigned portion; others comment, as did a five year old boy, "and this little bit, what good will it do me?" Still others react by rejecting the plate or piece offered them, and that they consider too small, although it should be noted that hardly any child ever throws away something that could not be later eaten, or fails to take back the rejected plate of food.

Parents as well as other adults are extremely sensitive to these complaints. If a father perceives food is going to take too long, they may add wood to the fire, may search for a piece of sugar cane out in the garden, or may send for something that can placate the appetites. children employ strategies that will secure them more and/or additional foods. But, as will be discussed in the final section, these strategies seem to have more success within certain domestic contexts than within others.

12.4. Differential Nutritional Outcomes: Successes and Failures

The preceding sections have attempted to describe the overall deterioration of the village food-supply circuits, to compare outsiders' and villagers' understandings of these causes, and to indicate some of the responses and adaptations which have evolved under the impact of this increasing stress. We have for presentational purposes talked of the "village" as an undifferentiated social unit that is undergoing certain negative, global changes. But nutrition intervention programs cannot deal effectively with entire "populations". The more common strategy is to identify those more vulnerable subgroups to whom special

preventive and therapeutic attention should be directed.

Our preceding discussion leads to the following series of propositions:

1. All households in the village are experiencing economic pressure and a tightening of traditional food-flow circuits.
2. Some households will be in a better position than others to prevent these pressures from being translated into substandard nutritional status on the part of their children.
3. The child will be better protected against these pressures to the degree that:
   a. the overall economic status of the household is higher; and
   b. the child is under the protection of both of its biological parents.

With respect to point 3, it is clear that houses with a stronger economic base will be able to prevent overall economic pressures from translating themselves into damagingly reduced food intake on the part of their children. But, the information presented above also strongly suggests that the nutritional outcome of the child is contingent on support from two economically active parents. And it is clear to us that the child's chances are substantially better to the degree that both male and female adult caretaker are the biological parents of the child. Where one of the adults is either missing or replaced by a surrogate (such as when the woman takes a new husband), the total adult emotional concern and resulting behavioral investment will be substantially lower than if the child were with both biological parents. Stated somewhat differently, the determinants of nutritional status are to be found not only in variables commonly lumped under the rubric "economy", but under variables that fall into the domain of "domestic organization" as well.

Table 4 is based on upper arm circumference measurements that were carried out on 59 village children between the ages of 2 and 4. By the age of 2, virtually all children are weaned and are consequently subject to the post-weaning nutritional stress that has been found in many cultural settings. The objective was to see if in fact some subgroups in the village are better at resisting nutritional stress than others. We have broken these children down into four subgroups:

1. Both parents present, higher economic status
2. Both parents present, lower economic status
3. One or both parents missing, higher economic status.
4. One or both parents missing, lower economic status.

Economic status was here measured by housetype, which has been found to be a sensitive economic surrogate variable in rural Haiti. Parental presence or absence was determined on a detailed kinship analysis of the household composition of all village houses with the assistance of village informants.

TABLE 4

ARM-CIRCUMFERENCE AS A FUNCTION OF ECONOMIC STATUS AND PARENTAL PRESENCE OR ABSENCE

(N = 59)

	Mean Arm Circumference	Standard Deviation
1. Both parents present, higher ec. status	16.2	1.1
2. Both parents present, lower ec. status	14.9	1.4
3. One or more parents missing, higher economic status	14.7	.8
4. One or more parents missing, lower economic status	13.9	1.7
Mean of all 59 children	14.7	1.4

F = .45 Sig. = .01

Despite the relatively small N, a one-tailed test of significance suggests that in fact economic and domestic organizational variables are highly significant determinants of nutritional outcomes in children. Further breakdowns indicated that *economic status and parental presence did not interact significantly* with each other or with the age of the child. In this particular sample, children of all ages between 2 and 5 and of both economic groups were as likely to be with both parents.

The most promising formulation of the matter is perhaps one which discusses the power of these variables to generate nutritional success. And the data indicate that it is a combination of both factors which endows children with the highest likelihood of better nutritional status. The most favored nutritional group are those economically better-off children living under the protection of both of their biological parents. Remove either of these factors and the nutritional status of the child plunges. Table 4 suggests that parental presence is even slightly more important than economic status as a predictor of nutritional outcome; the nutritional implication of living in a one-parent household appears to be more serious than that of living in an economically more marginal household. But finally those children having neither economic nor domestic protection as defined here turn out to be the nutritionally most disadvantaged.

These data, based on such a small village sample, can only be suggestive. But they do suggest strongly that nutritional status can be sufficiently linked to economic and domestic variables so as to render less promising any attempt to lay the blame at the door of the rural Haitian belief or value system. The quite satisfactory arm-circumference of the highest group of children in Table 4 leads us to suspect that, given proper economic and domestic protection, rural Haitian food knowledge is perfectly adequate to produce well-nourished children.

Stated differently, our research suggests the need for a careful reformulation of the role of beliefs, values, and other dimensions of "culture" in malnutrition. Standard formulations may state that children are malnourished because of the rural Haitian belief system. Under this analysis, the major solution would then be, in one way or another, to "educate the ignorant" to assist them to make better use of their resources. But our research suggests that it is more accurate to state that rural Haitian children are malnourished in spite of an exceptionally detailed and accurate knowledge of appropriate feeding techniques on the part of

parents. It is not because of the level of parental food knowledge that rural children are undernourished. It is in spite of that knowledge. It is not because of parental value systems that children go hungry. It is rather in spite of the many pressures that village tradition has devised to motivate parents to feed their children abundantly and well.

12.5. General Program Implications.

The above discussion may appear to point to fatalistic programmatic conclusions. It states in effect that nutritional stress is generated by variables over which nutrition programs have no control. We admit that this is a dilemma, first and foremost for those human beings trapped in this situation, but also for nutrition planners who would like to take some sort of remedial action. But the solution for planners is not to arbitrarily redefine the causes of malnutrition in such a way as to make relevant the items in their own "bag of tricks." Those who have chosen to work in this field are well aware that the basic cause of infant malnutrition is to be found in patterns of inadequate infant food intake. But it is in searching for the causes of this latter variable that much program discussion, in our opinion, stumbles into a questionable overemphasis on "lack of knowledge on the part of parents."

Confusion is created by those perhaps well-meaning analyses which point out that villagers are not making maximum use of their nutritional resources. "Aren't there local leaves which could be used to supplement the cooking pot? Couldn't people plant sunflower seeds in back of their houses?" Such questions miss a very important anthropological point: few if any human cultures are characterized by absolutely maximal use of every possible food resource on the part of their people. It is true that the rural Haitian could be taught many things about nutrition. But the same is true of the urban American. And if the former is undernourished whereas the latter is obese, the difference is generated, not by differences in their cognition, but by differences in their material environments. Under crisis conditions, human populations are forced to devise extraordinary food utilization measures. But the middle-class bearers of flip-charts frequently arrive in the village with presuppositions concerning the inadequacy of the ordinary food knowledge of the villagers, a stereotype for which our own research provides little support.

Is there then any room for program action, short of a total overhauling of the entire village economy? Experiences in various parts of Haiti, including mothercraft centers and more recent (and more cost effective) "demonstration

foyers", indicate that it is possible to reduce childhood malnutrition. The centers which up till now have been the major element in nutrition intervention in Haiti are predicated on the availability of food supplements (including, of course, donations of locally popular foods to the centers) and on the willingness of mothers to attend the center during the stipulated period. These are very specialized interventions and, at least in the case of the mothercraft centers, rather expensive interventions in terms of the number of children reached per dollar invested.

In conversations with several planners in Haiti we have become aware of a desire on their part to devise nutrition interventions which are not predicated on food gifts and/or cooking lessons, not as a substitute, but at least as an exploratory supplement, to the center-based models mentioned above. Our research leads us to propose the following general guidelines as being likely to assist in devising on-target interventions.

The first step will come in the development of an anthropologically sound problem statement. Here we have repeatedly found ourselves commenting on wha we perceive to be a widespread "ignorance model" of rural malnutrition. We would propose the following alternative problem statement:

1. Despite detailed nutrition knowledge and a high level of concern and social value placed by rural Haitian culture on the proper feeding of children, the economic situation in rural Haiti has deteriorated to a point where traditional food-supply circuits have been jeopardized and people find themselves unable to feed their children in the manner which they were fed as children and which local norms still regard as proper.

2. The ultimate solution must come in terms of improvements of the rural economy. Households enjoying reasonable levels of economic well-being and domestic integrity (in terms of a coresident conjugal couple) have been found to produce well-nourished children.

3. Other interventions that are "non-economic" or "non-agricultural" in character should be recognized as "emergency" in character. That is, they should be viewed as a response, not to some inherent defect in local cultural beliefs and practices with respect to feeding children, but to the unusually pressing economic conditions under which large sectors of the rural population now find itself.

4. A promising entry point can be found by observing that, even within the more disadvantaged sectors of the rural population, some households are more effective at producing well-nourished children. The research task is to identify the conditions producing this more effective feeding, with a view to assessing their replicability through some sort of program intervention.

5. Observations and quantitative data suggest that there is some "slippage" between norms and behavior. Parents are aware both of the traditional norms with respect to feeding children and the deteriorating economic conditions. During much of the year parents are giving their children less food than they themselves would wish to give them. These hunger-producing deviations are justified on the basis of the obvious material scarcity which many households suffer. But some parents "slip" more than others. Confronted with pressing circumstances, some push harder than others to keep the deviations to a minimum and to prevent their children from going hungry.

6. The quantitative data on the impact of parental presence or absence, as well as ethnographic observation of the behavior of children, lead us to suspect that a critical variable in this regard is the effectiveness with which children can exert filial pressure on parents who themselves may be under economic pressure. If the child is in a position to exert pressure, he will be fed slightly more food with slightly greater frequency. A child not able to exert pressure will get slightly less food. That is, under the types of conditions of scarcity such as those characterizing much of rural Haiti, a food-related tension arises between parents and children.

7. The conditions for exerting successful pressure by a child are only partially contingent on the personality of the child. The major determinant appears to be the ability of the child to capitalize on social pressure. If the child has both biological parents present, both will be under pressure to feed the child. They will be affected (and shamed) by public crying by the child in a way that step-parents or older siblings will not be shamed. The resulting increments in food to the child are enough to exert a measureable positive effect on the nutritional status of the child.

8. These parent-child dynamics -- the intrafamilial power-play that is being discussed here -- will find some manifestations in most human cultures. But it takes on particularly strong nutritional relevance only in those settings, such as contemporary rural Haiti, where food is scarce during much of the year. Parental feeding behavior is motivated by both affection and pressure. In conditions of scarcity, the child's ability to create the latter provides nutritionally critical buttressing of his ability to evoke the former.

9. In short, we suspect that the critical difference between economically similar households whose children turn out nutritionally unequal may be found less in terms of some supposedly greater "knowledge" on the part of one set of parents than in terms of the ability of the children of that household to capitalize on existing social pressure mechanisms. Other factors will come into play in individual cases. But we are impressed at the potential importance of the parent-child pressure balance in terms of determin ing the intrafamilial allocation of scarce food resources.

10. If this is the case, then nutrition programs should de-emphasize the cognitive, "informational" element in their interventions as being potentially off-target and give greater emphasis to enhancing the "bargaining position" of children. "Education" would then emphasize, not the different categories of food (of which the rural Haitians are already skillfully aware), but rather the status of malnutrition as an illness, the "rights" of children to as much food as their parents can possibly give, and the patterns (also

well known to villagers) by which some adults take better care of their children than other adults, even within the same economic level. That is, there is still room for "messages." It is their content that would be adjusted if the viewpoint being espoused here is correct.

The implications of these observations for planned nutrition interventions can be briefly specified. The report has consistently emphasized the dual problem of the basic food supply on the one hand, and the dynamics governing the subsequent allocation of food on the other. Nutrition intervention programs can focus on both of these dimensions.

A program attempting to encourage kitchen-gardens, whose produce will be directly incorporated into the family cooking pot, is one avenue that has been discussed. However the objective in such efforts should not be to try to turn a Haitian peasant family into a subsistence unit producing all or most of its food. We have seen that this is unlikely given the traditionally strong cash-cropping orientation prevailing in rural Haiti. But programs can make a serious effort to ascertain what are the inputs necessary to bring about a measureable improvement in the family cooking pot via new home-grown foods. The efforts with respect to kitchen gardens appear to have been sporadic and poorly documented up to now. One component of a nutrition intervention program could entail the devising of several alternative models to try to exert a measurable impact, within a year, on family cooking pots, and a monitoring system to evaluate what approaches, if any, work -- and why.

In line with the thrust of this report, we are convinced that the key element is not "new knowledge," but one of motivation and organization of incentives in such a way that these intensified "kitchen-garden" behaviors become successfully incorporated into communities (such as Kinanbwa) where they are virtually absent, and intensified in communities where they already form part of local tradition. One strategy might be to place these activities under the supervision of children themselves. Children could be given the facilities to have their own food gardens, a practice that would be eminently compatible with their current practices of cooking their own meals with bits of food that they find in the day. Since custom encourages this childhood independence in the realm of food preparation, it would be but a slight step to encourage it in the realm of supplemental food growing as well. Small bits of land could be allocated by cooperative parents, though the poorer families -- those most in need of nutritional supplements -- might be unable to provide such garden space. If there are blocs of unusued land available for loan or rental to a project, these could be used. But whether the protagonists are adults or children, kitchen gardening should be done on an individual, rather than a collective, basis. Ordinary gardens

are grown on an individual basis, and it would be a programmatically unwise decision to saddle a kitchen-garden project component with a collective planting and harvesting scheme which is alien to the traditional ownership arrangements governing agriculture in Haiti. The project could then fail because of extraneous reasons.

With respect to the second major dimension, that of recognizing the role of "differential pressure" as an important determinant of the amount of food that will reach the plate of a child in a poorer household, a nutrition intervention might set for itself the innovative objective of an across-the-board strengthening of the bargaining position of children with respect to the timing and quantities of food that they receive. This could be done through:

1. Messages directed at adults, especially via radio;
2. Messages directed at children, especially in the context of schooling;
3. Surveillance procedures in which malnutrition will be accorded the same degree of public attention currently given to other childhood illnesses.

Each of these strategies will be briefly discussed. They all stop short of the actual interventions, predicated on available food supplements, that have characterized nutrition programs up till now and may thus constitute important alternative models for those contexts in which, for one reason or another, nutritional rehabilitation via donated supplements is not available.

1. Messages directed at adults.

The guiding assumption probably of most nutrition education programs is that the messages should be "beamed" at those in control of the family food supply, namely, adults. Though we shall argue that messages could also be aimed at the children themselves, there is no reason for downplaying the potential importance of messages to mothers and fathers. The questions are: a) what is the purpose of such messages; b) what should their content be; c) in what context should they be delivered?

In terms of their purpose, they should be construed, not so much as teachers of new concepts, as reminders of old concepts. The guiding assumptions should be drawn, we believe, from a problem definition such as that found above (see pp. 201-203), reminding people of the nutritionally excellent food categorization scheme which their traditions have handed down, and of the special emphasis which custom has always given to the abundant feeding of lactating women and young children. In theory, there may be cultures in which there are no valid traditions that could be publicly strengthened. Haiti is not one of those cultures. Without the least bit of pretense, nutrition educators need only take the time to explore

traditional food patterns, as we have attempted to do in this report, in order to generate lists of concepts which should be strengthened and encouraged. Furthermore, however, messages should also make explicit reference to the rising costs of food and to the reality of widespread stress and outright hunger during certain times of the year. That is, the messages should incorporate, in colloquial, vivid Creole, the same perceptions and complaints that are heard at village level about the increasing stress that is coming over the rural areas. The credibility of the message will be enhanced to the degree that the listener perceives that the sender of the message is on a realistic "wavelength." But finally the messages should stress that, despite the increasing economic pressure, children that have been brought into the world have a right to be fed all the food that they need when they need it. This again is an emphasis that is a deep part of the value system of the villagers among whom we lived. It is not an alien message imposed from without, but rather a living, keenly-felt message that is part of the active traditions of contemporary village life. The messages would merely give public, institutional support, in the wording used by villagers themselves, to feeding values that have been handed down for generations.

In short, we are proposing a structure of messages to adults that:

a.) identifies and validates traditional food mixing and food timing concepts;

b.) explicitly identifies the crisis nature of much of current rural life during parts of the year; and

c.) reminds parents of the rights which their children have to food, despite the economic pressures confronting parents.

The messages should be constructed in colloquial Creole, not in the alien Gallicized Creole that characterizes at least some broadcasts.

What impact can be expected from such messages? We envision that the effect will be less that of imparting new behaviors of any sort than that of providing nudges toward slightly more faithful fulfillment of the traditional village norms. By rationalizing, publicizing, and giving institutional support to traditional norms, it will endow these norms with a saliency that makes them less amenable to "short-cutting" under stress of economic hardship. The radio, rather than a specially designed "nutrition meeting", seems a more natural setting in which to impart such messages. Such messages would also fit in very naturally where there are already ongoing mothercraft centers or demonstration foyers.

2. Messages directed at children.

We have become clearly aware that the nutritional drama in Kinanbwa is dependent on initiatives from two sets of protagonists, not merely one. Parents have the prime responsibility of providing food to the family cooking pot. But children quickly learn a variety of pressure-enhancing maneuvers to increase the frequency with which food actually reaches them. We have already seen the manner in which differing domestic arrangements increase or reduce the leverage which a child has.

We would like to suggest that, even giving complete, accurate recognition to the economic stresses that confront many couples, the nutrition program should assume the role of "child-advocate." That is, recognition should also be given to the ease with which children can be made to bear the brunt of the scarcity into which they were born.

Just as the traditional values of adults can be supported and made salient by the messages discussed above, so also we believe that the traditional patterns by which children are taught to ensure that the quantities they receive are adequate, and that they receive additional food in the course of a day, can also be enhanced and legitimized by messages directed at children. In industrial societies mass media campaigns motivate children to pressure their parents in ways that results in the expenditure of millions of dollars on expensive playthings. A more benevolent adaptation of this basic strategy could be adapted to the rural Haitian situation, in the form of messages which remind children that they should eat several times a day, that they should continue sharing food with younger siblings (as they are taught to do traditionally), and that they should do everything possible to ensure that their very young siblings eat regularly. They should even be encouraged to remind parents of these nutritional needs of children. It is possible to exaggerate this approach. For example, if children were taught, when hungry, to make their hunger known to neighbors as well, the result would be shame for the child's parents. But beatings, rather than additional food, might be the result. The construction of messages to children is a very delicate matter which should be worked out with sensitive Haitian professionals familiar with rural life. But the basic principle is that of publicly legitimizing and systematizing the "pressure tactics" which the children have learned traditionally.

Is this not cruelty to parents who may be economically strapped? It would be romanticizing not to recognize that there are parents who subject their children to neglect in Haitian villages, just as there are in other cultural settings. If, as a result of "importuning" learned in nutritional messages, children started

being systematically more demanding of food, it is unlikely that the matter would get out of hand in any practical sense. The parents are much more likely to protect themselves from importuning by their children, than are children able to protect themselves from unnecessary neglect on the part of parents.

The tragedy of a situation such as that found in rural Haiti is that a conflict of interest may arise between parents and children with respect to the very food supply. The most important programs are those which affect the supply of food. But in the interim, nutrition programs can also play the role of child advocates, helping to enhance the likelihood that the children -- including those not necessarily living with both biological parents -- get their share of the cooking pot, whatever its contents.

3. Nutritional surveillance.

The rights of children to food will be made even more salient if the matter of undernourishment is brought under community scrutiny. Programs of nutritional surveillance can play an important role in this regard. The objective would be to institute, on a pilot basis, surveillance procedures whose purpose would be one of detecting undernourishment and calling some sort of attention to the "illness" status of such a child. There is already a great deal of community pressure on parents to take their children to healers (either traditional or modern) in the case of ordinary illnesses. The plight of wasted children, however, is not construed in the same framework. The objective of surveillance would be that of attempting to have an undernourished child defined as "malad." Both sickness as a biosocial state and parental obligation with regard to the healing of sickness are well accepted in the village. What is here being suggested is the adoption of measures to attempt to have undernourishment defined in this context.

It would be unthinkable for a parent to have a sick child and not to fe kek demach ("take steps to do something about it"). The criticism of nosy neighbors ensures the regular undertaking of such demach. It would be an important step forward, from the point of view of children's nutritional rights, if malnutrition were thus identified and defined as a condition for which parents were obliged to make some demach. Surveillance procedures would be one strategy which could be used as an exploratory attempt to bring about this redefinition in at least some communities.

We make these recommendations after great hesitation and recognition of their possible misinterpretation or misuse. Our immersion in the daily rounds of village life has led us away from explanations of malnutrition which posit defects in village beliefs, understandings, or concerns. But in "absolving" rural Haitian belief from false charges of being the culprit in malnutrition, we have searched for causes in the environment itself. To those readers not involved in current arguments about the "role of beliefs" in malnutrition, and even moderately familiar with the poverty found in many parts of rural Haiti, assertions as to the economic roots of malnutrition may seem like stating the obvious. But the "educational" focus of much current nutrition intervention thinking has produced a style of analysis in which educators search intently for "gaps" in that domain with which they are most familiar, the domain of "knowledge" and "beliefs". The result is that the nutritional problem itself, either implicitly or explicitly, comes to be defined in terms of these "manageable" variables, rather than in terms of the jolting material poverty which strikes the eye of the "naive" observer and which we know is the ultimate root of malnutrition in Haiti.

Within this material poverty, children must maneuver and take an active part in the acquisition of their food. We have documented the maneuvers that have evolved among the children of the village that we know best. But some children maneuver more successfully than others, as some parents, even in their poverty, make slightly more energetic efforts to ensure that sufficient food reaches the mouths of their offspring. Our program recommendations have tended to focus, and capitalize, on that dynamic. We know that much malnutrition could be avoided with minor adjustments in the food allocation behavior of many households, adjustments which would not substantially reduce food intake on the part of adults.

But to interpret such recommendations as laying the blame for malnutrition on "neglectful Haitian parents" would be to misinterpret and distort the entire contents of this lengthy, detailed report. We repeat: the villagers among whom we lived not only knew about "good food" in much greater detail than either of the investigators; they also manifested a level of concern for their children, buttressed by explicit village tradition, that is every bit as great as we have observed in any other traditional or modern setting.

It is the deterioration of the Haitian economy, the undermining of the viability of life in rural Haiti, which has triggered off, and enhanced the importance of, nutritional "compromises" between parents and children. The first object of development should be the elimination of the conditions which

make such compromises and maneuvers necessary to begin with. The role of nutrition intervention should be seen as a supplement -- a very important one -- in the battle against deeper problems whose ultimate solution lies elsewhere.