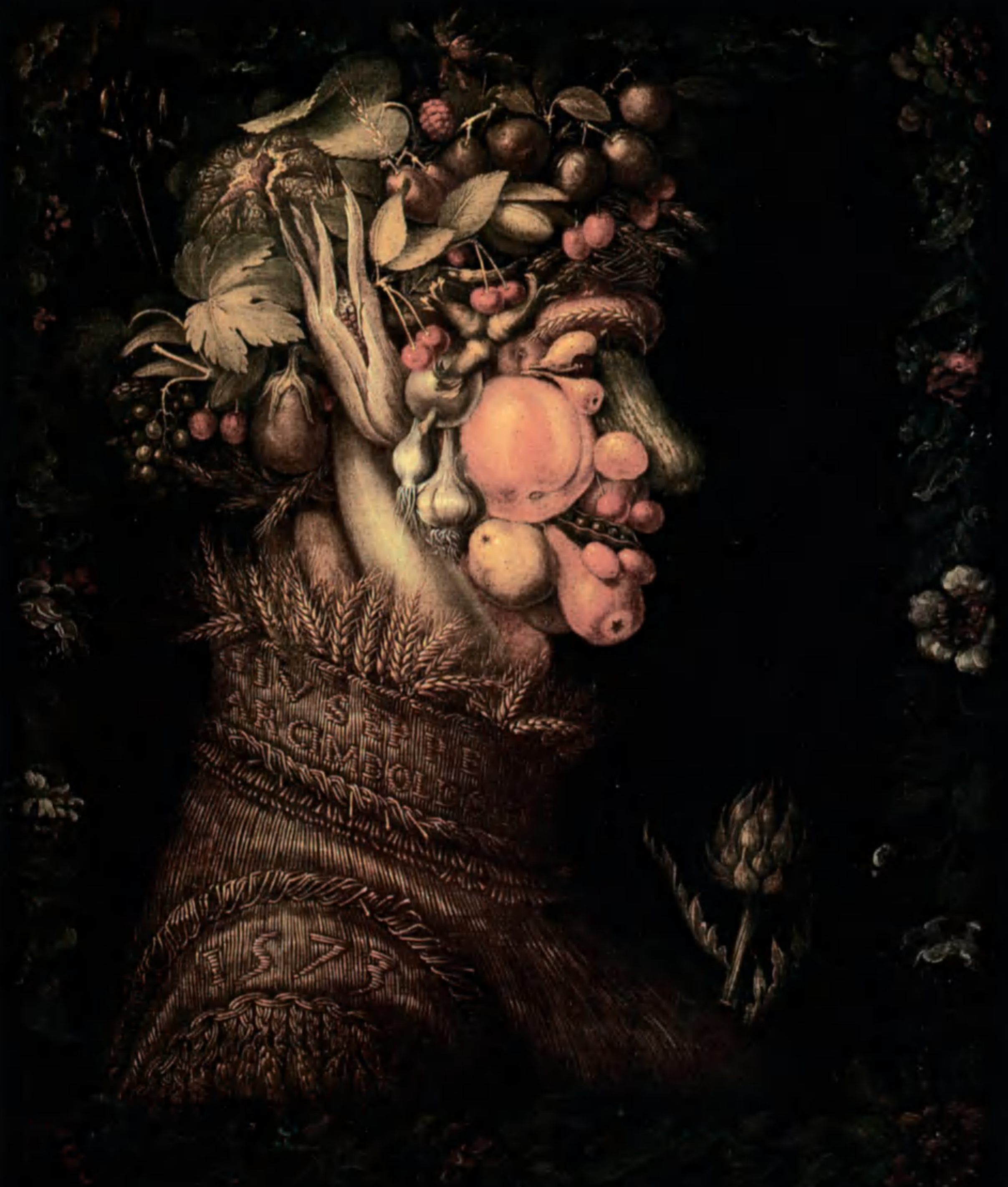
UNESCO

The Courier

MAY 1987 - 9 French francs



The spice of life

Food and culture

A time to live...

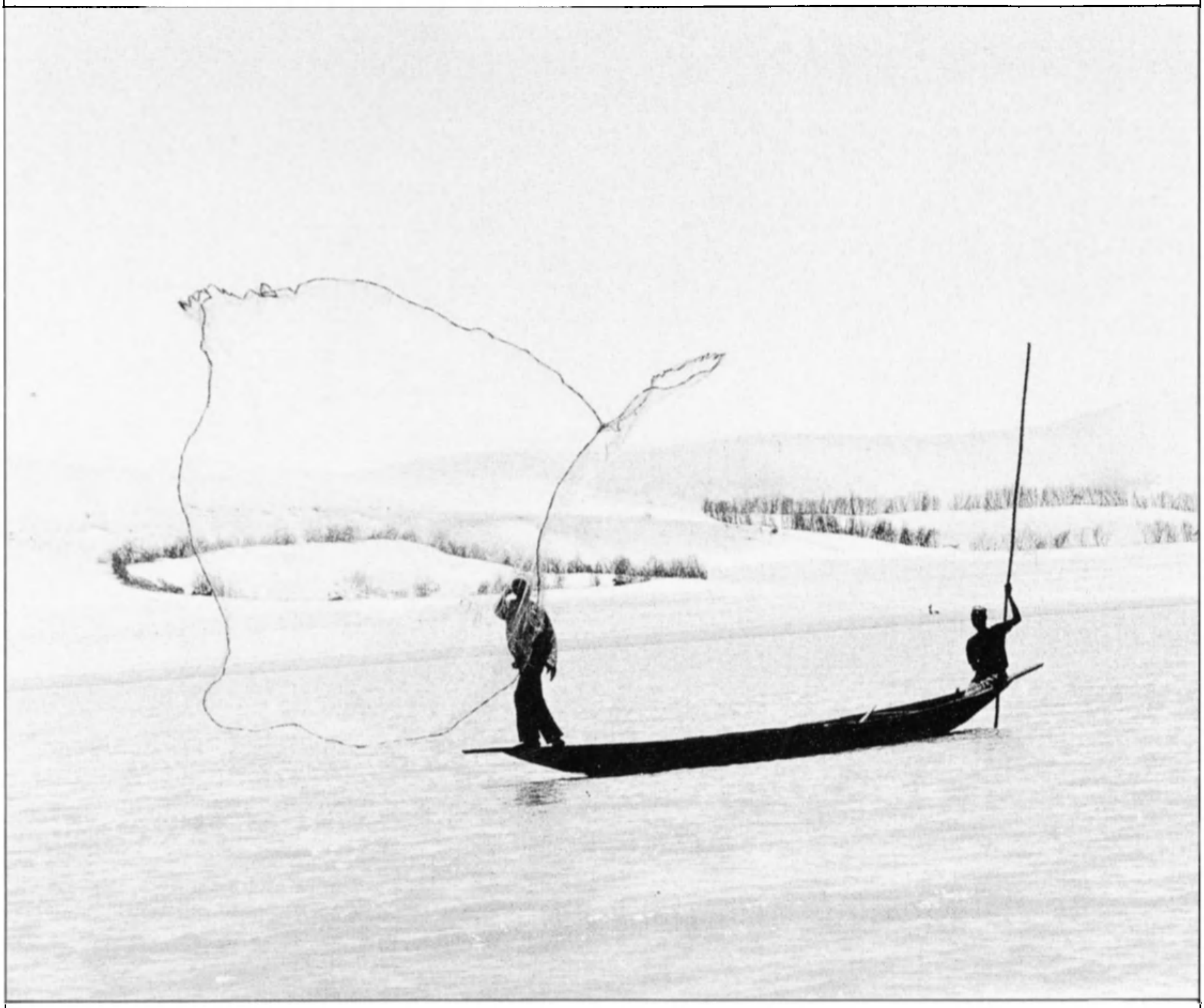


Photo Sebastião Salgado © Magnum, Paris

Water and life

Mali is the largest of the French-speaking States of West Africa. Through this land-locked country, half of which is desert, flow two major rivers, the upper Sénégal and the Niger, whose middle course brings water and life to parts of the drought-stricken Sahel. The population (some 7.5 million in 1984) is essentially rural. Farming, using irrigation water from the two rivers, is the country's main source of wealth, although livestock-raising and fishing, with outlets in both the domestic and the export market, also play an important role in the economy. Fishing on the Niger, in particular, gives rise to a significant export trade in dried and smoked fish. Above, traditional net fishing on the Niger.

Editorial

"Tell me what you eat and I will tell you what you are." The maxim penned a century and a half ago by the French lawyer Anthelme Brillat-Savarin in his celebrated work on gastronomy, *The Physiology of Taste* has not gone unheard by modern anthropologists. The foods people select from the range available to them in their environment, the ways in which they prepare those foods for consumption, the significance they attach to the act of eating and the code of manners which govern it can shed remarkable light on many other aspects of the societies in which they live. Food and drink are so profoundly important for humanity that they are often linked with matters that have nothing to do with nutrition. To take but one example described in this issue, for some groups of Mexican farmers, maize is not only a staple of their diet but an object of veneration, the very heart of their culture, myths and religious practices. If food satisfies an essential human need, it is also an essential ingredient of cultural identity.

This issue of the *Unesco Courier* examines some of the connections between the eating habits of peoples in different parts of the world and other aspects of their behaviour. These connections, as our contributors point out, are many and varied. Eating together is a way of initiating and maintaining human relations. Meals convey social messages. Through eating together as a family cultural values are transmitted from generation to generation. Symbolic meanings are attached to food and drink by the major world religions, and eating is associated with initiation and burial rites and other ceremonies. Food is used as a form of currency. The consumption of rare and expensive foods is a mark of status.

This issue is thus intended as an introduction to the "anthropology of eating" rather than an examination of the problem of world hunger. If the question of food aid to the victims of natural catastrophes and other disasters is evoked, it is in terms of the impact of such aid on the nutrition habits of those who receive it.

Finally, the importance of food and eating is reflected in proverbs, folk wisdom and metaphor in many languages. We hope that the following pages will whet our readers' appetite for knowledge about mankind's "consuming passions", provide them with some food for thought, and leave them hungry for more.

Cover: *Summer,* fantastic head composed of flowers, fruit, vegetables and other crops, by the Italian painter Giuseppe Arcimboldo (c.1527-1593). Photo © Réunion des Musées Nationaux, Paris. Louvre Museum

Editor-in-chief: Edouard Glissant

May 1987

40th year

The anthropology of eating

4 **Food, culture and society** by Igor de Garine

The spice of life

8 **A grain revolution**
The impact of imported rice on millet-based African civilizations by Thianar Ndoye and Malick M'Baye

10 **Of maize and meat**
Culinary traditions and cultural identity in Mexico and Argentina by Perla Petrich

13 **Beneficial beans?**

14 **Reflections on the potato** by Nick M. Joaquin

17 **The ones that get away**
A coastal community that turns its back on fish by John Durnin

Eating together

18 **(Table) manners makyth man**
The emergence of homo sapiens as a convivial animal
by Naomichi Ishige

22 **The meal is the message**
The language of Brazilian cuisine by Roberto DaMatta

24 **China's health food tradition**
by Li Ruifen

Too much and too little

28 **Paradise lost**
Bulimia, anorexia and drug addiction by Piero Camporesi

32 **Food aid and food habits** by Jeremy Shoham and Bruno Stainier

2 **A time to live...**
MALI: Water and life

Advertising in the *Courier*

We wish to inform readers that as of June 1987 the *Courier* will be introducing advertising pages into its English, French and Spanish editions.

Advertising matter will be entirely separate from the editorial content and *will be restricted to fields in which Unesco takes an active interest,* such as educational publications, communications technologies, and the work of international organizations.

Advertising revenue will be used primarily to assist the non-Headquarters editions of the magazine.

We hope that readers will understand the nature and purpose of this project, which is a new departure for the *Courier* but is already the practice in certain other publications of the United Nations system.

The Courier
A window open on the world

Published monthly in 33 languages
by Unesco
The United Nations Educational,
Scientific and Cultural Organization
7, Place de Fontenoy, 75700 Paris.

English
French
Spanish
Russian
German
Arabic
Japanese
Italian
Hindi
Tamil
Hebrew
Persian
Dutch
Portuguese
Turkish
Urdu
Catalan
Malaysian
Korean
Swahili
Croato-Serb
Macedonian
Serbo-Croat
Slovene
Chinese
Bulgarian
Greek
Sinhala
Finnish
Swedish
Basque
Thai
Vietnamese

A selection in Braille is published quarterly in English, French, Spanish and Korean

ISSN 0041-5278
N° 5-1987-CPD-87-1-445 A

Food, culture and society

UNLESS they satisfy their needs for food, living creatures cannot survive. Human beings, however, appear to differ slightly from other animals in the solutions they have devised for this problem. Thanks to our physiological omnivorousness and our nature as social animals with a culture, a sense of symbolism and the ability to create a favourable micro-environment for ourselves, we can live equally well in the polar regions and in the equatorial rain forests. We may wonder, however, whether our efforts to adapt to the symbolic standards dictated by our culture are always in keeping with our optimum biological adaptation, either in the short term as individuals or in the long term as members of the human species.

Food is one field in which biology and culture are to some extent out of step. Human beings are equipped with internal regulatory food-consumption mechanisms whose purpose is to maintain certain balanced states in the organism; but these mechanisms are often faulty.

In industrialized societies evidence of this phenomenon can be seen in the pathological consequences of an overabundant food supply. Although their lifestyle is tending to reduce their energy output, people eagerly consume animal proteins, fatty and sugary food, stimulants and intoxicants whose nutritional value is, to say the least, questionable.

Is this a recent development, specific to urban societies which are located in a man-made environment, alienated from natural rhythms, and have not had time to adapt to new types of stress? This is by no means certain. Where food is concerned we must beware of ecological providentialism and of the belief that in traditional societies people naturally consume the diet that is physiologically best for them.

As the American anthropologist Margaret Mead once pointed out, human societies make a selection from the potential range of foodstuffs which are provided by their environment and brought within their reach by the technical resources at their disposal. The survival of a human group obviously depends on a diet which satisfies its members' nutritional needs. However, the level of satisfaction of those needs, the definition of which is a matter of controversy, varies from one society to another both qualitatively and quantitatively.

It often happens that some available foodstuffs are either neglected or used to meet other needs. The example most often given is that of the Hindu populations of India, whose respect for animal life leads them, for religious and philosophical reasons, to practise more or less strict forms of vegetarianism. Pastoral peoples, who might be thought to eat large quantities of milk and meat, usually consume these foodstuffs sparingly. Cattle are used primarily to provide other forms of satisfaction, as a bride-price, for example.

Many African population groups live in climatic zones where cereal farming is possible, but they choose instead to grow tubers, especially cassava, which is less nutritious. People eat according to patterns prescribed by the societies to which they belong. Their culture determines the range of what is edible and imposes the dietary taboos which, when necessary, serve to distinguish their society from others.

The discrepancy between what is recommended by the culture and what is nutritionally indispensable is most strikingly apparent in the nourishment given to children after weaning. They are nearly always given what is thought to be the best possible nourishment, and are lucky if this provides them with the ration of protein they need to guarantee their growth and resistance to infection. In most cases, children are looked upon as small adults, and they receive a ration appropriate to their size but not to their specific needs for protein.

Populations afflicted with malnutrition for reasons which may include dysfunctional cultural choices, also undoubtedly pay a price in terms of death-rates (especially child mortality), physical development and longevity. The influence of malnutrition is, however, often difficult to disentangle from that of the major endemic diseases. In traditional societies there is a marked difference between known potential food resources and those which are actually used. Subsistence is usually based on a small number of foodstuffs of plant origin which, even in most hunting and fishing communities, provide nearly all the calories in the diet. The diet of traditional societies is extremely monotonous; perhaps familiarity is a source of comfort. Variations are the result of seasonal fluctuations of resources.

What reasons underlie the choice of what have been called

# of eating

by Igor de Garine

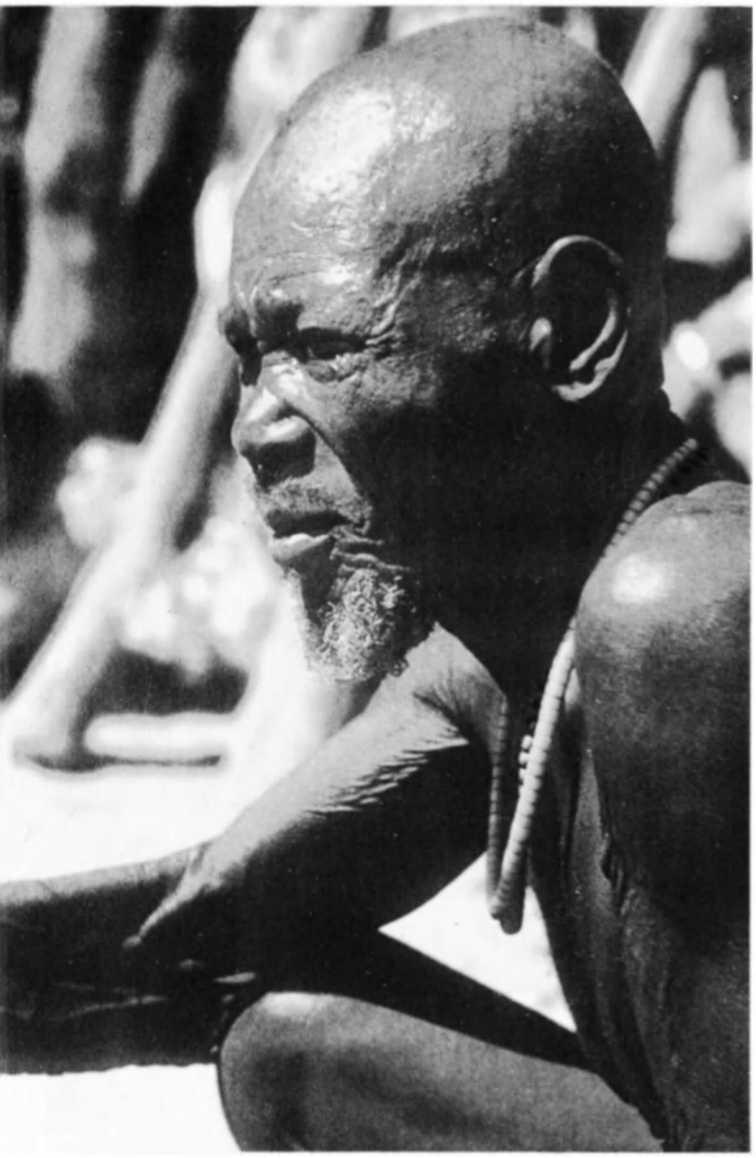


Photo © Igor de Garine, Paris

"What have been called 'supercultural' foods are often treated as divine gifts. The acts of cultivation and their accompanying rituals give form and pattern to the community's yearly round." Left, a Chadian farmer holds a cluster of sorghum.

"supercultural" foods? Both practical (and possibly nutritional) and symbolic considerations, notably the quest for prestige or for identification with an envied model, should be taken into account. These foods are often treated as divine gifts. The acts of cultivation and their accompanying rituals give form and pattern to the community's yearly round.

Eating habits, likes and dislikes are formed by the sense-impressions conveyed by the flavour, smell and texture of certain foods and the dishes of which they form part. These preparations provide the basis for human gastronomy and for the food of the gods, since offerings and sacrifices are a special means of communicating with the transcendent. Not only vegetable foods are used in this context. Meat comes into the diet through celebration: its consumption nearly always has a festive or ritual aspect. Blood is seen as an essential ingredient in Vedic sacrifices, in the Christian mass, and in the cutting of a chicken's throat as an offering to the ancestors in African ceremonies.

The esteem in which certain foods and dishes are held by different human groups is no indication of their real nutritional value, which is, as it were, a bonus. What is usually sought is a food which rapidly produces a feeling of repletion. One example, the thick porridge made from unsifted flour by the Massa people of Cameroon, contains a large quantity of indigestible carbohydrate which is filling but interferes with the assimilation of the other nutrients in the food ration.

Man is not a frugal animal. Some specialists believe that human beings are among the mammals with the greatest propensity to store fats. In most traditional societies, the quest for a full stomach, participation in a banquet to which both the living and the dead are invited and its digestion in common with other people, are among the main lubricants of social relations and provide a means of communication.

In the first hours of life a child comes into contact with the flavours and textures typical of the foods eaten by the group to which it belongs. Although taste remains something distinctive and individual, it is imprinted from birth with the stamp of a culture. A child's emotional response to the foods that its culture considers to be good is part of the process whereby it is integrated into society.

Without a doubt, the relative plasticity of early eating habits is a factor that must be taken into account when considering the future of our species. If the survival of a group depends on it, or for other reasons, it is possible to profoundly modify the eating habits of the members of that group, provided that a start is made at birth.

Although the connection between food and physical health may not be clearly perceived, all societies to some extent attribute magical medicinal properties to food. The general principle is that the body and the mind should be given the foods that are most appropriate, both materially and symbolically. The tendency in the West is to follow the Galenic theory of medicine, whereby ingested foods are converted into humours on whose balanced relationship the health of the individual depends. In India and China, the systems of correspondence are extremely complex, and in the choice of food account is taken both of the fundamental elements of the Universe and of contingent matters such as place, season, time and the distinctive characteristics of each person (see article page 24).

"Tell me what you eat and I will tell you what you are," wrote Anthelme Brillat-Savarin (1755-1826) in his celebrated work on gastronomy *La physiologie du goût,* (English translation, *The Physiology of Taste,* 1925). Food consumption expresses the status of individuals according to a whole range of criteria (age, sex, social and economic status) within a society in a particular spatial and temporal context, which is itself in contact with other self-contained societies. It provides a counterpoint to most other overt social characteristics and may, as the French anthropologist Claude Lévi-Strauss has suggested, unconsciously reveal the underlying structure of societies.

Eating is a form of expression whereby a person in a sense acts out his or her position in a particular society. For this reason, the quest for prestige and distinction is a constant feature of the dynamic of food selection. This dynamic operates between individuals, between groups within a society, and between traditional societies today faced with the overwhelming influence of urban industrial civilization. Monetary income has doubtless become the main variable that influences food consumption, but the dynamic of choice has by no means been brought under control. Any understanding of the process calls for considerable knowledge of local problems and the complexities of their historical background.

One example will suffice. In northern Cameroon, the Massa, the Toubouri and the Fulbe live side by side in approximately the same ecological setting. They can grow the same crops, but until recently some Massa were willing to forgo the benefits of dry-season transplanted sorghum, although they knew about it. They based their rejection of this crop on a religious argument (the curse of Mother Earth on upstart innovators) probably wishing to defend their cultural authenticity by distinguishing themselves from the other two peoples. Today, traditional beliefs and antagonisms have faded and the Massa are more inclined to see themselves as members of the Cameroonian nation. They have adopted dry-season transplanted sorghum and are tending to abandon their own varieties of red sorghum for strains which produce white flour, and for rice, which was the food of both the wealthiest peoples in the towns and of the Fulbe, who were historically dominant in the region.

This example shows that the influence of industrial civilization is not all-powerful and that local cultures (which are separate) also provide role models for neighbouring populations. This factor is seldom turned to account for development purposes.

Even if a standardization of everyday eating habits is taking place, linked to the trend towards a single world food economy, local food consumption patterns continue to flourish and traditional foodstuffs continue to be produced. Developing countries can probably free themselves to some extent from the need to import foodstuffs if they are willing to make an effort to promote indigenous products on a par with the efforts made to promote imported commodities.

One of the many reasons for fostering a degree of attachment to local foods is that self-sufficiency in food production is still an ideal situation for rural societies where money is too scarce a commodity to be wasted on food. The other reasons are symbolic. Individuals are emotionally attached to their childhood eating habits which are usually imbued with their traditional culture. The perpetuation of the traditional style of nourishment in daily life or in the calendar of festivities is a pledge of authenticity and social cohesion and a defence against outside aggression. This phenomenon is also found among emigrants. It has been pointed out that consumers fall into two categories: those who see a Golden Age in the past and uphold traditional cuisine, and those who envisage a Golden Age in the future and put their trust in scientifically approved nutrients. This dichotomy can also be observed in developing countries.

Preparation of taro gruel, a ceremonial dish consumed during festivities and rituals in the Melanesian archipelago of Vanuatu.

Right, lamas of the Tamang people of Nepal partake of a ritual meal.

Photo © National Archaeological Museum, Ferrara, Italy

Photo © Stavenhagen Collection, Mexico

Far left, ancient Greek cantharus or drinking vessel in the form of a satyr's head decorated with a sacrificial scene (5th century BC).

Left, fragment of a ceramic urn in the form of the young god of maize is from the pre-Columbian city of Monte Albán in Mexico. (Zapotec civilization, c. 500-750).

Photo © Igor de Garine, Paris

Admittedly, the advent of urban industrial civilization has made a big difference to the relationship between people and what they eat. This relationship is now independent of time and space. In some societies, those who can afford to do so can eat or drink anything, any time, anywhere and in any quantity. Food choices have become more individualized. Less repressed than they were by material constraints and the search for food, personal tastes are being more strongly expressed.

Anxiety about food has taken a new form. Seasonal hunger and the search for a full stomach have given way to a permanent and legitimate quest for pleasure in eating as a means of easing tensions whose origins specialists in the psychopathology of eating interpret as expressions of a nostalgic desire to return to the womb.

Food production has become monetarized, and food is now, as it were, secular. This does not mean that food has lost its symbolic value or its social significance. Although there is something anarchic in our habits of nibbling, it is still the person who runs the household, or, nowadays, the restaurant-owner or canteen manager who chooses what food is consumed at meals.

This choice is determined by many criteria whose range, thanks to advances in communication, has steadily widened. Urban industrial civilization encompasses many subcultures. Every social group has its own range of foods which helps to express its values and lifestyle. In accordance with a wide variety of criteria, each group makes a choice from the countless resources available to it, and this reduces the likelihood of a uniform worldwide food model, the establishment of which sometimes seems to be imminent. ■

IGOR DE GARINE, *French ethnologist and specialist in the study of food and nutrition in relation to culture and ecology, is currently director of research at the National Centre for Scientific Research (CNRS), Paris, where he heads a research team on "differential food anthropology". A former head of the food habits section of FAO's Nutrition Division, he is the author of around a hundred scientific articles and studies in French and English, and of eleven ethnographic documentary films.*

Photo © Igor de Garine, Paris

by Thianar Ndoye and Malick M'Baye

A grain revolution

The impact of imported rice on millet-based African civilizations

IN rural Africa today, drought and desertification have wrought profound changes which have upset the balance of the agrarian food-production system.

For centuries, millet and sorghum were the food staples that enabled the farmers of the Sahel to achieve self-sufficiency in an exchange economy. These farmers domesticated and improved *Pennisetum spicatum,* or bulrush millet, also known as "pearl millet". Owing to its short growth cycle, this crop draws the fullest benefit from the short rainy season.

In the southern Sahel, millet is cultivated as a supplement to sorghum, or "great millet", which originated in the Sudanese regions of tropical Africa. The area under sorghum cultivation has expanded considerably in the tropical regions of other continents, and even in warmer temperate countries. This cereal is nowadays the staple food of more than 300 million people, most of whom live in Africa, India and Central America.

Millet and sorghum have always been a powerful link between the African farmer and his environment. From a cultural point of view, millet plays a central role in the organization of community life and in the interpenetrating systems of kinship and values. Learning to grind millet with the traditional pestle and mortar and to process it into an edible foodstuff was part of every girl's introduction to the art of cooking.

The grain is dehusked by moistening and pounding with a pestle and mortar. After drying it is milled, by means of a second and then a third pounding, each of which is followed by winnowing. Then comes the fermentation stage, achieved by humidification, kneading, mixing and even germination. The end product is cooked in water and eaten with milk or a sauce, types of nourishment which are more liquid than solid.

Steaming became popular with the advent of recipes for couscous from the Maghreb peoples, who invented the technique and utensils and transmitted them to other cultures. The Senegalese cook has improved the recipe by meticulously working the flour by hand into a finer, firmer texture. The resulting semolina is then steamed, sealed with *laalo* (dried baobab leaves, ground into powder) and given a smoother consistency before being soaked.

Recorded in every African's memory are the working songs of women pounding millet, sung to the rhythm of the thudding pestle as it crushes the grains into flour. This millet or sorghum flour, made into porridge, is an excellent restorative for those who do hard manual work, for women who have recently given birth, and for convalescents.

Millet cakes are the first symbolic solid food given when a child is weaned. And couscous, thanks to traditional processing techniques, will keep for several months. It is the food on which nomad peoples survived during their long journeys. Millet, a sacred cereal, is also valued for its use in sacrifices connected with the Islamic or animist traditions of West African countries. In Africa dried millet stalks are used as building materials and as cattle fodder. Red sorghum is used to make beer.

Sorghum and millet also have exchange value in the rural African world and are bartered for other foodstuffs. The millet granary is a sign of wealth and abundance, and has a mythical significance. It is a symbol of fertility and a link between man and the earth. Thus it is appropriate to speak of a "granary culture", of the sacred characteristics of millet and, by extension, of all cereals.

Sorghum and millet may be traditional cereals, but they are nevertheless full of promise for the future, owing to their capacity to resist drought. Today, in Central America and in the United States, where high yields of sorghum are obtained thanks to fertilizers and irrigation, it is used essentially for cattle feed. In many countries facing food shortages, millet and sorghum hold out a hope of self-sufficiency.

However, rice has ousted millet and sorghum from their economic and mythical primacy, thereby increasing the food crop deficit of many Sahel countries and placing them in a vulnerable food supply situation.

The changeover from millet to rice took place in a particular historical context. The Portuguese introduced groundnuts to Senegal in the fifteenth century, and groundnut production was soon incorporated into the cultural system and

Photo M'Baye - Unesco

Senegalese village women grind millet in large wooden mortars before sifting the flour from the bran.

A young Chadian woman prepares a thick millet porridge, one of the staple foods of the African savannah.

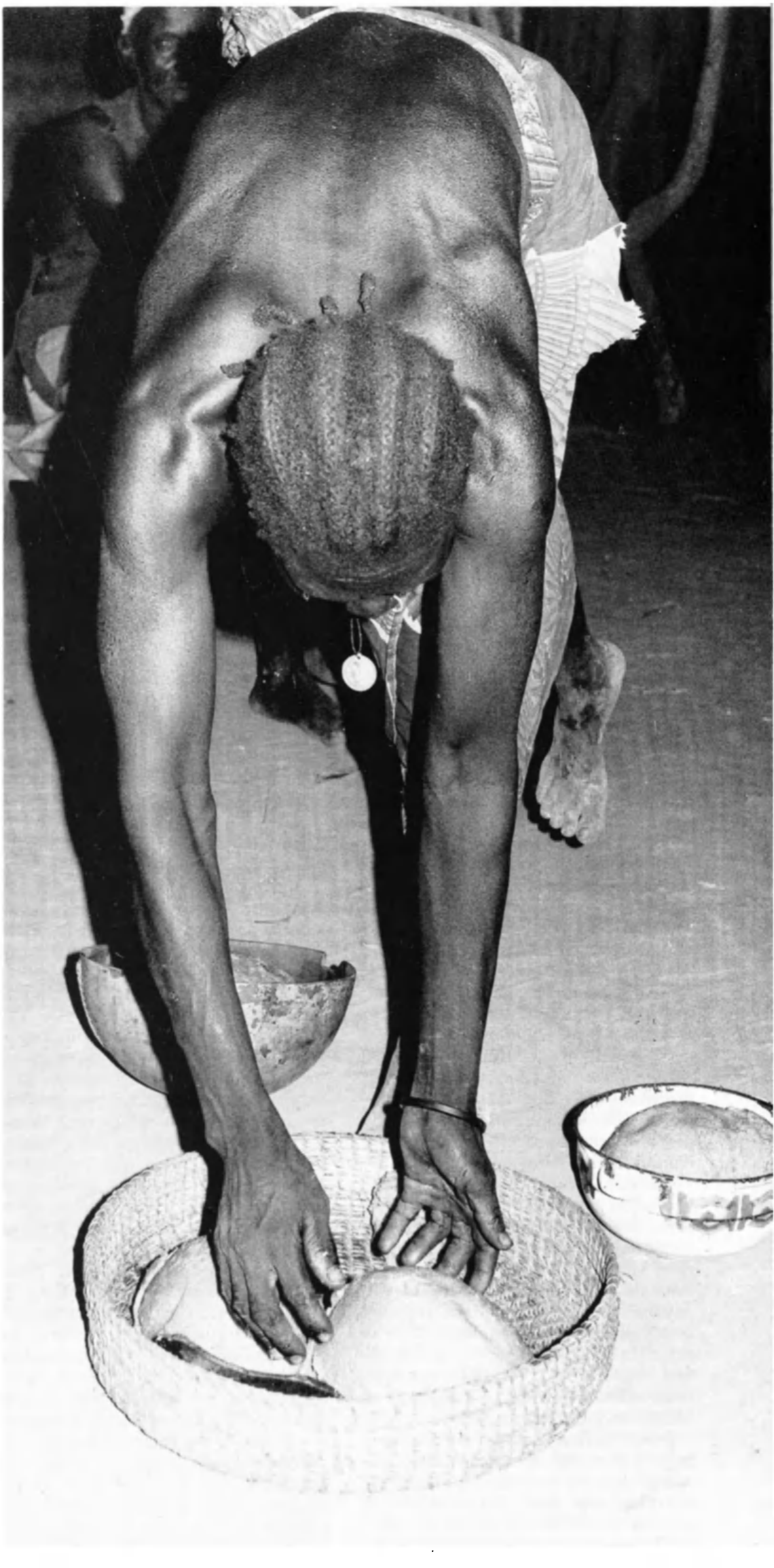


Photo © Igor de Garine, Paris

developed within a colonial market economy at the expense of the traditional crops which had enabled the farmers to be self-sufficient. To make good the food deficit caused by the cultivation of groundnuts, the colonial authorities imported cheap broken rice from Indochina.

New eating habits thus began to appear. Rice was adopted by Senegalese urban society and soon became fashionable throughout the country as the cereal to be eaten on festive occasions. It eventually pushed into the background an essential social and economic feature of African granary civilizations. Urban society began to impose alternative ways of life and styles of thought on the rural population and, in particular, to revolutionize habits of food consumption through the overwhelming acceptance of rice served with fish or meat.

Unlike millet, the preparation of which is a lengthy and laborious task, rice is ready for cooking: this is surely the main reason for its success. "Rice and fish" cooked in oil is a typically Senegalese recipe and may even be considered the national dish of Senegal. Today it has spread to all the countries of West Africa. Rice and oil, essential to the preparation of this dish, are increasingly important to the economy. A complex network of transactions has been established: the farmer sells his groundnuts, purchases rice with the proceeds, and buys back the oil from the groundnuts that he has sold. The terms of trade in these transactions have deteriorated for the farmer. Rice imports are increasing (approximately 300,000 tonnes a year), and oil production is no longer keeping pace, owing to the poor harvests of recent years blighted by drought.

But, contrary to all expectations, recent studies show that rural consumers still favour a number of the traditional millet recipes, a preference which highlights the importance of food symbolism to Black Africans and the crucial role played by traditional forms of nourishment in cultural identity. ■

THIANAR NDOYE, *of Senegal, was assistant director of ORANA, a Dakar-based institute for food and nutrition research in Africa, from 1952 to 1965. A co-founder of his country's food and applied nutrition service, he played a leading role in the WHO programme for nutrition education in Senegal (1972-1982). He has carried out missions as a consultant with Unesco, FAO and WHO, and has published articles in a number of journals.*

MALICK M'BAYE, *of Senegal, is currently working with Unesco's Division for the Study and Planning of Development. The author of a number of scientific studies on development, genetics and sexuality, he has carried out research with the French National Centre for Scientific Research (CNRS) and has taught at the University of Toulouse.*

Of maize and meat

by Perla Petrich

Culinary traditions and cultural identity in Mexico and Argentina

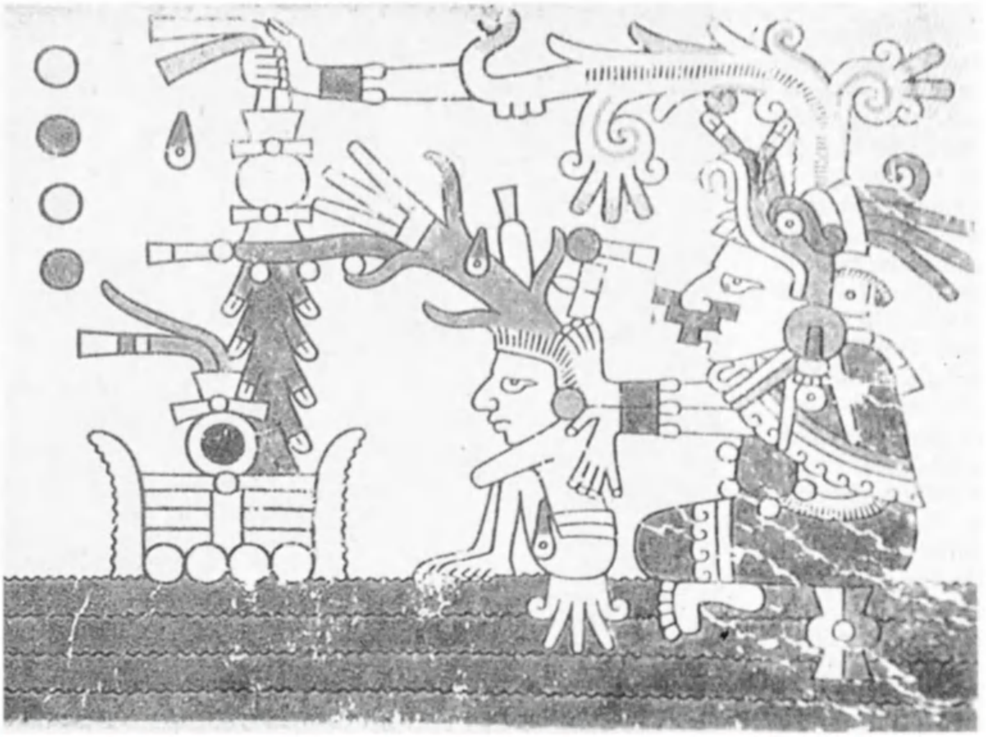


Photo © Jesús García-Ruiz

ALTHOUGH the food that groups of people choose to eat is undoubtedly dictated by their physiological needs, their environment and the technical and economic facilities available to them, these factors form part of a wider context—the social and historical background and the outlook on the world which are specific to each society. In other words, exclusively ideological motives play an important role in the choice of the staple foodstuffs and food processing techniques that make it possible to create a culinary tradition that is primarily recognized as a sign of cultural identification.

The ideology that each society creates in relation to food and eating is reflected in the choice of foodstuffs, the techniques employed in preparing them, and the rules laid down for their consumption. What is the relationship between the physical need to eat and the ideology which justifies or determines what is eaten? In an attempt to answer that question, we shall take two examples from Latin America: maize (Indian corn) in Mexico and meat in Argentina.

Even if soybeans or rice were cheaper to grow or produced higher yields, Mexican farmers would never dream of growing these crops instead of maize, which accounts for 80 per cent of their diet. For them maize is a cultural landmark of fundamental importance as well as a source of nutrition. According to Maya mythology, man was created by the gods from maize dough. Other materials such as clay and wood had proved useless. Only people made from maize survived to venerate the plant from which they had originated and which provided them with their daily sustenance.

Every ear of maize, every morsel of *tortilla* (maize cake), every sip of *atole*—the traditional beverage made from maize flour—provide incontrovertible proof that feeding is not merely a chemical and biological process but a form of direct communication with the deities. Through that communion, which is renewed every day, people bear witness to their faith in the gods, whose presence guarantees that life will go on.

Since the gods chose maize to create and feed mankind, how could man ever doubt its perfection, cease to revere it, or fail to believe in its origins and its divine reproductive powers? Maize has had divine status for centuries. Even today, Mexican Indians are reluctant to sell their maize because that would be tantamount to trading in their own flesh. Maize is grown exclusively for personal consumption.

Maize is the Mexican farmer's only criterion of taste, to the exclusion of all others. No other foodstuff can replace the *tortilla* which the women prepare with maize dough and then brown on the *comal,* a baked earthenware hotplate. In this context, quantity is not important; even if people gorge themselves on meat or fish they will still feel unsatisfied if they do not eat *tortillas.* On the other hand, a few *tortillas* accompanied by a pinch of salt or chili pepper will be sufficient to stave off hunger.

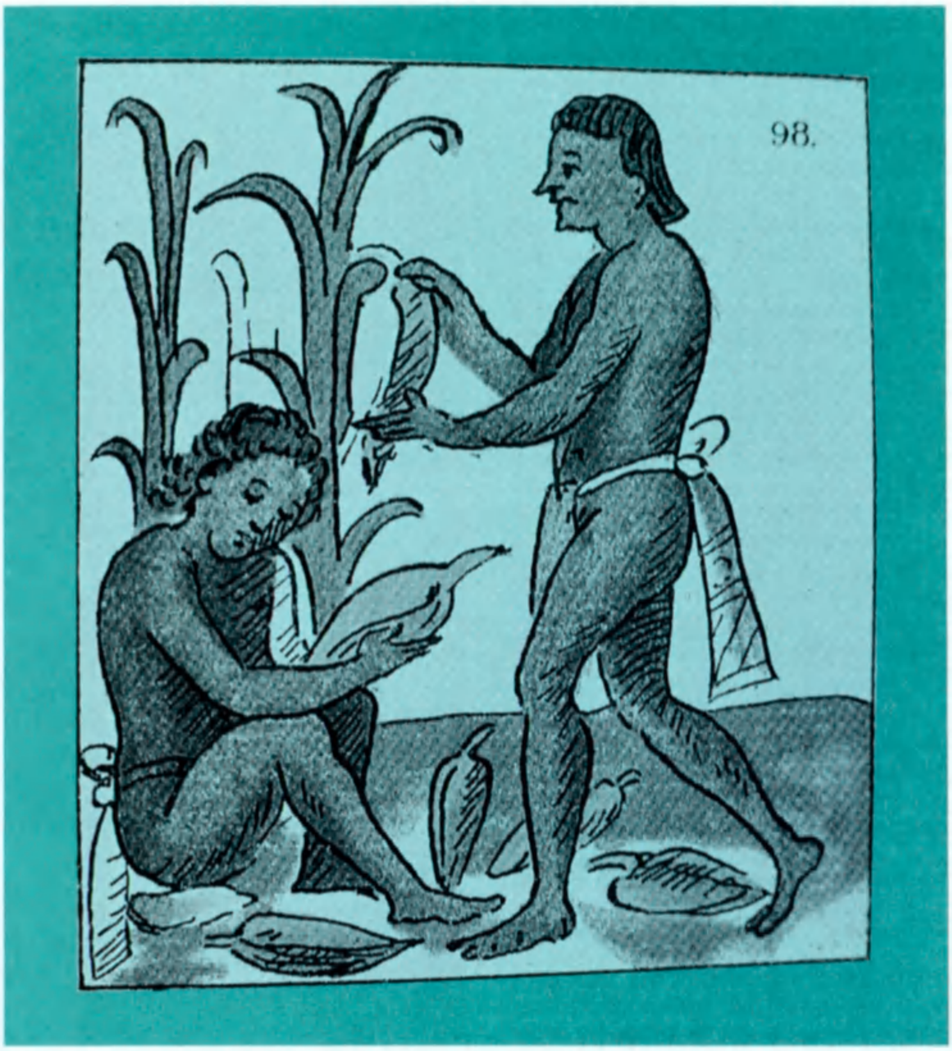
The *tortilla* has formed the Mexicans' taste for food. It is made from maize which is boiled and then kneaded into a soft, smooth dough. Compared with such a food, which calls for little chewing, meat is unpleasant, regardless of its quality. Roast meat is regarded as hard and dry, and it often happens that when hunters roast the animals they kill, the women later boil the roast meat in the kitchen.

In this indigenous culture there is a general feeling that maize is the only nourishing food. All other foods may be eaten for pleasure but they are not considered to have any nutritional value, because, it is assumed, they will be quickly expelled as waste. A man achieves social recognition when he begins to farm the land, and a woman when she begins to cook. Only when they have shown that they can grow and cook maize can they start a family. Only then do men become eligible for positions of responsibility within the community. The influence of maize thus permeates every aspect of human life, since it provides physical sustenance, integrates men and women into the system of agricultural production, justifies their existence and reaffirms their beliefs.

Paradoxically and tragically, this conception of maize is not confirmed by the biological facts. Maize cannot cater for the individual's energy requirements unless it is supplemented by a substantial protein and calorie intake. With few exceptions, the Indian's diet is limited to a maximum of 45 grams of protein a day compared with the 70 grams that are considered essential, and to 1,300 calories instead of the 2,600 calories needed by people engaged in regular physical labour.

The *Pampa*, the vast humid plain in central Argentina, has always provided the country with its food. It was there that the Indians hunted game and that Spanish and Creole settlers grew wheat and then began to rear cattle on a large scale.

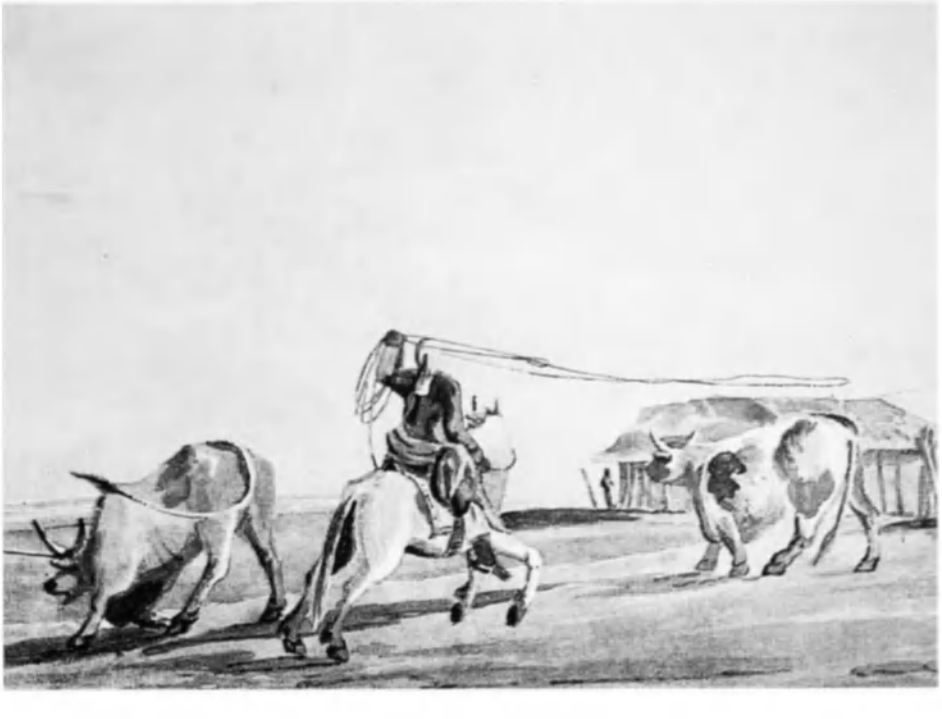
From the seventeenth century onwards, beef formed the staple diet and roasting was the most common culinary technique. To the Argentines, roasting evokes lavishness and plenty, in contrast to boiling, which is symptomatic of scarcity and frugality. Boiled meat not only preserves its juices but increases in volume. Roast meat, on the other hand, shrinks as it dries out.



Opposite page, detail from the "Codex Fejervary-Mayer" a 14th-century Meso-American pictographic manuscript. The water-goddess can be seen pouring water on maize with a hand that emerges from her head. Maize is depicted as a sturdy young man firmly rooted in the soil.

The maize harvest as depicted in the "Codex Florentino", a manuscript containing information from indigenous sources which was used by the Spanish monk and ethnologist Bernardino de Sahagún (1500-1590) in his study of Aztec civilization,* Historia general de las cosas de Nueva España *(General History of the Things of New Spain).

Lassoing *(1820), a watercolour by the English artist* Emeric Essex Vidal *(1791-1861).*



Photos © Jesús García-Ruiz

A comparison of roasting in Argentine cookery with boiling as practised in Mexico shows how food preparation patterns reflect not only different ecosystems but contrasting forms of social and cultural organization. In Mexico, from the sixteenth century onwards, the areas on which farmers were able to grow food were reduced as a result of colonial settlement. This land shortage was compounded by low crop yields caused by constant soil erosion. In Argentina, on the other hand, food production called for little effort until the mid-nineteenth century. The *gauchos* who lived on the plains considered themselves the monarchs of all they surveyed. If they felt hungry, they killed an animal, cut off a piece of flesh—sometimes only the tongue—and left the rest for the dogs or birds of prey. Today things have changed; unless they own livestock, people have to buy their meat. Even so, meat is still reasonably priced and continues to be the staple of everyday diet.

The hospitable ethos of the Pampa and its seemingly boundless vistas influenced ways of cooking. Food was prepared in the open air—meat was spit-roasted in the courtyard of the home or in the fields—for the entire extended family and friends who would turn up to eat without a formal invitation. Another significant feature of this type of cooking is its masculine character. As hunters and livestock raisers, men not only procured the food and did the slaughtering and skinning; they also did the cooking. The meat was either impaled on a spit, one end of which was driven into the ground so as to maintain it at an angle over the flames, or else placed, with the entrails, on a grill, to avoid direct contact with the hot cinders.

It was the usual practice—and still is in rural areas—for everybody to take his knife and cut off the slice he fancied, and then eat it without any seasoning. The only drink that went with the roast meat—the *asado*—was *mate,* an infusion prepared in a small gourd and drunk through a metal tube, or *bombilla.*

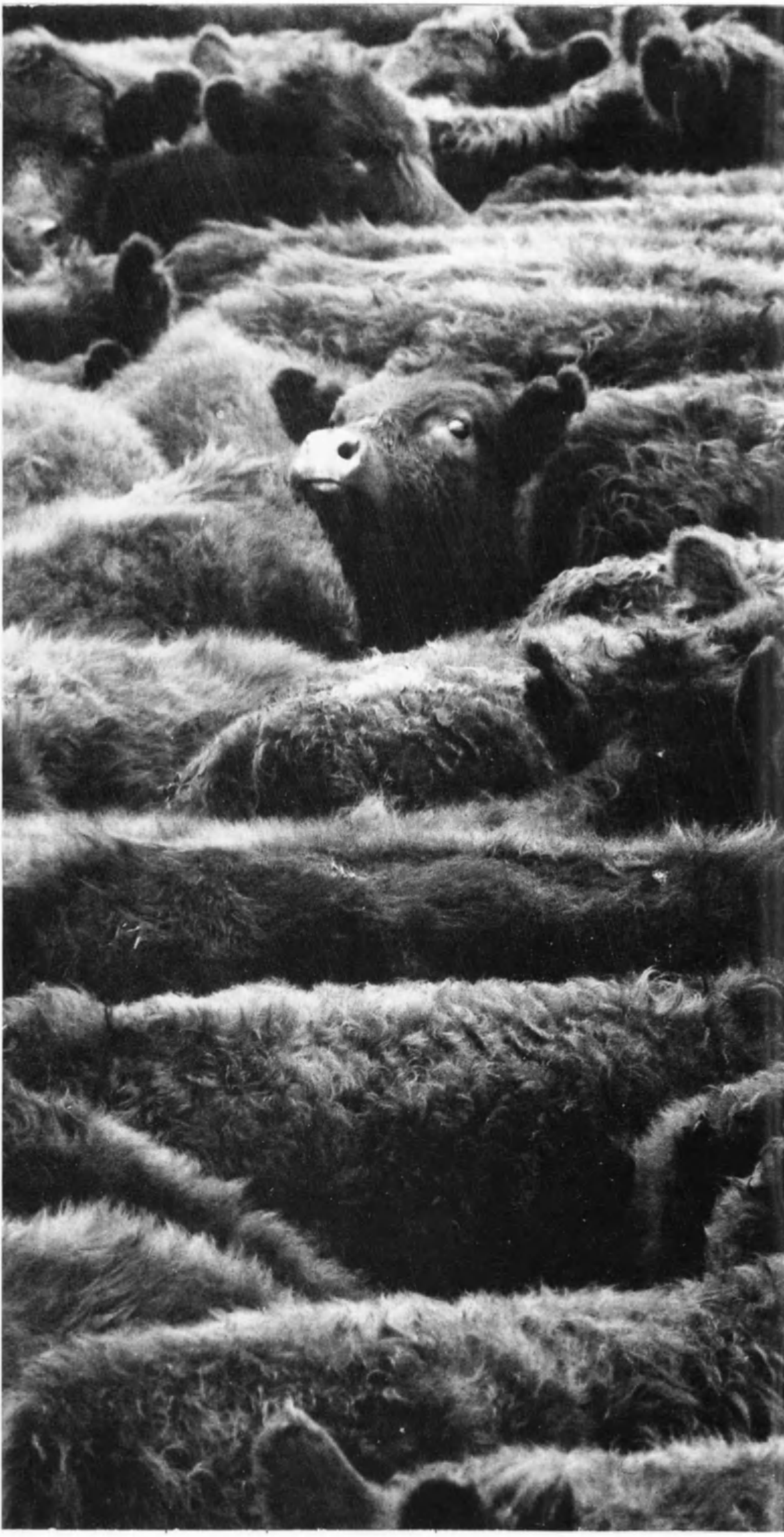
Women took no part in the preparation of the *asado* and only emerged when the meat was cooked. Their culinary duties lay elsewhere—in boiling, frying or baking the food for the daily meal when the family circle was confined to the intimacy of parents and children, and when the food was both prepared and consumed inside the home. Women prepared the *puchero,* a stew consisting of beef, Spanish-type *chorizo* sausage, black pudding, bone marrow, bacon, pumpkin, yams and potatoes, and the *carbonada,* a dish made with *charqui,* salt meat dried in the sun.

The Argentine culinary horizon broadened with the arrival of Italian, Spanish, Syrian, Lebanese and Jewish immigrants at the end of the nineteenth century and the beginning of the twentieth. However, the choice of food was not greatly modified; roast beef remained the staple diet and all other types of meat or cereal were secondary. Roasting continued to be the favourite cooking method.

For the Argentines, roast meat symbolizes the direct assimilation of the animal's vitality and of nature. People must eat plenty of meat to conserve their strength. All other foods are regarded as secondary, inessential. This approach to food has led to excessive meat consumption, to the detriment of dairy products and other foodstuffs. Argentina's vast herds of cattle have been used almost entirely for meat production. Even today, the consumption of milk and dairy products is negligible.

Both in Mexico and in Argentina, the appetite can only be satisfied by the staple food, the *tortilla* in one case, roast meat in the other. This does not exclude the consumption of other foodstuffs or the use of other cooking techniques, especially in the urban areas where they were introduced by immigrants in the early years of the century. Pizza and pasta, for example, have become part of the everyday diet, and although roast meat is still the most highly prized dish, it is no longer a regular feature. In urban areas, it has been replaced by steak, which fulfils for those who eat it the conditions

Photo René Burri © Magnum, Paris



A herd of young cattle on an Argentine ranch described by the French critic and essayist Roland Barthes: succulence and simplicity.

The long-standing preference for beef is reflected not only in the high rate of beef consumption but also in the rejection of other types of meat. The offshore shelf of Argentina abounds in an extraordinary variety of fish, but the lean, white flesh of fish is no substitute for beef, let alone a complement to it. Fish is only eaten occasionally and has an exclusively symbolic significance; as a result of Spanish influence, salt cod is eaten on Fridays in Lent and during Holy Week.

These occasions apart, fish almost never appears on the family table. The reasons are clearly neither biological nor economic (domestically caught fish is no more expensive than beef), nor are they imposed by the natural environment.

The same symbolic significance can be seen in the "imported" Christmas menu, which is a carbon copy of that prepared by the family forebears in the Iberian Peninsula and includes the pinenut cakes, almonds and nougat which were designed to make good the calorie deficit caused by the European winter but are quite unsuitable—as well as being indigestible—in a sultry South American summer, even though the family continues to decorate its Christmas tree with cotton-wool snow.

In short, roast beef has undoubtedly come to be a practical sign of "Argentineness" and boiled maize of "Mexicanness", in that they are both nourishing foodstuffs, the natural environment lends itself to their production, and the techniques are readily available for turning them into food. Fundamentally, however, these dishes embody the symbolic values which the two peoples have vested in them and which add to the pleasure of eating them. Referring to these intellectual models for interpreting and giving meaning to reality, the people of one region of Latin America look upon themselves as "maize people" who have been created and nourished by the tender grain which they venerate, while the people of another region see themselves as consumers of meat whose consistency evokes the boundless, rich and untamed land which, like the meat itself, can only be conquered by biting at it vigorously. ■

PERLA PETRICH, *of Argentina, is professor of Latin American literature at the University of Paris VIII and a member of the French National Centre for Scientific Research's Laboratory of Languages and Civilizations with an Oral Tradition (LACITO). She is the author of several works on food and nutrition, including* La semántica del maíz entre los mochó *("The Semantics of Maize among the Mochos").*

Beneficial beans?

THE bean, certain kinds of which are among the most nourishing vegetables eaten by man, has also since very ancient times produced a luxuriant crop of beliefs, cultural practices, rituals and taboos.

A bean taboo imposed on those rendering sacrifice is mentioned in the oldest Indian ritualistic text, the *Yajurveda*. In ancient Greece, the use of beans is mentioned at banquets and festivals, and a bean-god, Cyamites, was worshipped. In the Roman world beans played a role in magic rites, and the priest of Jupiter was forbidden to touch a bean or mention its name.

These and many other examples of the cultural and religious importance of beans have been recorded by the American anthropologist A.C. Andrews, who has written that "the ancients felt towards beans a mingled respect and dread, a complex of emotions generally applied to an object believed to be charged with some supernatural force, contact with which might be either beneficial or harmful".

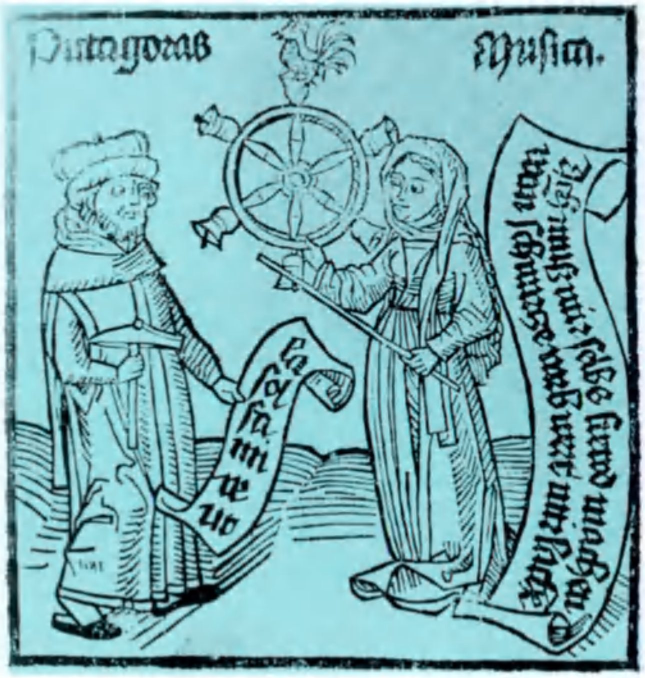
The Greek philosopher Pythagoras (c.580-500 BC) forbade his followers to eat beans "on the ground that beans were occupied by the souls of the dead and thereby took on the qualities of human flesh". Through this presence, according to the Pythagorean theory, beans became dynamic receptacles of generative power.

Two American specialists, Solomon H. Katz and Joan Schall of the University of Pennsylvania, have made a study of the consumption patterns of fava beans in the Mediterranean region and have suggested that the "rich growth of cultural beliefs and taboos surrounding the fava bean may be a product, in part, of the fact that many individuals who consume the beans become very sick". This sickness, known as favism, is "an acute haemolytic anaemia resulting in fever, jaundice and possibly death". Those who are susceptible to favism are those who suffer from a hereditary metabolic defect in a red blood cell enzyme, known as glucose-6-phosphate dehydrogenase deficiency (G6PD-). A particularly severe variant of this condition (GdB-) has been found to occur at frequencies of 10 to 30 per cent in certain populations in the Mediterranean region.

"Why", ask Katz and Schall, "are fava beans consumed in areas with high G6PD-frequencies since so many people would face a serious health risk? If the consumption of fava beans is so disadvantageous, they should be used less and/or be replaced by other nutritionally equivalent legumes ... Instead, fava cultivation and consumption have been widespread in the Mediterranean region since Neolithic times, suggesting that fava consumption confers some adaptive advantage through its nutritional qualities, [and/or] possible psycho-pharmacological effects ..."

In fact, it seems that the distribution of fava bean cultivation and consumption corresponds closely with that of the enzyme deficiency described above and with the incidence of malaria in the Mediterranean region. Since fava beans contain a number of substances which are similar to those used in antimalarial drugs, could it not be possible that their consumption may confer some protection against malaria?

For Katz and Schall, "The consumption of fava beans may indeed confer an antimalarial effect on G6PD normal individuals, similar to antimalarial drugs. In some individuals ..., fava consumption could prevent malaria, while in others ... it could precipitate serious disease and death. The continued use of fava beans as an important staple crop in these populations with high GdB- frequencies is more understandable if positive health effects are enjoyed by many, even though there are clearly deleterious consequences for some GdB- individuals." ■



"Pythagoras and Music". Woodcut from a late 15th-century illustrated book by a German musicologist, Michael Keinspeck.

Photo © Giraudon, Paris

Reflections on the potato

by Nick M. Joaquin

ACCORDING to the German writer Günter Grass, the introduction of the potato was a more important event in the history of the German people than all the martial victories of King Frederick the Great. Indeed, Grass considers the potato a crucial factor in the development of Europe. It was the potato, he believes, that made possible the industrialization of Europe and the rise of the proletariat.

We can see what he means. The potato is a highly nourishing food that is also very cheap because it can be grown so quickly and easily. The coming of this "fast food" liberated the masses of Europe from age-old hunger. It developed a sturdier working class. It released more and more people from farm work and made them available for factory labour.

The factories in turn led to the development of a strong labouring class that democratized Europe, and to a science and technology that made Western culture supreme in the modern world.

It can be argued therefore that the identity of the modern European as a highly civilized, cultured and progressive individual can be traced back, partly at least, to the coming of the potato.

But now let us bring in a counter-argument. Let us imagine, say, a European who is rabidly anti-potato because the potato is not indigenous to Europe. As this chauvinist argues, the potato should never have been allowed to change Europe because it, the potato, is so foreign and exotic. By eating the potato, the European lost something of his original nature, with the result that European culture today is a deviation from a pristine original. The true European is the European before the introduction of the potato.

But how can that uncorrupted original be restored?

Our imaginary European chauvinist demands the abolition of the potato.

At once, of course, we see the flaw in his proposal. Abolishing the potato will not restore European man to his pre-potato condition. Why not? Because from the potato have come such developments as industrialization, democratization, modernization, and so forth. And these developments have so radically altered European man that he would still remain what he has become even if he stopped eating potatoes altogether.

In other words, potatoes are the culture and history that cannot be cancelled in a desire to recover a former innocence.

You may smile at my potato story, which seems to make the potato like the forbidden fruit in the Garden of Eden. But I think that some such story would illustrate the problem of nationalism today in my country, the Philippines—and not only in my country but also in most of Asia, and Third World countries in general. When Adam and Eve ate of the apple, they lost innocence, they lost paradise. And I would say that among the peoples of the Orient, certainly among us Filipinos, there is a feeling that, by tasting of Western science and technology, we lost innocence, we lost a primordial paradise.

Our feelings towards Western culture are therefore ambivalent. We are fascin-

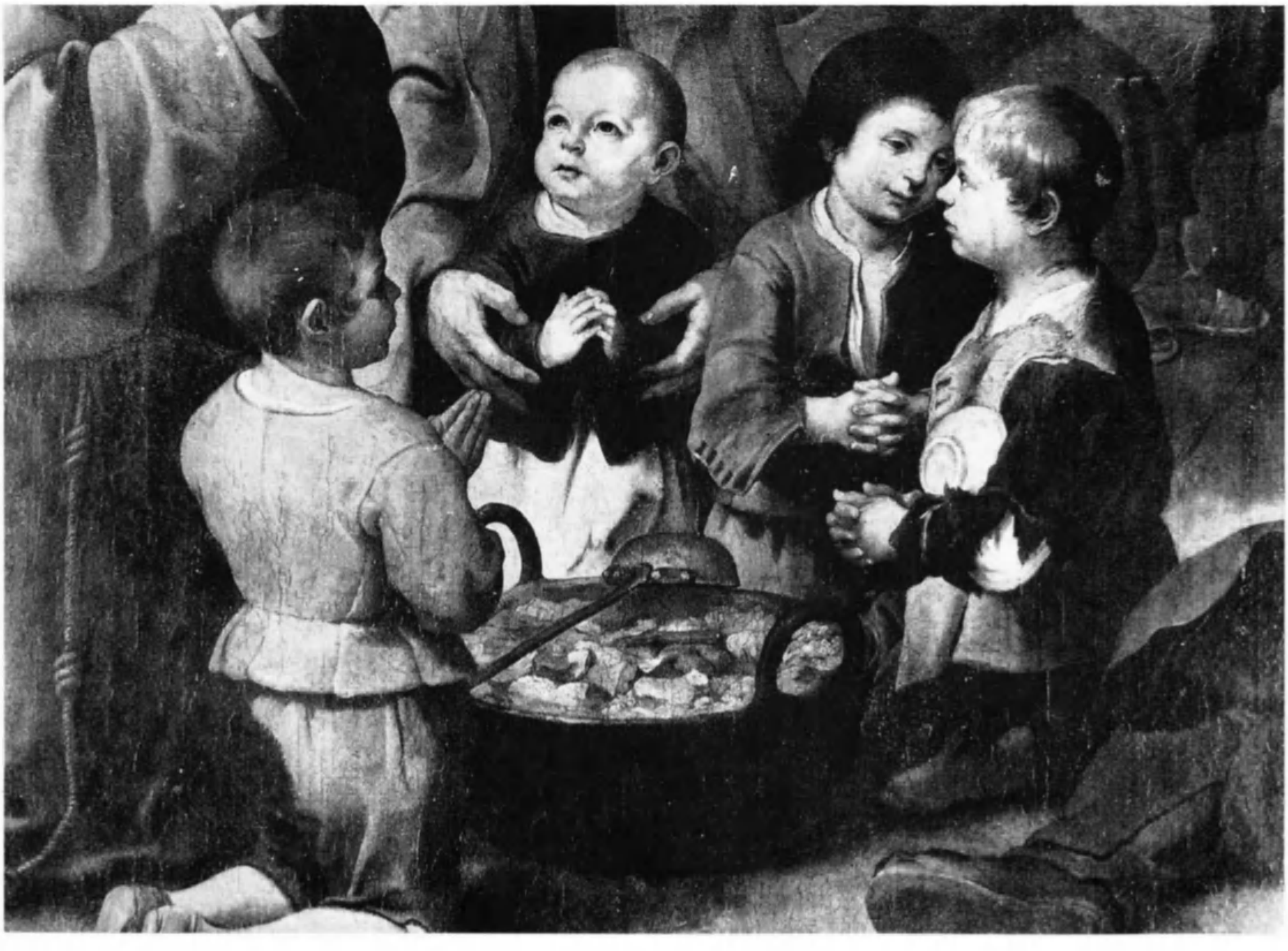


Photo © Mas, Barcelona. San Fernando Academy, Madrid

A family meal on Luzon Island, the Philippines

Photo Boutin © A.A.A., Paris

ated by it and we are also repelled. We fear and resist it even as we hanker for it. And though we crave to progress in the Western manner, we wonder at the same time if we should not rather go back—back to the culture we had before we were "corrupted" by the West.

Not long ago I had dinner with a Filipino family whom I admire for their nationalism, although they rather tend to make a display of it. At this dinner, the display consisted of a round grey stone about the size of a baseball. This stone—it was actually a piece of rock salt—was passed around instead of salt because, said my host, that was how the ancient Filipinos salted their food. You pressed the stone on your rice and fish, you rubbed it against your meat, you soaked it in your broth, to obtain the desired saltiness.

I'm afraid they all looked down on me when I said I'd rather have ordinary table salt. That piece of rock salt reminded me of the stones we used in the old days, when bathing, to scrub our bodies with. And I was putting no such stone into anything I was going to eat! Still, I was charmed by the sentiment behind the display, the nationalist nostalgia. What bothered me were the implications behind the sentiment.

In effect, my hosts were saying: "See how truly Filipino we are. Instead of using a saltcellar, which is foreign, we use a salt stone, which is native." The implication therefore is that the more we return to what is native and the more we abolish what is foreign, the more truly Filipino we become.

This may be true—but what I couldn't help noticing then was the inconsistency. Why pick on the poor saltcellar? On the table were fork and spoon, which are not native; and beef and cabbage, which are also not originally Filipino, and I knew that the food had been prepared using the sauté method, which is foreign, and cooked in a saucepan or kettle, both also foreign. To retain these, while abolishing the saltcellar, is tantamount to saying that the saltcellar is a bigger hindrance to becoming truly Filipino than cabbages and kettles.

Of course I know what question was supposedly being answered at that dinner table with the abolition of the saltcellar: the question of identity.

Identity, I would say, is like the river in philosophy. You remember the saying: "You can never step into the same river twice." The river has changed even as you step into it. Nevertheless, the Sumida River remains the Sumida River, though from one moment to the next it is no longer the same river.

This is the dynamic view of identity.

I'm afraid that we in the Orient—or anyway we Filipinos—have a different idea of identity, different because we regard identity as static: something given once and for all, something to which things happen but is itself never a happening, never becoming. We ourselves are, or were, a fixed original identity to which certain things—alien cultures, alien histories—have been added, layer upon layer. Therefore, if such cultures and histories are addition, identity is subtraction. All we have to do is to remove all those superimposed layers and we shall end up with the true basic Filipino identity.

That is the static view of identity.

But culture is not simple addition. Culture is not a stew to which you can add anything and it will still remain a stew. Instead, culture is like those laboratory experiments in physics where the moment you add a new ingredient the original mixture becomes completely transformed into something different.

When history added the saltcellar, the fork and spoon, beef and cabbage to our culture, the identity of the Filipino was so completely transformed that there can be no going back to a pristine original even if we abolished the saltcellar, the fork and spoon, and so on. Culture and history are the flowing waters that make it impossible to step into the same river of identity twice. ■

NICK M. JOAQUIN *is a Philippine novelist, journalist and playwright. Among his published works are* The Woman who had Two Navels *(novel),* Tropical Gothic *(short stories) and a volume of poetry,* El Camino Real and Other Rimes.

A cereal chronology

BC	
10000	*Jordan:* einkorn and emmer wheat and two-rowed barley
8000	*France:* wild grasses
7500	*Japan:* buckwheat, barley and various wild cereals
6500	*Romania:* various grasses
6000	*Crete:* emmer wheat *Mexico:* maize *Central Europe and Western Hungary:* large-seeded grasses *Mauritania:* wild millet *Balkans:* wild millet, einkorn and emmer wheat
5000	*Japan:* millet *Southern Europe:* einkorn wheat *Spain:* four varieties of wheat and two of barley
4500	*Northern China:* millet then sorghum
4000	*Denmark:* varieties of small cereal *Egypt:* wheat *Siberia:* millet *Southern China:* rice
3000	*India:* millet, rice *Babylonia:* barley, millet, sesame, emmer wheat *Africa:* millet (from east to west) *Ethiopia:* "great millet", barley and wheat
2000	*Central Europe:* rye *Mauritania:* cultivated millet
500	*Persia:* wheat
400	*Italy/Greece:* soft wheat then hard wheat
300	*Northern China:* soft spring wheat (from west to east) *Japan:* rice
AD	
100	*Sudan:* barley, sorghum *Europe:* rye (from east to west) and cultivated oats *Sahel-Chad:* sorghum
1400	*Italy:* rice
1520	*America:* wheat *Europe:* maize
1640	*France:* rice
c. 1800	*Australia:* wheat

Source: *Histoire naturelle et morale de la nourriture* by Maguelonne Toussaint-Samat, Bordas, Paris, 1987.

Needy children eating potatoes. Detail from "St. Diego of Alcalá and the Poor" by the Spanish painter Bartolomé Esteban Murillo (1618-1682).

Sacred grain

Cereals and especially wheat have long been a staple of the human diet. The diet of the Latin peoples, for instance, was for centuries based on the consumption of different forms of bread. An important crop since Antiquity, grain also had mythical associations in many civilizations. (1) "Harvest crown" (1987) woven in traditional style with winter wheat by the French artist Martyn Lévêque. (2) Wood and stucco model of a granary from an ancient Egyptian tomb (c. 2000 BC). (3) Kneading dough. Earthenware statuette from Cyprus (2000-1600 BC). (4) Greek earthenware statuette (525-500 BC) depicting bakers shaping oven-ready loaves.

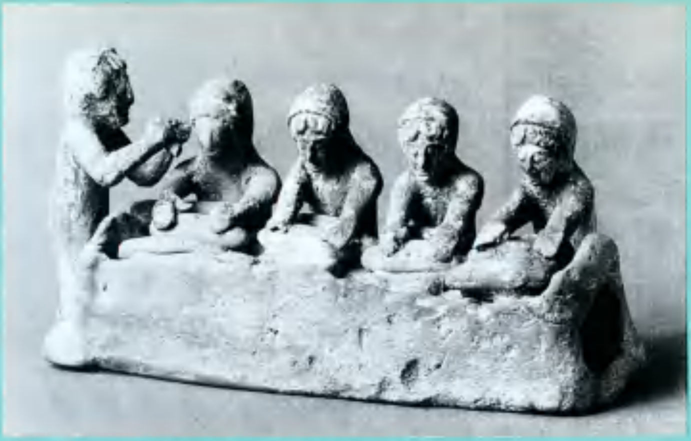
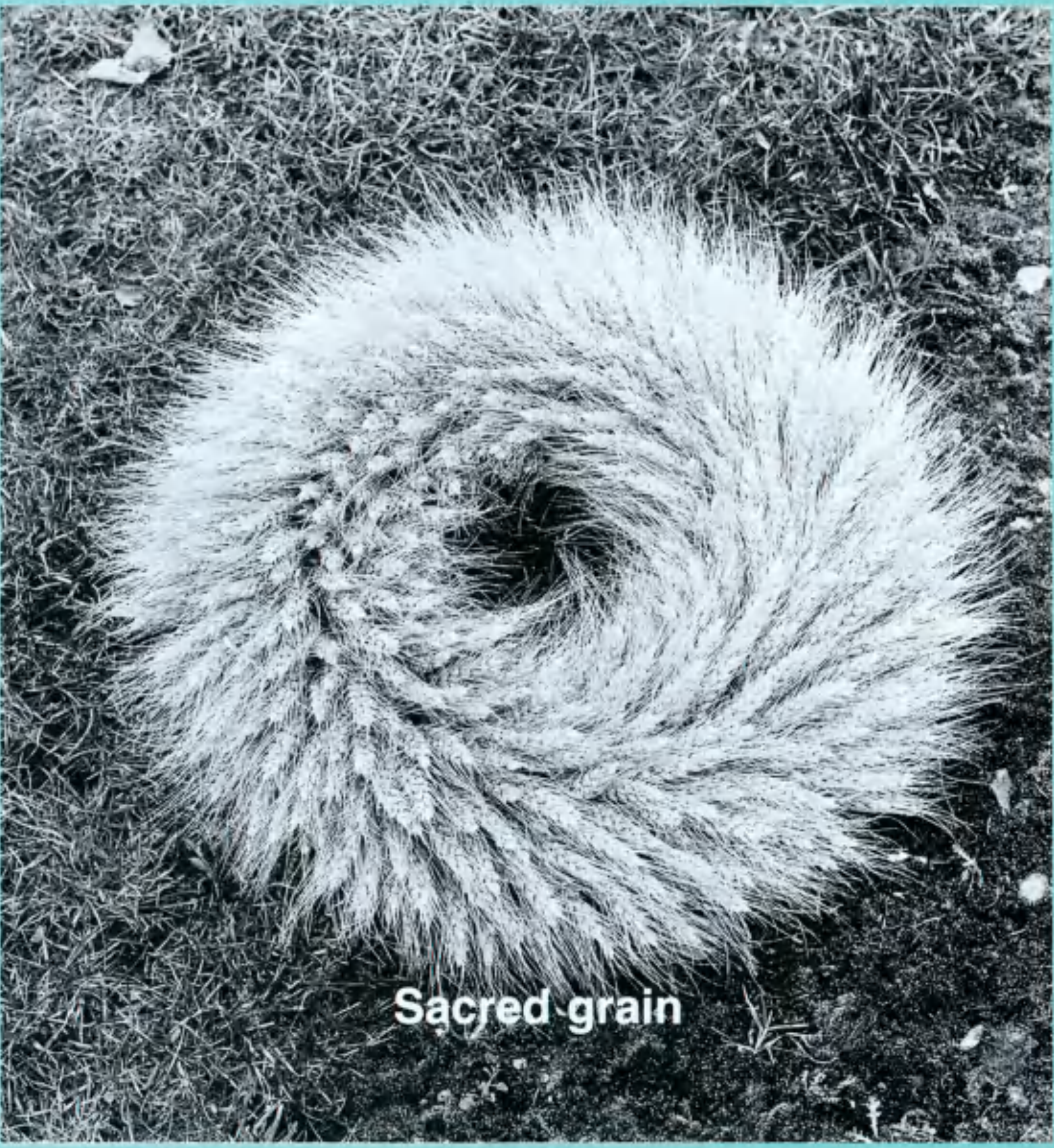


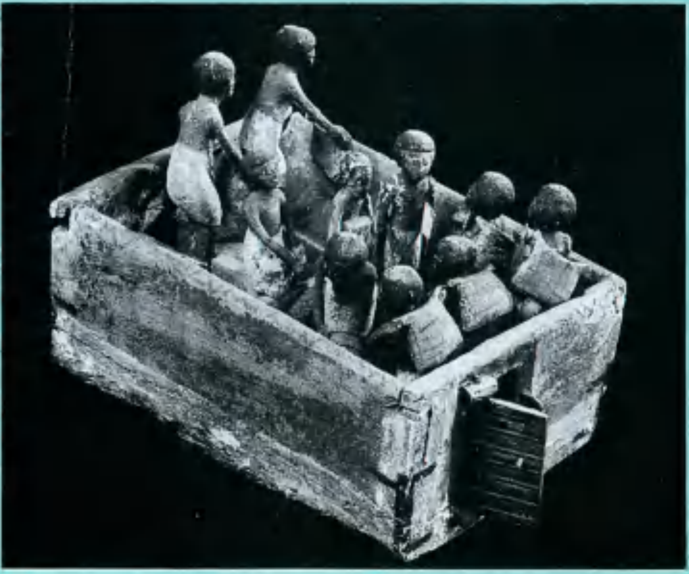
Photo © Réunion des Musées Nationaux, Paris. Louvre Museum

4



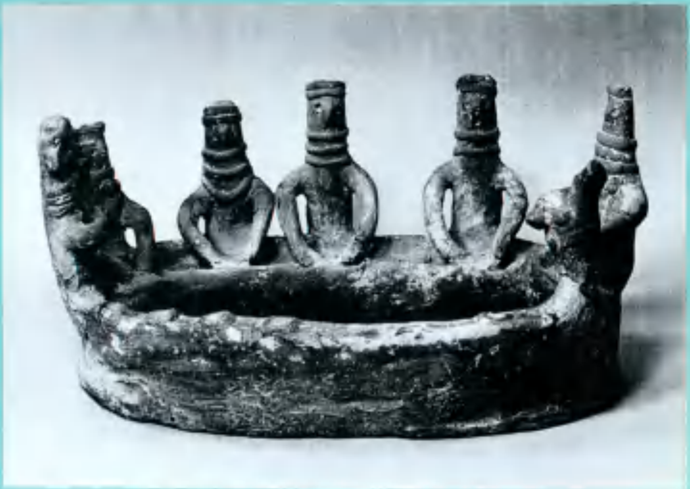
1

Photo © Christophe Ensminger-Editions Alphonse Marré, Chartres, France



2

Photo © Pelizaeus Museum, Hildesheim, Fed. Rep. of Germany



3

Photo © Réunion des Musées Nationaux, Paris. Louvre Museum

The ones that get away

by John Durnin

A coastal community that turns its back on fish

FOR many years, the protein intake of some Papua-New Guinean villagers was thought to be so low as to be incompatible with adequate protein equilibrium. Moreover, as an apparent paradox, these people were usually well-built and muscular. The amount of physical work they performed and their levels of fitness were also high: indeed their results in fitness tests put them well above well-fed European populations.

A satisfactory explanation was difficult to formulate until relatively recently, when it became clear that protein deficiency was much less common throughout the world than had been supposed and that the requirement of the human body for protein is relatively modest. The low protein intake of these New Guineans was therefore unusual but not physiologically harmful.

However, if people are allowed access to even a relatively restricted choice of foodstuffs, they almost invariably seem to make a choice which provides an intake of protein which is equivalent to between 10 to 14 per cent of the total energy content of their diet, whatever the particular foods that comprise that diet.

The New Guinean population whom we studied was therefore a very unusual group since, although its members lived on the coast and had easy access to the sea and to fishing, they had an extraordinarily low protein intake. They lived in a large village of about 1,200 people, on the edge of moderately open jungle. The mainstay of their diet, grown in gardens cleared from the secondary forest, was taro (a root vegetable) and bananas, both of which were grown in several varieties. They also ate some nuts and fruit, and consumed occasional small amounts of animal protein from flying foxes (which they shot with bows and arrows) and opossum. Taro, bananas and nuts contributed about 75 per cent of the total energy intake, and animal protein accounted for less than 20 per cent of the total protein in the diet.

The extraordinary feature of the villagers' diet was that although they lived near the coast, possessed canoes which they used frequently for leisure activities when they went to the beach, and had no apparent taboos against eating fish, they caught and ate an astonishingly small quantity of fish. The amount of sea-food in their diet was negligible although fish was relatively plentiful in the sea, was the object of leisure-time hunting, and indeed was eaten when it was caught.

Photo © J.V.G.A. Durnin

The eating habits of these Papua-New Guinean villagers are a biological puzzle. Although they have plenty of opportunities to fish and hunt, they persist in following a very low-protein diet. Their physical condition is superior to that of some "well-fed" peoples.

The behaviour pattern of these New Guinean coastal people is at variance with the accepted norm. It would appear that although their protein intake was low, it was adequate in biological terms and they had no "intrinsic", fundamental, biological urge to supplement it by increasing their protein intake from animal sources.

This particular study, on a group of people living in very simple circumstances, seems to have revealed a biological conundrum, in that the presence of reasonably plentiful animal protein in a situation where other sources of protein were of inferior type and limited quantity, did not seem to have provided any stimulus to increase the total intake of protein to a "usual" level.

An adequate amount of protein in the diet is regarded as important for renewing body tissues, for the constant manufacture of enzymes and hormones, and for replacing body losses in general. From a psycho-social point of view it is widely assumed that people prefer to eat a diet containing around 10 to 14 per cent of total energy in the form of protein. The basis of many theories of what constitutes a desirable diet depends upon this idea. If it is not universally valid—as would seem to be the case from our studies in New Guinea—the implications are quite wide-ranging. ■

JOHN DURNIN, *British nutritionist, is professor of physiology at the University of Glasgow. He has carried out research on energy requirements in a number of countries and has published over a hundred scientific articles and texts on topics such as energy metabolism.*

Two Melanesian cooking utensils from the Sepik River valley in north-east New Guinea: below, anthropomorphic earthenware bowl; below right, ladle made from a coconut shell.

Photos Erika Vesper © Museum für Völkerkunde, Berlin (West)

The emergence of homo sapiens as a convivial animal

by Naomichi Ishige

EVEN the most delicious food lacks savour if it is eaten in solitude. To enjoy our meals we need a companion to sit at our table and share our food with us. Of course, this does not mean that the pleasures of the table should be shared with just anyone. It is better to eat alone than with a stranger.

But we all know people with whom we are on close terms—members of our family, friends or colleagues, a group which varies from country to country and from person to person—the people we feel at ease with when we are at table. We all belong to a social group through which we relate to other people. One such group consists of those who eat together, and might be called the *kyōshoku shūdan* or "conviviality group".

Eating together strengthens the group and gives it a certain cohesion. A meal is also a means of communication whereby people assert their identity within the group.

Those who share a meal also share sensations. That is why, in many societies, ritual celebrations are often accompanied by feasting, which provides an opportunity to create new bonds between people and to strengthen those bonds that already exist.

In the animal world, eating is a solitary activity. A meal is neither a means of communication nor an occasion to get together. Mammals give milk to their young, and birds bring their chicks food as long as they stay in the nest. But that can hardly be called conviviality. It is a temporary relationship, for when the young have reached maturity they will feed alone. Carnivores which hunt in packs sometimes gather around a good catch and eat it together. But here too there is no conviviality, despite appearances.

On the other hand, studies have shown that chimpanzees may beg their food from other members of the troop, who sometimes let them have part of a meal composed mainly of plants but sometimes of prey. If a chimpanzee catches a large animal or gets hold of some fine fruit, he is quite prepared to share his precious trophy with any member of the troop who pesters him for it. It is often the female who presses the male to feed her on his return from the hunt. The behaviour of chimpanzees is in some ways reminiscent of the division of labour between man and woman in the early

(Table) manners makyth man

Photo René Burri © Magnum, Paris

days of mankind, when the man went hunting and the woman gathered the fruits of the earth.

There is no reason, however, to think that the sharing of food among chimpanzees means that they have a preference for certain members of their troop, especially since they behave as individuals when actually eating.

We can therefore conclude that conviviality is an attribute peculiar to man, and has been so since the emergence of the human race.

Man has been defined as an animal with the power of speech and the ability to use tools, but it could also be said that man is a convivial animal in the sense that he likes to eat in company. And the basic unit in which every human being likes to share his meal is the family.

"The basic unit in which every human being likes to share his meal is the family."

Photo Richard Kalvar © Magnum, Paris

"In many societies, ritual celebrations are often accompanied by feasting, which provides an opportunity to create new bonds between people and to strengthen those bonds that already exist." Left, a wedding ceremony in the Japanese Shinto tradition. The couple make their marriage vows by exchanging a bowl of saki three times.

"The usefulness of home cooking is challenged by ready-to-eat or pre-cooked food products, or the increasingly popular practice of eating out in fast food or self-service restaurants." Below, automatic vending machines dispense an instant family snack.

According to the French anthropologist Claude Lévi-Strauss, marriage is the exchange of women between groups, and women were the first currency in the history of mankind. Food, however, was another form of currency. We do not know whether the family started with the formation of a couple or whether the sharing of food between man and woman came before the couple—this is the old problem of which came first, the chicken or the egg.

As soon as man stood upright he began to hunt and learned to handle tools. Meat began to assume an important place in people's diet. In all hunting communities today, the males do the hunting. Since the dawn of mankind this activity must have been left to the men because of their greater physical strength.

The basic unit of society, the family, was probably established when a man began to share an animal he had caught with one particular woman and her children. The family came into being when a stable sexual relationship was begun between the man and the woman, who were linked by the sharing of food, and when someone had to be chosen to bring up the children born of their union.

The man left the dwelling-place to go hunting and led his life in a wider orbit, where he had what might be described as a social life. The woman stayed in or near the home. Her life was directed more towards the family—gathering fruit and nuts, looking after the children and the household. So their ways of life became differentiated, and the work was divided into male and female tasks. In almost all societies the woman is expected to prepare the family's meals. But a man—a professional chef—is often entrusted with the preparation of meals eaten on social occasions.

It is clear that man does not regard eating as a solitary but as a profoundly social activity. A meal is something to be shared, not to be consumed in solitude. This means that rules of conduct must be established. Table manners are the codification of these rules.

All societies have their own rules of behaviour while eating, even those societies which do not use tables or any kind of cutlery—whether chopsticks, knives, forks or spoons—where, for example, people eat with their fingers. Such rules reflect the complex nature of each culture; they are the outward sign of the power either of the head of the family or of religion. When a number of people eat together, the main cause of disagreement is the question of how the food is to be shared. Obviously, if there are no rules the strongest will prevail. This may be the origin of table manners, the observance of which had to be enforced by a familial or religious authority as a means of keeping order. In any society, the appropriation of food which has been offered to someone else, especially if that person is about to eat it, is considered to be extremely impolite. However, these rules may be set aside when close relatives or friends (parents and their children, or couples) exchange food that has been partly eaten.

Sex and food are the two principal bonds that hold the family together. Sexual relations are reserved for husband and wife, and are regarded as incestuous if they occur outside the couple. But all the members of a family are entitled to share the food on the table, and sharing it is designed to bring them closer together. That is why in many cultures the family is symbolized by the hearth and the oven which are used in the preparation of food.

This symbol, however, is tending to lose its meaning in highly industrialized societies. The usefulness of home cooking is challenged by ready-to-eat or precooked food products, or the increasingly popular practice of eating out in fast food or self-service restaurants.

Thus, in technologically advanced societies, giant food and catering industries constitute a challenge to the family home. Meals have become more individualized. In days gone by, when the home was both the unit of production and of consumption in a self-sufficient economy, the individual could not decide unilaterally when and what to eat. Now, it matters less if some members of the family are not present at meal-times. They eat whenever and whatever they wish. Does this mean that the very meaning of the family, based as it is upon the sharing of food, is disappearing, and that the human race will soon be eating as individuals again, much as animals do?

The family has made a material and economic contribution to the success of industrialized societies, but it is doubtful whether society can take its place in providing the emotional relationships which family members—husband and wife, parents and children—establish between themselves.

The members of a modern family spend over half their time outside the home, at work or at school, and for them the family table is the main meeting place, the opportunity to confirm membership of the group. If people were to stop eating together the family would cease to exist.

The origins of the family can thus be traced back to the sharing of meals. Modern civilization has not yet found another basic living unit, compatible with human psychology, to take its place. The present family system should thus be preserved, even if it appears outdated, through the institution of the common meal. For although eating has become more of an individual activity than it was in the past, it seems unlikely that the kitchen or the family table will cease to be part of our homes in the near future. ■

NAOMICHI ISHIGE, *Japanese cultural anthropologist, teaches at Japan's National Museum of Ethnology. He is the author of many published works including "An Investigation into Food and Life" and "The Ethnology of Gluttony".*

Coca-Cola
Sprite
あ、未知の味。
テキサス生れの

Photo Richard Kalvar © Magnum, Paris

Photo Phelps © Rapho, Paris

The meal is the message

The language of Brazilian cuisine

by Roberto DaMatta

EVERYONE has to eat to live, but each society defines in its own way the significance of the act of eating, and stipulates what should be consumed regularly and what must never be eaten for fear of turning into an animal or a monster.

Strict rules define the relationship between the food consumed and the condition of the person who consumes it. All Brazilians know that they should fast before taking communion, in order to maintain the assumed state of purity compatible with the host which they receive into their bodies. They behave very differently, however, when they entertain their relations or friends at home for Sunday lunch. On these occasions they carefully choose the food that will help them to define the social situation they wish to create.

If I am invited to eat a *feijoada,* a *cozido,* or a *peixada,* I expect to take part in an informal ritual of meal-sharing in which there will be a connection between what is eaten, the way in which it is eaten, and the people with whom it is eaten. These dishes consist of a variety of ingredients (either meat or fish combined with vegetables and flour) from which the guests help themselves and make their own mixture of the various items offered on the table, Brazilian-style, establishing a parallel between the act of eating and the ideal of "mixing" socially those who eat together.

Above, a food-vendor in a street of Salvador, capital of Bahia State (Brazil). Among her wares are crab, pé de moleque (a kind of nougat made from brown sugar, far right) and fried bananas coated with flour.

Brazilians have strict rules for matching a meal to those who eat it. I should never think of inviting home the Governor of my State for a *feijoada.* A more classic menu would be appropriate on such an occasion and might include such dishes as roast chicken with salad, or meat cooked in a more cosmopolitan style. However, there is nothing wrong in having a cup of coffee or a snack with strangers, but in this case you eat standing up in a downtown snack-bar or *balcão.* This is a mode of eating in which the utilitarian concept of "eating to live" takes precedence over the moral or symbolic aspects of a meal. During a slap-up meal with your friends, on the other hand, Socrates' adage is forgotten and instead of eating to live you live to eat.

In Brazilian cooking and hospitality a great effort is made to combine the "universal" aspects of food (such as its nutritive and energy value, its capacity to sustain the organism and its protein content) with its symbolic characteristics, since "man does not live by bread alone" and the act of eating has great social significance. All this is connected with "totem commensality", as the French anthropologist Claude Lévi-Strauss described a system in which people and their mood, the surroundings, the food and even the way of preparing the meal, must all be in harmony.

This no doubt explains why in Brazil a sharp distinction is made between the concept of "food" and the concept of a "meal". In the language of Brazilian cuisine, these terms express a fundamental semantic opposition between the universal and the particular. Brazilians know that all edible substances are "foods" but that not every food is necessarily a "meal". In transforming food into a meal the preparation is of critical importance, but a degree of ceremony is also required. When preparing a carefully organized and well-thought-out meal, no Brazilian will be satisfied with simply buying top-quality produce and then obediently following a cook-book recipe. He will take great pains to prepare the ingredients and season them properly. Since the quality of the meal, served copiously and with care, expresses consideration for the guests, it would be inconceivable for a Brazilian to serve pre-cooked convenience foods, as is now the practice in Anglo-Saxon countries.

The meal is also a means of expressing and asserting a national, regional or local identity, or even the identity of a family or an individual, depending on the context. Essentially, the act of eating crystallizes emotional states and social identities. Outside my country I can use a regional dish to express my national identity, but within Brazil I identify many regions and even families through the way in which they prepare and serve certain foods. In a genuine system of "totem meals" social identities can be expressed. Every Brazilian knows that the people of the Northeast are as fond of flour as mice are of cheese; that *tutú con linguiça* (a dish based on sausage and beans) is typical of Minas Gerais State; and that *churrasco* is the favourite dish of the *gauchos* of the South.

And so, when speaking of Brazilian cooking both the modes of eating and the groups of people who are invited to share certain kinds of food must be taken into account. There is no doubt that in some contexts meals acquire a personality of their own, which explains the enormous importance of meals as offerings in Brazilian traditional cults. Thus there are foods associated with the sacred (or the profane), with sickness (or health), with virility or femininity, with childhood or with maturity.

Sitting down at table is supposed to put an end to disputes. Brazilians believe that some dishes and some situations (the Carnival, for instance) are, like some women, irresistible, so that the very presence of certain dishes should be enough to create a degree of conviviality and bring harmony to those who are assembled around the table.

But the symbolism of meals also provides an opportunity to examine a highly complex question which is usually overlooked in "anthropologies of eating"—the search for a rational explanation for the culinary peculiarities that are found in every society. Every society has dishes it would almost be ready to die for. It is not fortuitous that North American society has an individualistic culinary model according to which everyone tucks into a solitary meal from a tray in front of a newspaper or television set. There must be some connection between the fast food and junk food industries, self-service restaurants, and the values of self-reliance and independence which underpin society in countries such as the United States.

But what is happening in countries like Brazil where traditional cuisine exists alongside modern, more individualized patterns of food consumption? There is no doubt that in these countries, the modern practice of eating an individual food product such as a hamburger, either alone or with strangers, coexists with traditional eating habits which reassert themselves at banquets held in that atmosphere of friendliness and conviviality to which people are still strongly attached.

The Brazilian example reveals that these two practices are not mutually exclusive. On the contrary they can reinforce each other; dual eating habits seem to exist in societies of this kind. One practice is an expression of "modernity", while the other can provide a focus for personal relationships. In Brazil there is, indeed, an impersonal, individualized, public cuisine, in contrast to traditional home cooking which keeps people in touch with the basic social relationships that give form and meaning to life.

On the whole, however, the concept of the meal as an act of sociability is inseparable from family, friends and colleagues, in other words from all close relationships. In this connection it is worth mentioning that all Brazilian national dishes such as *feijoada, peixada, cozido, vatapá* (a dish based on manioc flour or rice with fish or meat) and *cararú* (typical of Bahia State), specifically combine solids with liquids, meat with fish, and dried vegetables with green vegetables.

In Brazilian cooking the utmost importance is attached to combining ingredients which in other countries are served separately. Brazilians pay close attention to the arrangement of the table and carefully blend black beans with assorted meats, cabbage, oranges, *torrezno* (pieces of bacon) and white manioc flour, all of which are eaten in a rather curious manner, taking a little here and a little there and mixing everything up in the centre of one's plate.

Echoing the layout of the table, where the main dish is surrounded by accompanying dishes in a perfectly-defined hierarchy, the centre of each plate is reserved for the principal item of food, as though gradations were emphasized at all levels. The ideal of Brazilian cooking is to assemble appropriate dishes and guests on an important occasion in a harmonious ceremony which is the main symbol of sociability in Brazil.

Does this arrangement of the table (where there is always a leading figure and supporting actors), table manners (the main dish is served first, then the others) and even the method of eating, have a direct correlation with what I would call "intermediate meals", an embodiment of the ties which for centuries have enabled so hierarchical a society to absorb and harmonize values from other cultures? It is similar to the effect achieved by humbly and subtly blending in the same dish black beans and white manioc flour to form an intermediate mass that is as delightful as a mulatto skin. ■

ROBERTO DAMATTA, *of Brazil, is professor of social anthropology at Brazil's National Museum, Rio de Janeiro. He has also taught and studied at universities in the United States, the United Kingdom and France. Among his published works are* A Divided World *and* Carnavais, Malandros e Heróis *("Carnivals, Bandits and Heroes").*

Ritual offerings for a **macumba** ***ceremony in Rio de Janeiro (Brazil).***

Photo Bruno Barbey © Magnum, Paris

China's health

Photo © Musée Cernuschi, Paris

MANY people appreciate the subtle and delicious flavours of Chinese food and drink, but few are aware of the important role they play in preventing illness, curing disease and preserving health.

Over thousands of years the Chinese people have learned that many foods have a medicinal value. During the period of the Longshan culture 4,000 years ago, our ancestors learned how to make wine for drinking, for use as a condiment, as a medicine for invigorating the blood, nourishing the *qi* (vital energy), warming the stomach, and keeping out the cold. The lower part of the original Chinese character signifying doctor and healing (醫) contains the character for wine (酉 = 酒), illustrating the point that "food and medicine originate from the same source; a food is also a medicine".

Professional food doctors already existed in China during the Zhou Dynasty (c. 11th century-221 BC), and *The Canon of Medicine,* the first work of Chinese traditional medicine written in the Spring and Autumn Period (770-476 BC) stated that food as well as medicine should be used in the treatment of disease. Bain Que, an eminent doctor who lived during the Warring States Period (475-221 BC), used food treatment before prescribing medicines. *The Peaceful Holy Benevolent Prescriptions,* a work written during the Sung Dynasty (960-1279) gave recipes for the treatment of twenty-eight diseases with instructions for the preparation of appropriate foods. Porridges made with different nutrients were prescribed for different illnesses: black bean porridge for oedema; almond porridge for coughs; fish porridge for dysentery.

Over forty years' experience as a clinical dietician have taught me how successful food treatment can be. As a mother I feel special concern for women during childbirth, and pay great attention to the restoration of their health after delivery. I once looked after a fragile young woman who weighed less than 50 kg before she became pregnant. She was worried that she would not be able to withstand the strain of childbirth. I drew up

Left, preparation of fish as depicted by a sculptor of the Han Dynasty (3rd century BC). Right, making pasta by hand in modern China.

food tradition

by Li Ruifen

Photo Eve Arnold © Magnum, Paris

special menus for her in accordance with Chinese traditional practice—stewed hen without soya sauce, eggs in glutinous rice wine, millet porridge with brown sugar and sesame, and other *re* (hot by nature) foods. Within a few months she had recovered, even though she breast-fed her baby. In fact, she became much healthier than before.

According to traditional Chinese medical theory, the physical constitution of a woman after childbirth is *xu* (weak), *han* (cold by nature), and her internal organs do not function normally. Such patients should take either *wen* (warm by nature) or *re* foods to obtain vital energy and to restore the balance within the body. On the other hand, pork, duck, mung beans and other *han* foods are not suitable for women after childbirth.

I have also advised hundreds of mothers on a suitable diet for their babies. One pale-looking premature baby was so weak that it lacked even the energy to suck. It is generally believed that only in rare cases can such weak babies survive. This particular baby was placed under my care. First of all, I fed it the thick liquid skimmed from rice porridge to provide it with the calories it needed. (Doctors practising Chinese traditional medicine assert that rice is sweet and neutral by nature, and is easily absorbed in the spleen and kidney. Li Shizhen, a famous doctor of the Ming Dynasty (1368-1644) said, "Skinny and dark babies fed on the thick liquid from rice porridge become plump and white after a hundred days".)

Then I gradually added milk powder, egg yolks, fish paste and bean soup to the baby's diet to provide amino acids, and liquids from vegetables and fruit as a source of vitamins and minerals. The baby was fed very small amounts at first, and then gradually increasing quantities, and from eating a single kind of food progressed to eating many different kinds. In less than a hundred days, the baby was heavier than other babies of the same age. When it was six months old, I cut down on its starch intake to control its weight and added more vegetables and fruit to the diet. By the time the child was one year old, it was healthy and lively. In China, some mothers are always afraid that their babies may be hungry and so they overfeed them with protein-rich foods. The results are unsatisfactory as overfeeding harms the digestive system.

Old people often come to me for advice on how to eat to prolong life, and I always quote them a rule laid down by the renowned Doctor Sun Simiao of the T'ang Dynasty (618-907) which recommends "many small meals". This is good advice for older people whose physical faculties are gradually failing. They should take light meals with little sugar, little salt, and not much fat. I also advise them to eat two or three snacks between their three regular daily meals. At each meal, they should stop eating before their stomachs are full, and should include at least twenty and if possible between thirty and forty different kinds of food in their daily diet in order to obtain the many kinds of nutrients they need.

Madame Zhang is an elderly writer whose way of life I highly approve of. Every day she eats some millet, dried shredded corn, beans, peanuts or other grain. A green leafy vegetable dish forms part of every meal. One of her favourite foods is bean curd. She does all she can to maintain a balance between *han* and *re* foods in her diet and a balance between motion and rest in her daily activities. She rises early and goes to bed early, and often takes an outdoor stroll as well as walking 7,000 paces around her rooms each day. She also massages herself daily and does some household chores. Although she is in her eighties, Madame Zhang is physically fit and mentally lucid and is able to keep up with her writing.

I told her that the rate of metabolism is slower for old people and that she should add more protein to her diet. Instead of dining on "four-legged animals" (cow, pig, lamb, etc.), it was better to eat "two-legged fowls" (chicken, duck or other birds), "single-leg edible fungi" (mushrooms) or "legless fish". Poultry and fish have a high protein content, are low in fats and their short fibres are easy on the digestive system. Fungi are a rich source of plant protein.

Once I made a special "eight-treasures duck" for Madame Zhang. This is a highly nourishing festive dish with a low fat content. I used protein-rich plants for the stuffing—*xianggu* mushrooms (which replenish vital energy, regulate blood circulation and reduce phlegm), lotus seeds (which are credited with sedative properties, strengthen the function of the heart and reduce blood pressure), sesame (which nourishes and builds up the body and moistens the intestines), Chinese dates (which reinforce the spleen, normalize the functions of the stomach, nourish vital energy and replenish body fluids), chestnuts (which nourish the spleen, invigorate the functions of the stomach, reinforce the kidney and invigorate blood circulation), *gingko* seeds (which warm the lungs, nourish vital energy, check asthma and act as a detoxicant), peanuts (which enliven the spleen, normalize the function of the stomach, moisten the lungs, stop coughing), bamboo shoots (which clear up internal heat, reduce phlegm, regulate the stomach, moisten the intestines) and glutinous rice. Thus the combination of these foods with duck (nourishing to the *yin*[1] and an eliminator of dampness) makes an excellent dish for the aged.

I usually follow our traditional method of selecting appropriate foods which will gradually restore the physical strength of my patients, especially those who are critically ill. The patient must first acquire enough calories to maintain life, to improve resistance against disease and strengthen the immune defence system in order to increase the opportunities for recovery.

Some years ago I treated a woman who had undergone an operation for stomach cancer. It was found that the cancer had spread to all the lymph nodes. The doctors predicted that the patient had only three months to live. At the time the patient was undergoing chemotherapy which seriously impaired her health. She was constantly vomiting as a reaction to the chemotherapy and lost between 2 and 3 kg after each course of treatment.

I decided not to make her eat in the morning when she had her chemotherapy treatment which caused her to vomit. But after 4 o'clock in the afternoon when the climax of the toxic effect of chemotherapy had passed, she was put on a special diet which included her favourite foods. For a patient in her condition, every mouthful counted and so she was constantly fed until night. The next morning, when chemotherapy continued, she was given a slice of ginger to suck to prevent vomiting and to warm the spleen and the stomach. With such care, though the patient underwent eight courses of chemotherapy treatment in over a year, she gained more than 10 kg in weight. She lived five years longer than predicted.

Chinese traditional medicine insists that diet should vary according to the individual. The human body needs a certain amount of all kinds of food, but the amount taken must be based on such factors as age, physical constitution, dietary habit and climate. Over-eating or starvation must be avoided to protect the spleen and the stomach. By proper use of food to build up the body, it will be possible to give priority to the prevention of disease.

According to Chinese traditional medicine, the physical constitution of the hu-

Regional traditions of Chinese cooking reflect climate, customs and natural produce. In Shanghai, below, and elsewhere in eastern China, people are fond of hot, spicy dishes while the people of western China tend to prefer tart flavours.

Photo René Burri © Magnum, Paris

Photo Boutin © A.A.A., Paris

Photos Dai Jiming © Xinhua News Agency, Beijing

Three specialities of traditional Chinese cuisine: above, shrimps, strips of meat and vegetables are simmered in soup kept boiling in a pot heated by burning charcoal; top right, "turnips in chicken soup" accompanied by bamboo shoots and ham; right, "Hudie Su", butterfly-shaped pastries.

man body is classified as *yin, yang,*[2] *xu, han.* Food materials are *han, re, bu* (replenishing) or *xie* (reducing) in nature, and taste sweet, sour, bitter, salty or hot. Selection of foods must be made according to the season and the climate and the corresponding relation between them. Doctors of Chinese traditional medicine classify the four seasons as spring-warm, summer-hot, autumn-dry, winter-cold and believe that the physical condition of a person undergoes corresponding changes in the different seasons. Unless appropriate changes are made in their diet, people are likely to fall ill.

Since there is a release of vital energy and the *qi* (vital energy) and blood tend to rise to the surface in spring, people should eat more vegetables and less fats at this time of year. Hot, pungent foods must be avoided. In summer, there is usually a loss of appetite and a slackening in the function of the digestive system. Thus it is desirable to take tart foods and other innately cold foods to facilitate the removal of toxic heat within the body. With the arrival of autumn and cool weather, people regain their appetite. In this season a reasonable amount of hot and pungent foods serves to expel internal residual summer heat. When winter comes, the rate of metabolism rises and thus more hot and pungent rich foods may be included in the diet.

The styles of Chinese cooking have been developed according to the geographical location, customs and habits, and the material resources of the different parts of our country. The people of the Sichuan Basin, for example, are fond of peppery foods. This can be related to the fact that they live in an area which is damp all the year round. Hot peppery foods help to remove dampness within the body and thus restore its inner balance. In our country, the southerners are fond of sweet foods while the northerners prefer salty fare; easterners favour hot foods and westerners like tart flavours. The reasons for this variation in the local flavours may be found in differences of climate, geographical characteristics and material resources.

Chinese food treatment is based on the hypothesis that "if there is genuine energy within the body, diseases will not be able to attack". Prevention is of primary importance. Treatment after a person falls ill comes next. Food treatment is too complicated a subject to be expounded in a short article, and I shall leave the last word to a distinguished thirteenth-century doctor, Chen Zhi, who wrote that "regardless of hundreds and thousands of kinds of edible foods found on land and in the sea, their five colours,[3] five tastes and their natures of *han re, bu xie* are inherent in the *yin yang* and the five elements[4]". ■

---

1. *Yin*—the female or negative principle.
2. *Yang*—the male or positive principle.
3. Five colours—blue, red, yellow, white, black.
4. Five elements—wood, fire, earth, metal and water with their characteristic properties—an ancient philosophical concept to explain the composition and phenomenon of the physical universe. Later used in traditional medicine to expound the unity of the human body and the natural world and the physiological and pathological relationship between the internal organs.

LI RUIFEN, *Chinese dietician, is deputy managing director of the Beijing Gastronomy and Nutrition Research Association and deputy director of the Beijing Nutrition Association.*

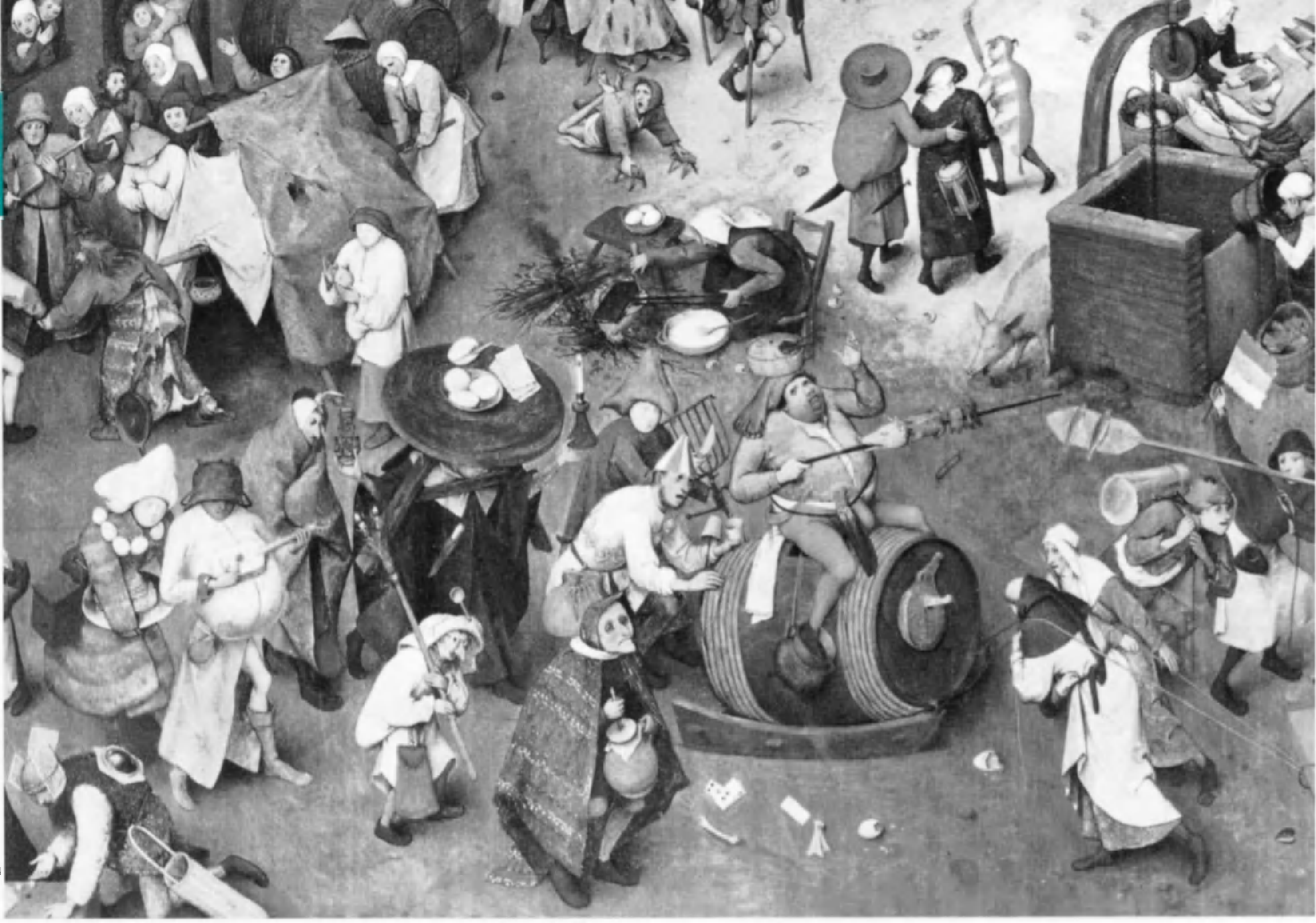


Photo © Kunsthistorisches Museum, Vienna

Paradise lost

Bulimia, anorexia

UNTIL modern times, melancholy was always regarded by Western medicine as the worst enemy of a "well-ordered", harmonious life, in which the humours were perfectly balanced, especially in the blood, which was held to be the very "food of life". It was possible to govern the body and maintain its balance by keeping a rein on desires, by a wise and prudent administration of the "treasure of life" on which the quality and length of human existence depend.

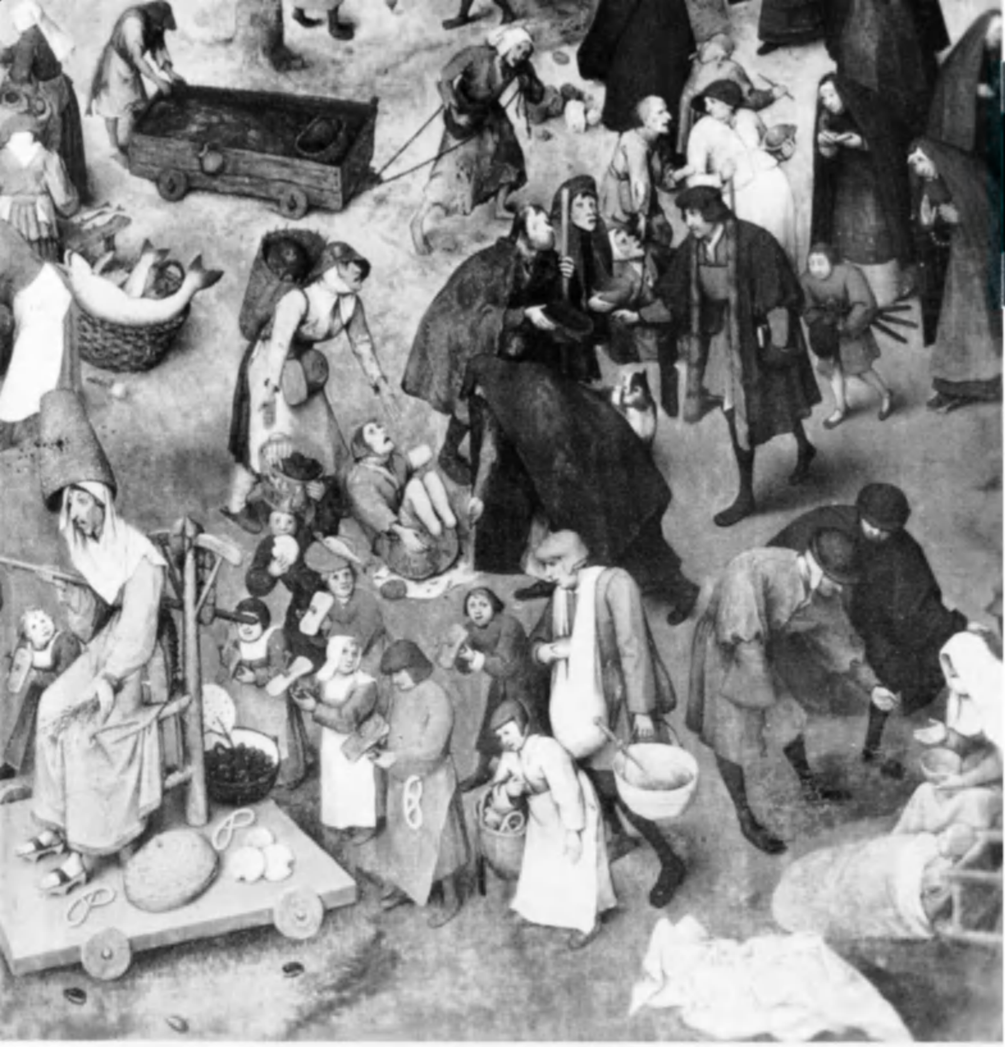
The key to life was thought to lie in the phenomenology of nutrition, in the mysterious "faculties" and "virtues" of food. Natural scientists of the old school saw clearly that the body was responsible for its actions to none but itself—neither to moral standards nor to religious laws. The ancient Delphic precept "Know thyself" was extended to cover knowledge of the physical as well as the inner life. Governance of the passions was united to control over the body's hidden drives and rhythms and over the world of desires and needs. Self-knowledge meant taking good care of oneself.

In this conception of the well-balanced, consciously ordered life, the only limitation on the enjoyment of pleasures was that prudent, carefully controlled balance of the biological and physiological functions which was the basis of physical wisdom.

At the centre of this system of vigilant self-regard was moderation in eating, or dietetics, which became the absolute arbiter of the fate of the body and the harmony of the mind. The delicate balance of the four humours, on which the marvellous edifice of the human body reposed, could be upset not only by foods which were unsuited to the individual "temperament" or by ignorance of the "nature of foods", but also by incorrect proportions and by an unreasonable excess or insufficiency of certain foods.

If that balance was upset, the hell of the disorder and corruption of the humours opened up before the feet (and in the blood) of the immoderate man who was hungry or the exhausted man who had no appetite. The moderate, balanced nourishment of the body, which governed the balance of the mind, was upset by such extravagant forms of alimentary deviationism. The destabilization of the healthy diet caused irreparable harm to the governance of the soul and psyche. It is no accident that our forebears thought that the paradise of delights was identical with unspoiled, incorruptible Eden

Walking Man ***(c. 1950), oil on paper by the Swiss painter and sculptor Alberto Giacometti (1901-1966).***



Too much and too little

Detail from "The Fight between Carnival and Lent", by the Flemish painter Pieter Bruegel the Elder (c. 1525-1569).

by Piero Camporesi

and drug addiction

Photo © Museum of Modern Art, New York. James Lord Collection, New York

Photo © Moravske Museum, Brno

"Palaeolithic Venus" unearthed at Dolnl Vestonice (Czechoslovakla) Is made of a mixture of clay and powdered bone (11.4 cm).

where the perfect moderation of the humours—before Adam's fall brought the scourge of imbalance and immoderation into the world—warded off both sickness and evil. Paradoxically, however, dreams of Eden or the dread of falling into the infernal abyss provoked a short circuit in the form of food neuroses and upset the delicate system of the physiological order.

Even today, the dietary pattern and the fragile mechanism of self-control can be disturbed either by alienating fears or by excessive, inordinate desires. When this happens, compensatory or renunciatory attitudes towards food are bound to be produced.

The appetite for sweet, sugary things that appeal to the senses, and the pleasure of gormandizing, are greatly stimulated by the unconscious desire to recreate artificially the Eden-like happiness of our dreams, and to recapture in some way the delights of the honey, manna and milk enjoyed by our remote ancestors. The uncontrolled bulimia of high-calorie diets is caused by the tormenting dream of re-creation. It is due to a desire to retrieve, through the consumption of restorative, invigorating nutrients, a place in paradise lost, to take refuge in the uncontaminated, contented womb of Mother Earth, to counteract the squandering of life during the daily round, and to exorcize the grim uncertainties of the future by means of food.

For centuries, the vain hope of being able to prevent entropy and the dissipation of heat and energy has kept alive the myth of the tonic, the fortifying cordial, the miraculous elixir of youth which will restore the life-force and bring back lost happiness.

Anorexia, on the other hand, expresses a premature, much-feared descent into an underworld of darkness and bitterness, hunger and thirst. It marks the defeat of the libido by the death instincts and a surrender to the decay of the flesh. It is a symptom of an irresistible desire to taste the perverse pleasures of the death throes by deliberately and gradually anticipating the moment of decomposition.

In the allegory of the drama, the battle between fat, jovial, cheerful, sanguine Carnival and dismal, melancholy, emaciated Lent, symbolized the conflict between the two great principles that govern life (Dante's two "great powers") and preside over the destiny of the world, the two temptations, and the call of the negative and the positive: the rift between

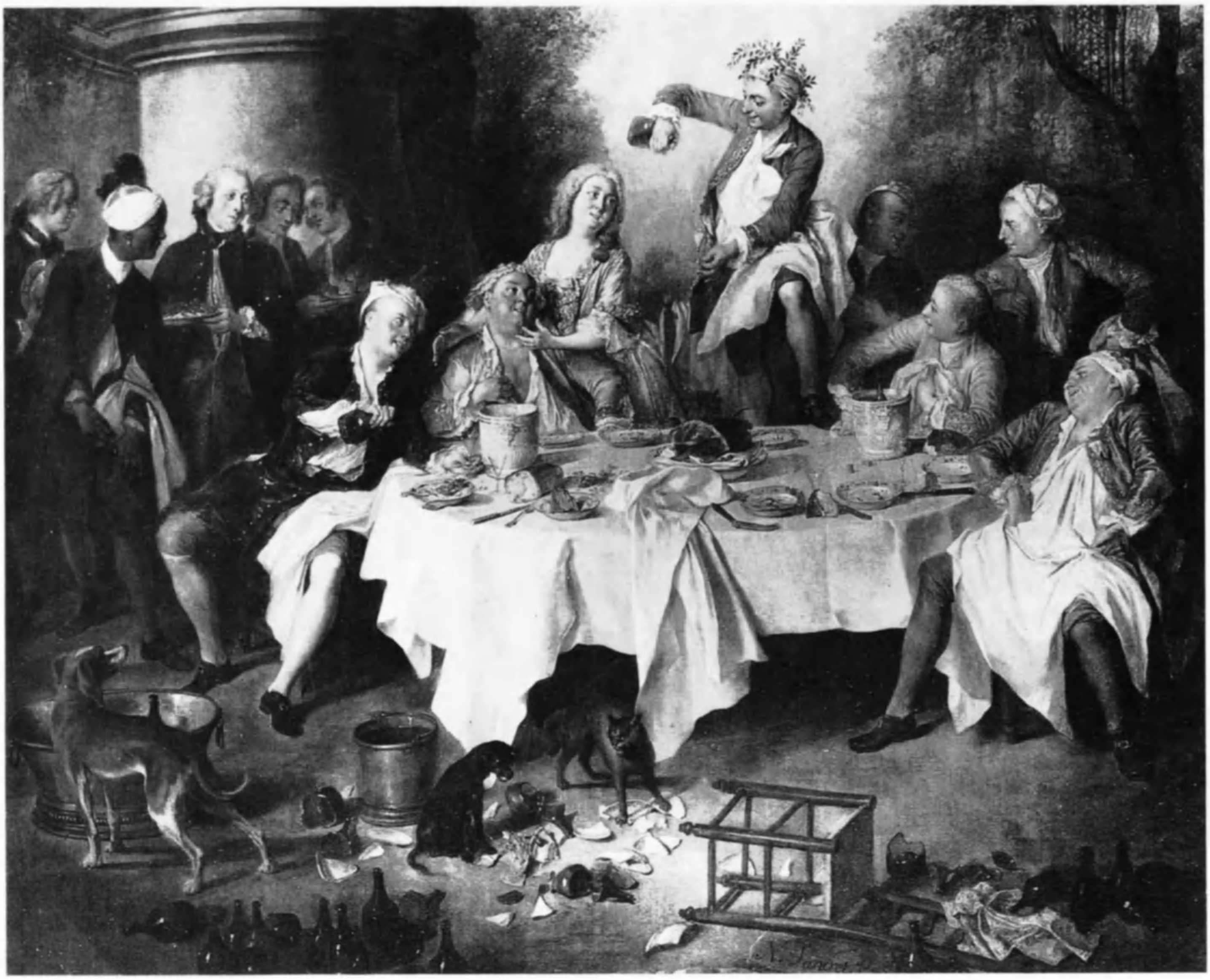


Photo © Giraudon, Paris. Musée Condé, Chantilly

"The Ham Lunch" (detail) by the French painter Nicolas Lancret (1690-1743).

night and day, the stages of life which alternate between the two opposite poles of intensification and diminution of the vital forces.

The dream of longevity, of returning to the age of the patriarchs, the various formulae and secrets for delaying the onset of old age and lengthening the lifespan, as well as the opposite temptation to shorten life, to reject it by freeing oneself from the primordial life instinct, and to lighten the weight of the flesh once and for all—both these impulses are expressed in a pathological appetite or the lack of it, and quantified accordingly. Both originate in the logic of lack and absence, in yearning for lost happiness. For some, happiness was to be recovered at all costs; while for others, it was irretrievable.

Scepticism about life, failure to achieve fulfilment, a frustrating awareness of the wretched limitations of the human condition, confined in both space and time—such are the motives behind the desperate search for alternative solutions. They lead people to build dream factories for themselves, producing artificial paradises to push back the narrow confines of biological necessity and put back the clock of life, of history and of inevitable social change.

In all ages and all cultures, man has felt the need to recreate a time which is non-temporal or timeless, outside history, and to regain an Eden-like condition in a different place, to invent a different abode by going back to the prehistory of the ego, to divide man's earthly lifetime into an infinite number of ages and to reconstruct it according to a new geometry. This need has led to a long and dramatic search for "mediators of oblivion", ranging from food and drink that produce euphoria, to tonics and cordials that bring elation and conviviality, philtres and other magic potions, and insidious hallucinogenic substances.

Ritual drugs (fungi, herbs, leaves) have been used in some religious practices to help people expand their consciousness, explore the realms of the unseen world by embarking on imaginary journeys, and make contact with the celestial spirits that preside over the cosmic order. (The fumes of the tobacco used by Amerindian cultures and of the incense used in the Christian liturgy are like frail olfactory threads intended to make communication easier and help people to understand messages from the unknowable.) These drugs have long been a potent means of magical and religious communication. Institutionalized by the liturgy and ordered by the sacred calendar, the hallucinogens used in worship were deeply rooted in the collective culture of the social group which used them and kept them under control.

Society today is largely desacralized; and now that the regulated use of drugs for a specific purpose has been abandoned their consumption has become a dangerous experiment undertaken by individuals, a desperate attempt at personal escape, an act of negation that marks the disintegration of the tribe and a lawless attempt to escape from the body of society envisaged as a grey, oppressive prison, without light, colour or fragrance. ■

PIERO CAMPORESI, *Italian cultural historian and essayist, is professor of Italian literature at the University of Bologna and visiting professor at the Ecole des Hautes Etudes en Sciences Sociales in Paris. He has published a number of works on the anthropology of literature and the history of popular cultures, which have been translated into several languages.*

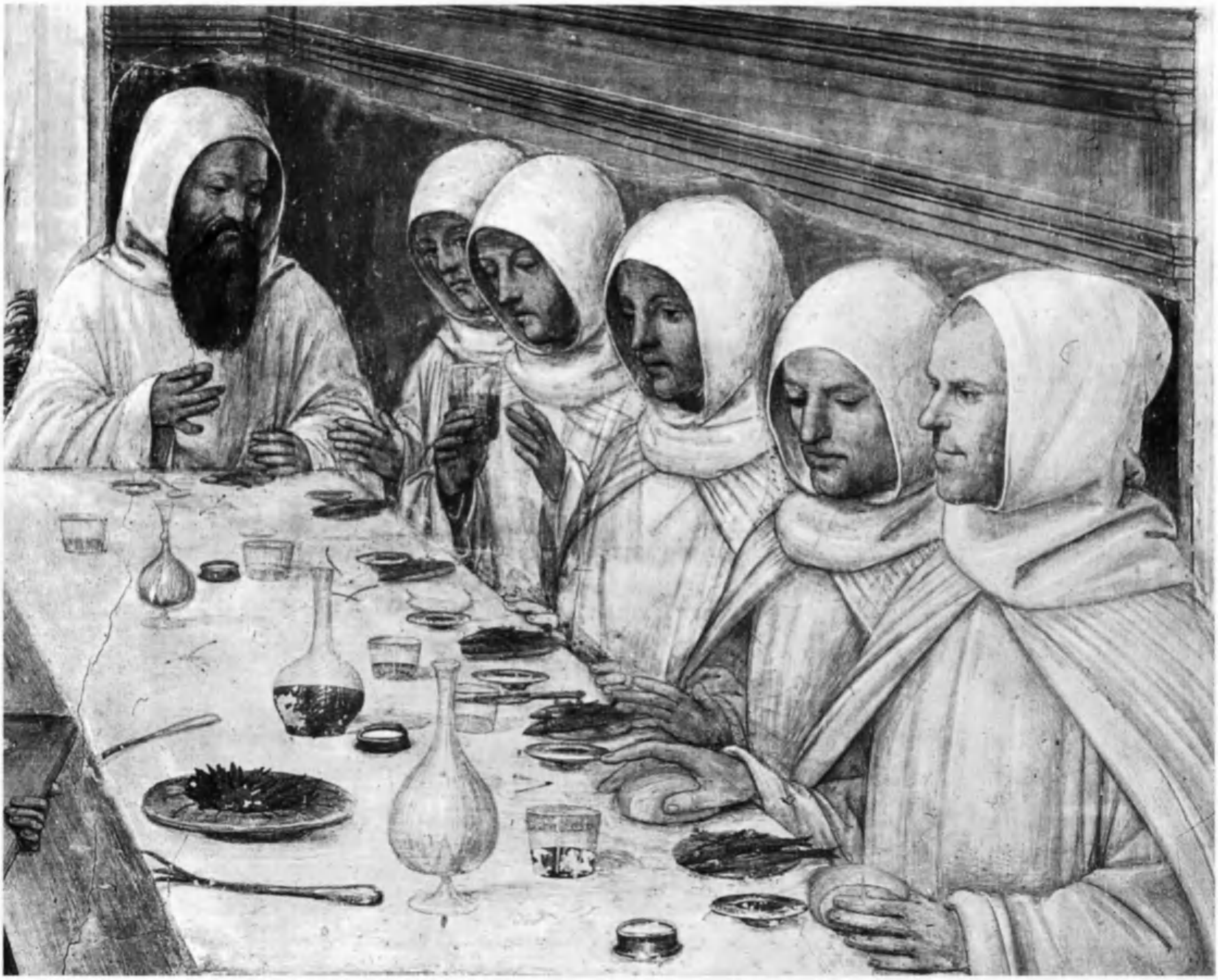


Photo © Scala, Florence

Detail from "The Meal in the Monastery", a fresco by the Italian painter Luca Signorelli (c. 1445-1523). The fresco, which depicts the life of St. Benedict, is in the abbey of Monte Oliveto, near Siena.

Food shortages and food aid

EXCEPTIONAL climatic conditions, such as the widespread and persistent droughts that have caused great hardship in sub-Saharan Africa in the last decade, are usually accompanied by severe food shortages. The effects of these climatic hazards last longer than those of any other natural catastrophes and include crop failures, risk of epidemics, and large-scale migration from rural areas to better-fed towns and cities.

Other factors which have an impact on food production and consumption include the current world economic recession and the imbalances stemming from it—higher rates of unemployment, falling national income, increase in external debt—which in many developing countries are leading to deteriorating living conditions and malnutrition. In some regions the situation has been made much worse by civil disorders or war.

At the end of 1985, the Global Information and Early Warning System of the Food and Agriculture Organization of the United Nations (FAO) reported that 11 countries were experiencing abnormal food shortages—6 in Africa, 4 in Asia and 1 in Central America. The situation had improved considerably since 1984, when the total was 34 countries (25 in Africa, 6 in Asia, 2 in Central America and 1 in South America), mainly because of better weather conditions and increased food production in sub-Saharan Africa.

At the end of 1985 FAO estimated that shipments of food aid in cereals had amounted to some 12.5 million tons in 1984-1985, 2.7 million tons more than the previous year. This significant increase mainly reflected larger shipments to Africa. The estimate of commitments of food aid in cereals for 1985-1986 was much lower, since increased rainfall had had a positive effect on Africa's food aid needs. ■

Source: *The State of Food and Agriculture 1985*, FAO Report.

Food aid and food habits

by Jeremy Shoham and Bruno Stainier

Photo Tortoli/FAO, Rome

A cloud of locusts almost blots out the African sky.

DROUGHT, floods, locust plagues and other disasters can dramatically dislocate families from their normal environment. Households may then be forced to rely on donations of food to survive, and as a result changes in food consumption habits may occur. A number of questions have been raised about food aid of this kind. Is it likely to alter food habits? If it does, will such changes be to the benefit or detriment of individuals? How will such changes subsequently affect local and national economies? Might they establish a dependence on imports if local agriculture proves unable to adapt to altered tastes?

Questions about the potential effects of emergency food aid programmes are particularly pertinent at this time, in view of the possibility of increasingly frequent food emergencies in many parts of drought-prone and war-affected Africa. The beneficiaries of emergency food aid are likely to become increasingly dependent on the food ration they receive, and in some cases may have to endure the situation for several years. Most major donors make every effort to supply foods traditionally used by intended beneficiaries, but this may not always be possible if such foods are not available among the surplus food commodities stored in donor countries. Local purchases may also be problematic in food emergency situations as food scarcity causes inflation.

It is convenient to distinguish between emergency programmes which bring food aid to indigenous populations, and refugee feeding programmes (although refugee aid is also usually described in the early stages as emergency aid). The distinction may be important in its implications for food habits, since emergency programmes are generally of shorter duration than refugee feeding programmes and receive more traditionally consumed foods, as donors have a greater chance of finding suitable short-term stocks.

Also, emergency food aid recipients will not necessarily receive a full subsistence ration and may well continue to consume some local foods, while refugees are likely to be totally dependent on the ration for some time. While these factors may make food habit changes less likely among emergency programme recipients than among refugees, the fact that such populations may be considerably larger than refugee populations suggests that if food habit changes did occur, their effects on local agriculture would be far more significant and diffusion to other population groups more probable.

The World Food Programme (WFP) supplies the bulk of refugee food aid. Generally, at least three commodities are provided: cereal (400 grams), either maize, rice or wheat; oil or another fat (30 grams); and a protein source such as pulses or dry skimmed milk. In some programmes WFP also provides fish, meat or cheese. The total ration usually supplies upwards of 1,800 kilocalories* a head. However, in emergency rations the WFP may not be the only major donor, so that such rations are limited both in terms of the number of commodities and quantities. The main commodity is a staple food, cereal, associated if possible and if necessary with fat. The average ration provides about 1,400 kilocalories, and 40 grams of protein are recommended.

Many factors influence food habits, and people never eat simply to satisfy their physiological needs for various nutrients. They eat to achieve satiety and they eat foods with certain textures which they like. Colours also play an important role, as do cultural, social, economic and demographic factors. Some of these factors may dictate that certain foods are prohibited, and in some situations a radical change in food habits, externally imposed, may amount to a symbolic breaking with society. Hence, in the 1944

---

* The prefix *kilo* is commonly omitted from the term *kilocalorie*, and the "calories" counted by dieters are in fact kilocalories.

Bengal famine, many rice-eating Bengalis preferred to starve rather than eat wheat flour provided by an aid programme.

The provision of food aid could affect food habits in many ways. It may, for example, cause a reduction in the price of locally produced substitutes and a subsequent fall in agricultural production in response to the low price. Increased quantities of food aid would then be requested to fill the resulting agricultural deficit and the increased availability of the food aid commodity would gradually encourage altered food habits. In many cases the change in food habits would probably require little encouragement. For example, the availability of wheat and rice food aid allows rural as well as urban consumers access to staples which are considered by many to be better foods. However, in spite of many studies, particularly in India, there is no firm evidence that long-term food aid is a disincentive to local agriculture.

In contrast there have been no studies on the effect of bulk emergency food aid on agricultural production and food habits. Recent evidence from emergency programmes in sub-Saharan Africa suggests that this may be an important omission. In Sudan, for example, dramatic price deflation of the staple grains millet and sorghum in 1985 and 1986 closely mirrored patterns of food aid flow. Prices were actually lower than in 1982, in spite of an annual inflation rate of 30 per cent. Wages were also affected and labour costs on two irrigation schemes tripled over 1984 levels. Food aid appeared to be acting as a work disincentive, with the resulting labour scarcity causing wage inflation. Many large farms around Gedaref were reportedly left unharvested in 1986 because of the squeezing of agricultural profit margins. It seems probable that as a result of this a significant proportion of Sudanese farmers subsequently cut back production of the normal staple and changed their cropping patterns to reduce future risks. Clearly, this has implications for food habits.

Food aid may of course have a more direct impact on food habits. Recipients may react quickly to factors such as taste, ease of preparation and the status attached to certain donated foodstuffs. Some reports on mother/child health, food-for-work and school feeding programmes have revealed the rapid acceptance of new food items. In Sri Lanka a previously untried weaning mixture introduced through mother/child health clinics caught on so quickly that it stimulated local production of vegetables contained in the mixture to the point of self-sufficiency within two years. There are also examples of foodstuffs which have proved unacceptable. For example, the unfamiliarity, texture and odour of fish protein concentrate have caused it to be withdrawn from a number of programmes. Other reports describe situations in which new foods are tolerated rather than wholeheartedly accepted or rejected, as with sorghum-grits in Bangladesh.

Overall, it seems probable that a number of factors militate against enduring or widespread changes in food habits from food aid provided by this type of project, most of which are small-scale with limited national coverage. In India, for example, only 1.5 per cent of pre-school children are reached by the mother/child health programme. Most beneficiaries are only attached to such projects for short or

Photo L. Gubb/UNICEF

A refugee family in an African camp. It is increasingly felt that measures to develop sound nutrition habits should be an indispensable part of food aid and other relief programmes.

intermittent periods. World Food Programme mother/child health programmes only encourage attendance for one to two years, while food-for-work projects attempt to offer employment at a time when there is seasonal slack in labour demand. Most projects also provide only a proportion of food subsistence needs, so that participants consume traditional foods concurrently.

It might be expected that refugee feeding programmes would be more likely to encourage changes in food habits, since many of these programmes are long-term and involve total dependence on food aid. In Asia and Latin America, however, refugee food aid items have been the same as, or very similar to, normally consumed foods. This contrasts with Africa where, for example, the main refugee food aid staple items have been wheat and maize, which have therefore substituted for the more traditional sorghum, millet and teff used by the Somali and Ethiopian peoples. While these donated staples have generally been accepted in the camps, largely because of their convenience and ease of preparation, it is not clear whether long-term use of these staples and other unfamiliar food items will lead to an eventual change in food habits, should these refugees return home.

Some refugee settlements have been allowed to cultivate areas of land, and have therefore managed to grow a proportion of their former staple. Other camps have allowed refugees individual or community gardens where traditional spices, vegetables and other items are grown. But even if refugees learn to grow and process new staples and other foods in the settlements, it may prove difficult for them to do so on their return. Furthermore, as surveys have shown, agriculturalists, who comprise the bulk of refugee populations, are notoriously conservative with regard to certain food habits. This is borne out to some extent by the number of food aid items which end up in local markets as refugees exchange them for preferred traditional foodstuffs.

On the other hand, many refugee populations tend towards a younger than normal age distribution (as vulnerable older segments of the population may have died in the period of hardship leading up to the refugee exodus, or may have been abandoned), and may therefore adapt more readily to changed food circumstances. Indeed, in many camps, children under five will have known no other source of nutrition than refugee food aid.

At present it is impossible to say with certainty whether food aid, and in particular emergency and refugee aid, affects long-term food habits. What is certain, however, is that some changes in food habits, such as greater use of appropriate weaning foods, may be very desirable while others such as those that may create dependence on expensive imports, are tions expand and as emergency programmes recur with greater frequency in those countries increasingly vulnerable to food crises, the need to link food aid distribution with educational and productive activities must be recognized, in order that relief operations of a certain duration may be used as an opportunity to protect and develop sound nutrition habits. ■

JEREMY SHOHAM *is a nutritionist and a consultant on food aid matters with FAO.*

BRUNO STAINIER *is head of the Nutrition Programmes Service of FAO, based in Rome.*

Social Structures and Food Deficiency, a book based on the proceedings of an international seminar organized by Unesco in 1985, will be published later this year in English and Spanish editions. (English edition published by the Unesco Regional Office, Bangkok.)

Food for all

THE world now has the means to attack childhood malnutrition and disease on a massive scale. The lives of over 4 million children have already been saved in the last five years by countries which have mobilized their resources in order to put today's low-cost solutions into effect. But infections and undernourishment still kill 280,000 children every week.

Through its major programme IV, "The Formulation and Application of Education Policies", Unesco is contributing to the fight against this situation by implementing, within its sphere of competence, a series of activities in the field of nutrition, notably through co-operation with other agencies of the United Nations system and non-governmental organizations concerned with nutrition and health education.

Many individuals are also engaged in the struggle against the tragic consequences of famine and undernourishment. One of them is the Greek poet and politician Yannis Coutsocheras who, wishing to remedy a situation which he considers to be unworthy of humanity and also a major obstacle to world peace, has for some years been advocating the proposition that free access to staple foodstuffs should be recognized and practised as a basic human right.

Since 1975, when, as a member of the Parliamentary Assembly of the Council of Europe, he proposed that "the basic food products necessary to humanity should not be subject to market forces and should be declared freely available to all", he has championed this ideal through speeches in the Council of Europe, at Unesco and elsewhere, and also through his writings (including his trilogy *White Hand, Black Hand*). An international meeting is scheduled to take place later this year to discuss ways of implementing his proposal. ■

The Courier

Editorial, Sales and Distribution Office:
Unesco, 7 Place de Fontenoy, 75700 Paris.

Subscription rates
1 year: 90 French francs.
Binder for a year's issues: 62 FF
The **Unesco Courier** is published monthly.
Individual articles and photographs not copyrighted may be reprinted providing the credit line reads "Reprinted from the **Unesco Courier**", plus date of issue, and three voucher copies are sent to the editor. Signed articles reprinted must bear author's name. Non-copyright photos will be supplied on request. Unsolicited manuscripts cannot be returned unless accompanied by an international reply coupon covering postage. Signed articles express the opinions of the authors and do not necessarily represent the opinions of Unesco or those of the editors of the **Unesco Courier**. Photo captions and headlines are written by the Unesco Courier staff. The boundaries on maps published in the magazine do not imply official endorsement or acceptance by Unesco or the United Nations. The Unesco Courier is produced in microform (microfilm and/or microfiche) by: (1) Unesco, 7 Place de Fontenoy, 75700 Paris; (2) University Microfilms (Xerox), Ann Arbor, Michigan 48100, U.S.A.; (3) N.C.R. Microcard Edition, Indian Head, Inc., 111 West 40th Street, New York, U.S.A.; (4) Bell and Howell Co., Old Mansfield Road, Wooster, Ohio 44691, U.S.A.

Editorial staff (Paris)
Assistant Editor-in-chief: Olga Rödel
Managing Editor: Gillian Whitcomb
Editors:
English: Roy Malkin
Caroline Lawrence
French: Alain Lévêque
Neda el Khazen
Spanish: Francisco Fernandez-Santos
Russian: Nikolai Kuznetsov
Arabic: Abdelrashid Elsadek Mahmoudi
Braille:

Research: Violette Ringelstein
Illustrations: Ariane Bailey
Layout and Design: Georges Servat, George Ducret
Promotion: Fernando Ainsa
Sales and subscriptions: Henry Knobil
Special projects: Peggy Julien

All correspondence should be addressed to the Editor-in-chief in Paris

Non-Headquarters editions
German: Werner Merkli (Berne)
Japanese: Seiichiro Kojima (Tokyo)
Italian: Mario Guidotti (Rome)
Hindi: Ram Babu Sharma (Delhi)
Tamil: M. Mohammed Mustafa (Madras)
Hebrew: Alexander Broîdo (Tel Aviv)
Persian: H. Sadough Vanini (Teheran)
Dutch: Paul Morren (Antwerp)
Portuguese: Benedicto Silva (Rio de Janeiro)
Turkish: Mefra Ilgazer (Istanbul)
Urdu: Hakim Mohammed Said (Karachi)
Catalan: Joan Carreras i Marti (Barcelona)
Malaysian: Azizah Hamzah (Kuala Lumpur)
Korean: Paik Syeung-Gil (Seoul)
Swahili: Domino Rutayebesibwah (Dar-es-Salaam)
Croato-Serb, Macedonian, Serbo-Croat, Slovene:
Bozidar Perkovie (Belgrade)
Chinese: Shen Guofen (Beijing)
Bulgarian: Goran Gotev (Sofia)
Greek: Nicolas Papageorgiou (Athens)
Sinhala: S.J. Sumanasekera Banda (Colombo)
Finnish: Marjatta Oksanen (Helsinki)
Swedish: Lina Svenzén (Stockholm)
Basque: Gurutz Larrañaga (San Sebastian)
Thai: Savitri Suwansathit (Bangkok)
Vietnamese: Dao Tung (Hanoi)

IMPRIME EN FRANCE (Printed in France) - Dépôt légal : C1 - Mai 1987
PHOTOCOMPOSITION : Ateliers de l'Unesco - PHOTOGRAVURE-IMPRESSION : MAURY-IMPRIMEUR S.A., Z.I. route d'Etampes, 45330 MALESHERBES.

The Courier

For people who care about the rest of the world ...

- A monthly magazine, each issue usually devoted to a single theme
- Stimulating and informative coverage from a wide range of viewpoints
- A window open on the world
- A meeting-place for different outlooks and cultures
- A valuable source of ideas and information on current issues such as development, new technologies, human rights and the rights of peoples, and the cultural heritage
- A powerful instrument in the service of international solidarity and understanding

Courier
Kurier
Correo
Glasnik
Гласник
Курьер
Courier
El Correo
The Courier
le Courrier
LOS OCEANOS
ESPACES MUSICAUX

Forthcoming issues include:

The world of medicine
The baroque
Underwater archaeology
Japan

Join or ask your friends to join our international family of more than 3 million readers around the world.

Annual subscription

12 issues: 90 French francs

The only magazine in the world published in **33 languages**, with 4 (free) language editions in Braille.

Where to renew your subscription

and place your order for other Unesco periodicals

Order from any bookseller or write direct to the National Distributor in your country.
(See list below; names of distributors in countries not listed, along with subscription rates in local currency, will be supplied on request.)

AUSTRALIA. Hunter Publications, 58a Gipps St., Collingwood, Victoria 3066; Publications: Educational Supplies Pty. Ltd., P.O. Box 33, Brookvale 2100, NSW; Periodicals: Dominie Pty. Subscriptions Dept., P.O. Box 33, Brookvale 2100, NSW. Sub-agent: United Nations Association of Australia, Victorian Division, 328 Flinders Street, Melbourne 3000. **AUSTRIA.** Buchhandlung Gerold and Co., Graben 31, A-1011, Vienna. **BAHRAIN.** United Schools International, Arab Regional Office, P.O. Box 726, Bahrain. **BARBADOS.** University of the West Indies Bookshop, Cave Hill Campus, P.O. Box 64, Bridgetown. **BELGIUM.** "Unesco Courier" Dutch edition only: Internationale Drukkerij en Uitgeverij Keesing, Keesinglaan 2-20, 2100 Deurne-Antwerpen. CCP 000-0012775-68. French edition and general Unesco publications agent: Jean de Lannoy, 202 Ave. du Roi, 1060 Brussels, CCP 000-0070823-13. **BRAZIL** Publicaçoes Tecnicas Internacionais Ltda, Processing Dept., R Peixoto Gomide 209, 01409, Sao Paulo SP. **CANADA.** Renouf Publishing Co. Ltd., 1294 Algoma Road, Ottawa, Ontario K1B 3W8. STORES: 61 Sparks Street, Ottawa, 211 Yonge St., Toronto. SALES OFFICE: 7575 Trans Canada Hwy. Ste. 305, St. Laurent, Quebec H4T 1V6. **CHINA.** China National Publications Import and Export Corporation, P.O. Box 88, Beijing. **CZECHOSLOVAKIA.** S.N.T.L., Spalena 51-113 02, Prague 1; Ve Smeckach 30, P.O.B. 790-111-27 Prague 1 (Permanent display); Zahranicni literatura, 11 Soukenicka, Prague 1. For Slovakia only: Alfa Verlag -Publishers, Hurbanovo nam. 6,893 31 Bratislava-CSSR. **DENMARK.** Munksgaard Export-OG, Tidsskriftservice, 35 Norre Sogade, DK-1970 Kobenhavn K. **EGYPT (ARAB REPUBLIC OF).** National Centre for Unesco Publications, No. 1 Talaat Harb St., Cairo. **FINLAND.** Akateeminen Kirjakauppa, P. O. Box 128, SF-00100 Helsinki. Suomalainen Kirjakauppa Oy, P.O. Box 2, 01641 Vantas 64. Rautikirja Oy, Subscription Department, P.O. Box 1, 01641 Vantas 64. **FRANCE.** Librairie de l'Unesco, 7 Place de Fontenoy, 75700 Paris. CCP 12598-48. **GERMAN DEMOCRATIC REPUBLIC.** Buchhaus Leipzig, Postfach 140, 710 Leipzig, or from Internationalen Buchhandlungen in the G.D.R. **FED. REP. OF GERMANY.** For the Unesco Courier: Mr. H. Baum, Deutscher Unesco-Kurier Vertrieb, Basaltstrasse 57, D5300 Bonn 3. **GHANA.** Fides Entreprises, P.O. Box 14129, Accra. **GREAT BRITAIN.** See United Kingdom. **GREECE** John Mihalopoulos & Son SA, International Booksellers, P.O. Box 10073, 541 10 Thessaloniki. G C Eleftheroudakis SA, International Bookstore, 4 Nikis Street, Athens T 126. Kostarakis Brothers, International Booksellers, 2 Hippocratous Street, Athens. **HONG KONG.** Swindon Book Co., 13-15, Lock Rd., Kowloon. Hong Kong Govt. Information Services, Publication Centre, Baskerville House, 22 Ice St. **HUNGARY.** Kultura-Bushimport-ABT, P.O.B. 149-H-1389, Budapest 62. **ICELAND.** Snaebjörn Jonsson and Co., H.F. Hafnarstraeti 9, Reykjavik. **INDIA.** Orient Longman Ltd., Kamani Marg, Ballard Estate, Bombay 400038; 17 Chitaranjan Ave., Calcutta 13; 36a, Anna Salai, Mount Road, Madras 2; 5-9-41/1 Bashir Bagh, Hyderabad 500001 (AP); 80/1 Mahatma Gandhi Rd., Bangalore 560001; 3-5-820 Hyderguda, Hyderabad-500001. Sub-depots: Oxford Book and Stationery Co., 17 Park St., Calcutta 70016; Scindia House, New Delhi. **INDONESIA.** Indira P.T., Jl Dr. Sam Ratulangie 37, Jakarta Pusat. **IRAN.** Iranian National Commission for Unesco, 1188 Englab Ave., Rostam Give Building, Zip Code 13158, P.O. Box 11365-4498, Teheran. **IRELAND.** The Educational Company of Ireland Ltd., Ballymount Rd., Walkinstown, Dublin 12. **ISRAEL.** Literary Transactions, Inc., c/o Steimatzky Ltd., P.O. Box 628, Tel Aviv 61006A.B.C. Bookstore Ltd., P.O. Box 1283, 71 Allenby Rd., Tel Aviv 61000. **ITALY.** Licosa (Libreria Commissionaria Sansoni, S.p.A.), Via Lamarmora 45, Casella Postale 552, 50121 Florence. **JAPAN.** Eastern Book Service Inc., 37-3 Hongo 3-chome Bunkyo-ku, Tokyo 113. **KOREA.** Korean National Commission for Unesco, P.O. Box Central 64, Seoul. **KUWAIT.** The Kuwait Bookshop Co., Ltd, POB 2942, Kuwait; for the Unesco Courier: Farafalla Press Agency, P.O. Box SAFA 4541, Kuwait. **LUXEMBOURG.** Librairie Paul Bruck, 22, Grande-Rue, Luxembourg. **MALAYSIA.** University of Malaya Co-operative Bookshop, Kuala Lumpur 22-11. **MALTA.** Sapienzas, 26 Republic St., Valletta. **MAURITIUS.** Nalanda Company Ltd., 30 Bourbon St., Port-Louis. **MEXICO.** Librería El Correo de la Unesco, Actipán 66, Colonia del Valle, Mexico 12, DF. **MONACO.** British Library, 30 Bd. des Moulins, Monte Carlo. **NEPAL.** Sajha Prakashan Polchowk, Kathmandu. **NETHERLANDS.** Faxon Europe, P.O. Box 197, 1000 AD Amsterdam. **NEW ZEALAND.** Government Publishing, P.O. Box 14277-Kilbirnie, Wellington; 130 Oxford Terrace, P.O. Box 1721, Christchurch; Alma St., P.O. Box 857, Hamilton; Princes St., P.O. Box 1104, Dunedin. **NIGERIA.** The University Bookshop of Ife; The University Bookshop of Ibadan, P.O. 286. **NORWAY.** Johan Grundt Tanum, P.O.B. 1177 Sentrum - Oslo 1; Narvesen A/S, Litteraturt Jenesten, P.O.B. 6125 Etterstad, N 0602 Oslo 6; Universitets Bokhandelen, Universitetssentret, Postboks 307 Blindern, Oslo 3. **PAKISTAN.** Mirza Book Agency, 65 Shahrah Quaid-i-azam, P.O. Box No. 729, Lahore 3; Unesco Publications Centre, Regional Office for Book Development in Asia and the Pacific, 39 Delhi Housing Society, P.O. Box 8950, Karachi 29. **POLAND.** Orpan-Import, Palac Kultury I Nauki, Warsaw; Ars Polona-Ruch, Krakowskie Przedmiescie No.7. 00-068 Warsaw. **PORTUGAL.** Dias & Andrade Ltda. Livraria Portugal, rua do Carmo 70, Lisbon. **SAUDI ARABIA.** Dar al Watan, Olaya Main Street, Ibrahim Bin Sulaym Building, Riyadh. **SINGAPORE.** Federal Publications (S) Pte Ltd. Times Jurong, 2 Jurong Port Rd., Singapore 2261. **SOUTH AFRICA.** American & Overseas Publications (Pty) Ltd., Subscription Service, P.O. Box 42476, Johannesburg. Universitas Books (Pty) Ltd., P.O. Box 775, Pretoria 0001. Van Schaik's Bookstore (Pty) Ltd., Libri Building, 268 Church Street, Pretoria 0001. Central News Agency Ltd., Group Overseas Periodical Div. P.O. Box 613, Cape Town 8000. **SRI LANKA.** Lake House Bookshop, 100 Sir Chittampalam Gardiner Mawata, P.O.B. 244, Colombo 2. **SUDAN.** Al Bashir Bookshop, P.O. Box 1118, Khartoum. **SURINAME.** Suriname National Commission for Unesco, P.O. Box 2943, Paramaribo. **SWEDEN.** For the Unesco Courier: Svenska FN Förbundet, Skolgrand 2, Box 150 50 S-104, 65 Stockholm; Wennergren-Williams AB, Nordenflychtsvagen 70, S-104, 25 Stockholm; Esselte Tidskriftscentralen, Gamla Brogatan 26, Box 62-101, 20 Stockholm. **SWITZERLAND.** Europa Verlag, 5 Rämistrasse, Zûrich; Librairie Payot, Rue Grenus 6, 1211, Geneva 11, C.C.P. 12-236; Librairies Payot also in Lausanne, Basle, Berne, Vevey, Montreux, Neuchâtel and Zurich. **SYRIA.** Aleppo University Books Establishment, University of Aleppo, Aleppo. **TANZANIA.** Dar-es-Salaam Bookshop, P.O.B. 9030, Dar-es-Salaam. **THAILAND.** Nibondh and Co. Ltd., 40-42 Charoen Krung Road, Siyaeg Phaya Sri, P.O. Box 402, Bangkok; Suksapan Panit, Mansion 9, Rajdamnern Ave., Bangkok. **TRINIDAD AND TOBAGO.** National Commission for Unesco, 18 Alexandra St., St. Clair, Trinidad W 1. **TURKEY.** Haset Kitapevi A.S., Istiklâl Caddesi, No 469, Posta Kutusu 219, Beyoglu, Istanbul. **UNITED KINGDOM.** H.M. Stationery Office, Agency Section Publications CTR, Periodicals Section-Room 008, Nine Elms Lane, London SW8 5DR, and H.M.S.O. Bookshops in London, Edinburgh, Belfast, Manchester, Birmingham, Bristol; for scientific maps only: McCarta Ltd., 122 King's Cross Rd., London WC1X 9DS. **UNITED STATES.** Bernan-UNIPUB, Periodicals Department, 4611-F Assembly Drive, Lanham, MD 20706 4391. **USSR.** V/O Mezhdunarodnaya Kniga, Ul. Dimitrova 39, Moskva 113095. **YUGOSLAVIA.** Mladost, Ilica 30/11, Zagreb; Cankarjeva Zalozba, Zopitarjeva 2, Lubljana; Nolit, Terazije 27/11, Belgrade. **ZAMBIA.** National Educational Distribution Co. of Zambia Ltd., P.O. Box 2664, Lusaka. **ZIMBABWE.** Textbook Sales (PVT) Ltd., 1 Norwich Union Centre, Harare.

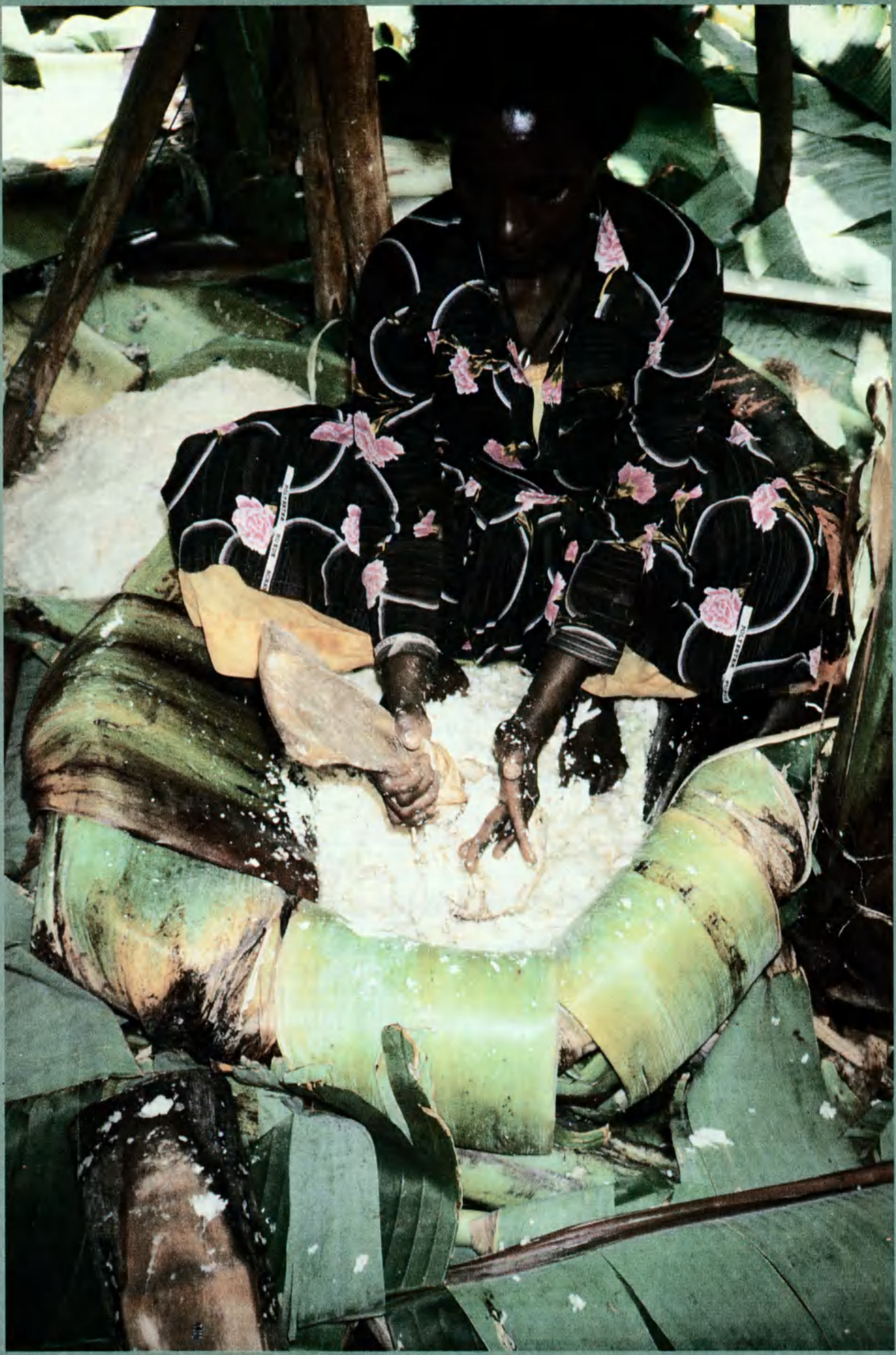


Photo © Anna Ferrolussi, Rome

The false banana tree

The *ensete (Ensete ventricosum)*, or "false banana tree" grows abundantly in Ethiopia's Sidamo region. Paste made from a pulp extracted from the tree and then fermented is shaped into small cakes which are cooked on metal or earthenware hotplates and eaten with butter or vegetables. Although this traditional food is eaten at almost every meal (each person consumes an average of 500 grams per day), studies carried out by Italy's National Institute of Nutrition (Rome) have shown that its nutritive value is very low. *Ensete* consists largely of carbohydrates and is almost totally lacking in proteins and fats. Photo shows a villager preparing *ensete* paste according to the time-honoured method.