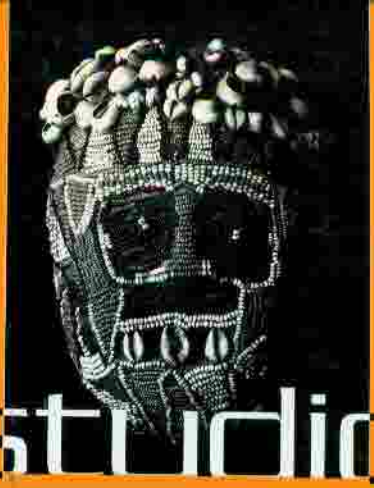

Estudios del Hombre

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Man and Meat

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UNIVERSIDAD DE GUADALAJARA

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ÍNDICE

Introduction

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Meat, in all human cultures, has been and still is a sensitive subject. Highly valued or prohibited, symbolically always very powerful, it has often been at the core of all food lore. This book is an attempt to understand some aspects of the complicated relationship between Man and Meat.

There are all sorts of animal foods. Possibilities range from insects and reptiles to fish, fowl and all other warm blooded animals. Every human society, culturally, has selected and established the animals it considers edible, and this may vary from snails to beef, bugs to fish, rabbit to reindeer. It is not inconceivable that humankind at some point or other has tasted all living creatures.

From a nutritional point of view, animal flesh is not absolutely essential to the human diet. Proteins of animal origin can be absorbed through milk and milk products, as well as eggs. Thus we have several cultures, such as Buddhists and Hindu groups, who, for philosophical or religious reasons, have abstained from the flesh of animals and maintained an excellent level of health. But groups abstaining from all animal products whatsoever have been few and far between. In the post-Pythagorean Western world, these have never established structured societies, and even today, if such groups develop, they are small and not really representative; the very exacting effort they have to make to achieve a diet that provides

all necessary types of protein, relegates them rather to the sphere of philosophical or religious peculiarities.

Conversely, societies where meat is a staple are also extremely rare, and confined today to the Arctic, the best example being the Inuit.

However, one of the most important topics discussed and researched by food anthropologists and primatologists has been the original condition of humanoids: were they vegetarian or meat eaters? It is indeed a major topic still today, possibly because it carries strong philosophical interpretations of the "true" nature of Man. And this remains so even if the general consensus is that our ancestors were, like most primates, occasional meat eaters.

Many differing ideologies have imagined early man as a vegetarian, mainly fruit-eating, a simple gatherer. Others stressed the importance of meat and hunting for our distant ancestors. Patrick Pasquet and Marcel Hladik discuss this topic and show the ambiguous omnivore status of our species and our considerable ability to adapt to various types of diet. This ambiguity and the intricate meandering of the human relationship with meat are analysed by Igor de Garine through the African examples he adduces.

Cultures have shaped human foodways, and in space and time determined what flesh was to be food or whether flesh was to be food at all, and what was inedible or what prohibited. For most cultures today, meat is the flesh of warm blooded animals. It means that the animals have to be killed, unless of course scavenging is considered normal. If indeed our distant ancestors practised this, one must say that it is extremely rare today. Hunting thus has a long tradition all over the world. Yet, there is a peculiar relationship between the hunter and his prey. If various rituals of purification or preparation are performed by the hunters in traditional societies, we can consider that our own western traditions of the hunt can also be related to rituals: typically there are special costumes, sometimes special music, well defined roles, and emphasis on the supremacy of men. In certain cases special blessings are still an important part of hunting, as if the pursuit and killing of an animal needed a formal framework to legitimate this kind of "ritual murder". Even today, whether in Africa or Europe (Mechin, 1992: 124), game retains a special quality, that of strong meat – almost dangerous meat. It was for centuries the privilege of aristocrats, prestigious flesh for prestigious people.

But then, what happens with domestication, when humans started raising animals for their work force, their produce (milk, eggs, and wool) or their flesh and skins? The act of killing is not considered free of danger and here again we have surrounded it with ritual. We do not "kill" an animal: we "sacrifice" it, even when speaking of laboratory mice. In most traditional societies, previous to its consumption by humans, the animal is offered to God, spirits or ancestors. The necessary sacrifice (Kilani, 1996: 14-20) legitimises the consumption. Thus for example in Yao societies of south East Asia, every pig, chicken or cow eaten has previously been duly sacrificed and offered to the ancestors and local spirits. (Hubert, 1985: 53-180). But this applies only to animals they kill themselves: it is perfectly legitimate to go to the market and buy a pound of pork for home cooking. It is the act of killing which requires precaution, as, for example, in the observance of ritual action in Islamic or Jewish traditions: the bleeding of the animal by an established "sacrificer", thus insuring the purity of the flesh to be eaten.

Is the offering up of a life-giving food at the heart of the tradition of sacrifice as a means of communication with unseen forces? Much has been written about this, and it only shows more clearly the importance and necessity of ritual sacrifice in most human cultures. The animal's flesh and blood, that carry power and life, become a natural vector of communication with God, or invisible forces. It links the visible to the invisible, as it does in Christianity through the sacrifice of Christ. We should note, however, that Catholicism has "cleansed" the commemoration of that sacrifice of all "animal" connotations: in the celebration of mass, the bread signifying flesh becomes unleavened wafer bread, totally unlike our staple daily bread, and red wine in remembrance of Christ's blood (now seldom drunk by laymen taking communion) has been replaced with white wine.

But this need for ritual surrounding the slaughter of an animal is not just for "traditional" cultures. Our own western approach to it has been extremely ritualised. How else are we to interpret the complicated and hidden actions within modern slaughter houses? The hiding of all violence, the cleansing of all blood and dirt on the premises, the "hygienic" costumes of the actors, the sharing of the various sequences that lead to the death of the animal, making it difficult to point specifically to one particular "sacrificer"? (Vialles, 1987: 36-41; 80-85) Hygiene and food safety are not

the only reasons. Unbeknown to our rational thinking, we are ritualising the killing, as most humans in most cultures have done in the past.

Why is meat often considered specifically a man's fare? If we speak of man's meat, why not of woman's meat? (Mechin, 1992: 73-86) The ancestral division of labour and the male need for strength have disappeared from our culture, yet the stereotype of red meat and manliness is still going strong in the Western world, with various connotations of course, whether seen through feminist eyes or those of old-fashioned rugby players!

Meat is indeed troublesome, and especially if it is the flesh of warm blooded mammals, so alike our own. That very resemblance has led to a great deal of elaboration in most cultures, and to universal fears, starting with that which is closest to us: our own flesh. Gilles Boetsch tells us of the various ways cannibalism was discussed in anthropological circles of the 19th century. Was it a "savage" trait left over from a dark prehistoric past, and a clear marker of inferior status in the evolutionary chain? Did it disappear when "civilization" approached – western civilization, that is; naturally the only conceivable model? Or was it a practice culturally coherent and understandable internally speaking, that is in "emic", indigenous logic? He gives us an interesting view of our anthropological predecessors and the way this particular topic could be used morally and politically in the context of their time.

Nevertheless, cannibalism has probably been among the most ritualised forms of flesh consumption, and to this day it leads to strong denials of its existence, or to excessive rationalisation, such as in the theory of Marvin Harris (1985: 199-225), which explains Aztec consumption of the flesh of sacrificed warriors by the elite as due to lack of animal protein in their environment.

Meat is still, for many human cultures, a major source of nourishment, and for Arctic populations it is actually a staple, the only substance deserving the name of food, as it must have been for our Ice Age ancestors. Hunting is the main activity, the only source of food, yet here too, the relationship between hunter and prey is specific: respect is shown to the victim who gives its flesh to feed humans (Victor and Lamblin, 1993: 14-21). Seen as the essence of life and strength, meat is, as mentioned by Joëlle Robert-Lamblin, the food par excellence and

animals have been the source of most material goods in an environment where vegetation plays a very minor role.

In other climates, meat has been or has become a major food, as shown by Ricardo Ávila *et al.* for western Mexico. Spanish colonisation brought cattle to the American continent, and in the wake of this event there was developed a craving for meat as the most satisfying and fulfilling of foods, a very human craving as it goes, which has emerged wherever culture and environment have permitted. It permeates all levels of society and I think this phenomenon is comparable to what has happened in other great cattle raising countries of the American continent: Argentina, Uruguay and parts of Brazil, as indeed in certain parts of the United States, such as Texas or Arizona, and some regions of Australia. In these cultures a real meal includes meat, and is indeed centred on it. Any food that lacks meat belongs to the category of snacks or "play food". In this context, we should note the paradox mentioned by Ávila of these meat-centred cultures eating it "overcooked". Indeed, in these cultures, rare or undercooked meat is considered inappropriate, and disliked. Could it be that there is a need to "humanize" it by cooking, as a secondary form of ritual to establish a well-defined line between the "wild" or "savage" and the "human" or "civilized", as mentioned by Lévi-Strauss (1964: 106-107)? What then of our own European gourmet diktats of today, requiring meat to be rare to be really enjoyable? Yet a British friend finds American rare steak slightly revolting, northern European countries sometimes prefer meat well done, like the southern American and the Arab world, thus showing this possibly very old trend of "cooking to humanize".

Other human groups have given a high value to meat, even if, or perhaps because, it is scarce, scarcity enhancing its highly valued status and nutritional importance. Françoise Aubaile, surveying Muslim Mediterranean cultures, shows us how a very little meat can mean a great deal. The various cooking styles and techniques allow people to make the most of each cut and a little can go a long way. Meat and fat are then the symbol of plenty, of prosperity, heralding feasting times. While it is daily food for the rich and powerful, it is highly valued by the poor, and indispensable ritually for the yearly sacrifice of Aïd el Kbir. As in other societies of Central Asia, also of pastoral and nomadic origin, such as the Turco-Mongolian people, fat, meat and bones are the symbol of life, the most highly valued in the hierarchy of

foods for humans. Returning to the Mediterranean tradition, Xavier Medina shows again the importance of meat in societies around this sea, the crossing-point of so many civilizations. This goes against the stereotype of the "Mediterranean diet", in which, according to western nutritionists, fish is the important animal protein, a central food, and meat a negligible part. Clichés lead charmed lives, and most western urbanites today are ready to believe that Mediterranean peoples are fish eaters, mainly vegetarian, and olive oil users. Helen Macbeth, among contemporary researchers has also shown the importance of pork and lard in so called "Mediterranean populations", such as those in Cerdanya (Macbeth, 1996: 103-114). We have here another occasion to reflect on the varying patterns of human diet around the Mediterranean and the necessity of dismantling current stereotypes if only for the sake of scientific exactitude.

This past century has seen the Western world through two great wars, and great fluctuations of food availability for Europeans. What happens when food is abundant once more? We eat more meat. This meat hunger is not necessarily a nutritional need (Ossipov, 2002: 16-26). It reflects once more the powerful symbol of flesh as a provider of life-giving energy and health, common to a majority of human cultures. This is particularly well illustrated by Jana Parizkova's presentation of consumption trends in Czechia. In times of plenty, one can indeed consume too much meat, as a way of compensating for previous want, with hazardous effects to one's health, as shown in the case of young Czech athletes' diets. Yet, humans being unpredictable creatures, we can encounter a totally different situation in Spain, for example. After years of rationing and scarcity, with extremely little meat available to the general population, as described by Mabel Gracia Arnaiz in reference to Barcelona, we discover that a strong anti-meat, pro-vegetarian movement is developing. This trend is strongly felt in northern Europe (Ouedraogo, 1998: 59-76; Ossipov, 1994: 127-136) and is beginning to make adepts in the southern half of the continent, as it is in North America (Bratman, 1999: 87-112). Carme Garcia Gimeno analyses these attitudes in Catalan society, and shows that they stem from many different influences. Whether because of animal welfare and health food movements, environmentalism or on general moral grounds, a meatless diet is seen as purer, healthier and

ethically correct. That this happens in a town where the population suffered greatly and for years from lack of food and poor food, with an almost total absence of meat, illustrates particularly well the emotional and contradictory links we humans have with all flesh.

But, can we today eat meat with a clear conscience? Parallel to the concept of a vegetarian diet has developed the concept of animal welfare. It has taken time to gain hold, and has needed a society of plenty to develop seriously. Particularly strong in the Anglo Saxon world, animal welfare groups not only promote a vegetarian diet, but a diet devoid of all animal products, and also a rejection of animal matter: wool, silk, bone, shell, etc. In a more reasonable and moderate voice, Anne Elène Delavigne gives us an extraordinary view of what is happening in Denmark. Traditionally people who eat meat, especially pork, the Danes have developed a high awareness of environment, conservation, and the health of the planet. Their attitude towards meat is based on moral grounds. Eating meat is all right, as long as the animals have been happy and well treated during their lives. Animal welfare here has taken the upper hand, together with environmentalism. All animal products, including meat, of course, have to come from happy animals, which have led a normal life in natural surroundings. This type of movement is by no means restricted to Denmark: it is present in most of Scandinavia, as well as Great Britain. What is interesting about it is that it does not preach vegetarianism, but moral kindness to other species for the sake of a harmonious planet. Meat here retains its value, both affective and nutritional. Admittedly it is only possible in a society of plenty and surplus. An interesting question would be: is game a happy meat? (Provided it does not come from protected species, of course!) Which raises another moral question: is environmentalism a movement that forces other small, but existing human cultures into a culturally western-centred policy? Is the prohibition of hunting for food (or even of agriculture under certain circumstances) for the sake of environmental protection, but at the cost of survival and quality of life for other human beings, morally tolerable? (Peterson, 2003: 64-71) Are whales endangered if Inuit and other indigenous peoples hunt them for food? Are we right in committing without questioning all human societies to our own way of thinking and managing the world?

Although not directly contemplated in this book, the BSE (Bovine Spongiform Encephalitis) crisis of the past years is in the background: whether in the caring and feeding of animals in Denmark and other Scandinavian countries, or in the fear of meat consumption among new converts to vegetarianism in Spain and other European countries. To put these fears in perspective, in France there was a total of 3 cases of human BSE by the end of 2002 in a population of more than 60 million inhabitants. It must be remembered that in southern Brazil, the landless farmers' movement made it known that they would welcome the European cattle which were being sacrificed, and had little fear of eating the meat (considering the statistical risk) since it was a commodity they hardly ever had access to. Hunger for meat, fear of meat… Humans are never neutral on this topic. M. Kilani (1996: 14-20) has attempted to analyse this fear through the idea that it has grown with the disappearance of the ritual and sacrifice surrounding it, although, as I said earlier, our own ways of slaughtering are indeed ritualised, unbeknown to the public. This crisis, which shook most of the European continent, has revealed a whole new set of representations of food, health, politics, and environment. (Fiddes, 1997: 252-267). It could have become an important topic in sociology and anthropology; on risk, statistics and reality; yet it was taken up mostly by psycho-sociologists and environmentalists, and used as a political argument, but few explored its hidden significance for a number of different cultures. (Fishler, 1998: 45-57; Hubert, 2002: 30-50)

The sharing of the flesh of an animal, whether sacrificed or hunted, can be a good example of how a society is structured, and how kinship systems work. Probably extremely ancient, the ritual of cutting up and distributing the various pieces of meat to those present (and their kin) at the hunt or the sacrifice, often reveals the inner workings of a social system. There is a complex hierarchy of anatomical parts, and a way of selecting and carving them, for each according to his rank and kinship ties. This is particularly well described in Frederic Visner's article for Australian indigenous cultures and by I. de Garine for African cultures. A kangaroo becomes a complex map of related bits and pieces, each with a particular meaning and destination. All the different actors in the hunt and the sharing of flesh have a specific part they can or cannot touch, they can or cannot eat,

and the whole is in complete harmony with the Pitjanjara's way of thinking about the world and its inhabitants, as well as the ties that link one to the other, and the place of that very kangaroo in the human and non-human landscape. The same happens with Arctic peoples, Inuit or other Siberian or North American groups, when they carve and share sea mammals, caribou or any other game. Come to think of it, some of this sharing ceremony can still be observed in some of our still surviving (though who knows for how long) western households, where the head of the house at the head of the table carves the Christmas turkey or Sunday roast, distributing choice pieces around the assembled group at the table. (Castelot, 1972: 238). To the hierarchy of men goes the hierarchy of pieces.

Finally, what is meat and for whom? There are strange meats, even in our own cultures. Lizard in Spain is a choice fare, as described by Luis Cantarero. A man's meat, more than a woman's. We find that same lizard again in North African cultures, described by Françoise Aubaile. Varans, snakes and other amphibians are indeed meat for many peoples, as are monkeys, pangolins, rats, horses, bears, dogs, and indeed any other animal, with hair or feathers, that just happens to be around. Meat is what we decide is meat, from whatever animal, just as we decide what is food and what is not. Yet, humans will express in one way or another that particular link that ties us to the living animal world, by making meat a controversial, troubling issue.

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ARTÍCULOS

Theories of Human Evolutionary Trends in Meat Eating and Studies of Primate Intestinal Tracts

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Abstract

Theories of hominid evolution have postulated that switching to meat eating permitted an increase in brain size and hence the emergence of modern man. However, comparative studies of primate intestinal tracts do not support this hypothesis and it is likely that, while meat assumed a more important role in hominid diet, it was not responsible for any major evolutionary shift.

Introduction

Despite the enormous variation in current human diet in different cultural and environmental settings (Farb and Armelagos, 1980; Garine, 1990), whether or not there is such a thing as a "basic" human diet is a long-

standing and controversial issue both for nutritionists and anthropologists. The evolutionary trends of our ancestors that may shed light on past diets have been investigated via a number of different approaches including studies that compare them with other primates and mammals (*e.g.* Kay and Hylander, 1978; Whiten and Widdowson, 1992); analysis of isotopic composition of fossil hominid bones and teeth (Ambrose and De Niro, 1986); palaeo-environments (Bunn and Kroll 1986), and studies on contemporary hunter-gatherers (Hill, 1982, O'Connell *et al.* 1988; Kaplan *et al.*, 2000). However, the various research approaches available at present cannot yield a definite representation of our past dietary history, especially when the focus is on a long-term study of meat eating.

In spite of a consensus among modern researchers that large amounts of meat were consumed by hominids during prolonged periods of history (Gordon, 1987), the reality of biological adaptation to meat eating is questionable. To address this issue, we will examine data concerning gut morphology that might be used as evidence of adaptive dietary trends.

MEAT EATING AND HOMINIZATION

Based on the remarks of Dart (1953) about stone artefacts and faunal remains associated with Australopithecinae, Ardrey (1976) suggested the "hunting hypothesis", which implies that meat eating was a milestone in hominid evolution. The morphological, behavioural and social consequences of meat eating would have been linked to the complex social bonds and technical skills that imply group organization of hunting parties. A number of speculative debates on this matter, using the baboon model (Devore and Washburn, 1963) and analogies with current human groups of hunter-gatherers (Lee and Devore, 1968), have focused on the relationships between game acquisition, feeding ecology and social organization. The adaptive biological significance of meat eating was summarized by Milton (1999), who came to the conclusion that "the incorporation of animal matter into the diet played an absolutely essential role in human evolution", otherwise the arid and seasonal environment likely to have been the cradle of hominids would not have provided enough protein. The link between a high quality diet (including animal matter) and the enlargement of the brain (characterizing

hominization) has been highlighted by several authors (Martin, 1983; Foley and Lee, 1991; Leonard and Robertson, 1997).

In their most quoted paper, the argument of Aiello and Wheeler (1995) supports this view, proposing the "expensive-tissue hypothesis", related to the evolutionary forces implied in the increase of hominid brain size. They focus on the shift to a high-quality diet and corresponding gut adaptation. A reduced intestinal mass would considerably lower the relative energy cost and permit disposal of sufficient energy to cover the extra-expenditure of a larger brain. The main point of Aiello and Wheeler is based on the relationship between body mass and Basal Metabolic Rate (BMR): the Kleiber line characterizing the relationship between BMR and body size is identical for all mammals, including humans. Since maintenance of gut tissue is as expensive as that of brain tissue, Aiello and Wheeler proposed that gut reduction compensated for brain increase.

Henneberg *et al.* (1998), following this point of view, developed further arguments on the role of meat eating in human evolution. For these authors, the "quantitative similarity of human gut morphology to guts of carnivorous mammals" is a strong argument for a human status of "well evolved meat eater". In fact, one should ask if there is actual evidence of human gut adaptation to meat eating in the past that would have permitted a characteristic swing towards carnivorousness.

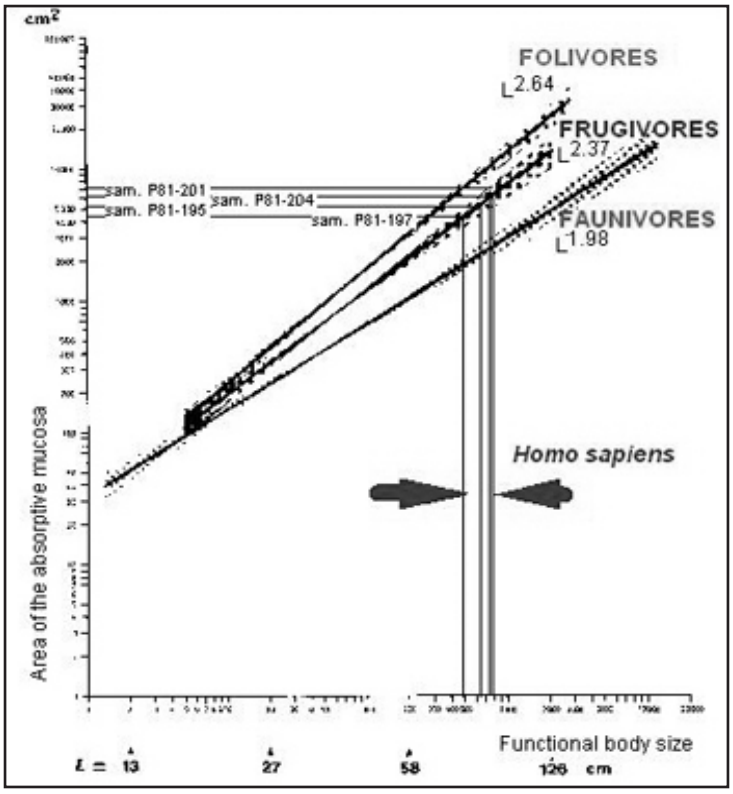
PRIMATE DIETS, DIGESTIVE TRACT AND BRAIN

To support their hypothesis, Aiello and Wheeler (1995) refer to a set of measurements of the intestinal tract of primates published by Hladik (Hladik, 1977; Chivers and Hladik, 1980), with certain adjustments, as compared to the human intestinal tract (data from Aschoff *et al.*, 1971). However, since the sample they used to determine non-human primate gut size (or gut weight) includes several species of primates with folivorous diets rich in fibre (such as gorillas), the expected gut size for a "standard human" – derived from this sample and larger than normally observed – could reflect, to some extent, differences in diet between the reference primate sample and humans (Hladik and Pasquet, 1999).

Gut areas rather than weight were used in Hladik's studies. Data on areas is more accurate than weight because most weighing is performed after the removal of excess moisture of gut parts dissected in water; hence published weights must be used with caution. Furthermore, area measurement of relaxed gut parts was aimed at comparing functional capacity (i.e. absorption and the size of fermenting chambers) in relation to functional body size (Hladik, 1977).

FIGURE 1

Allometric relationship between the area of the absorptive mucosa of the digestive tract and functional body size in three distinct groups of species, according to major dietary patterns (in a total of 117 primates of 50 species, among 180 mammals)



Similar measurements of 4 post-mortem human specimens (samples P81 of Hladik and Chivers) are reported in this graph. Functional body size (10-3L3) is plotted along a logarithmic scale (L= nose to anus for animals; sitting height for humans)

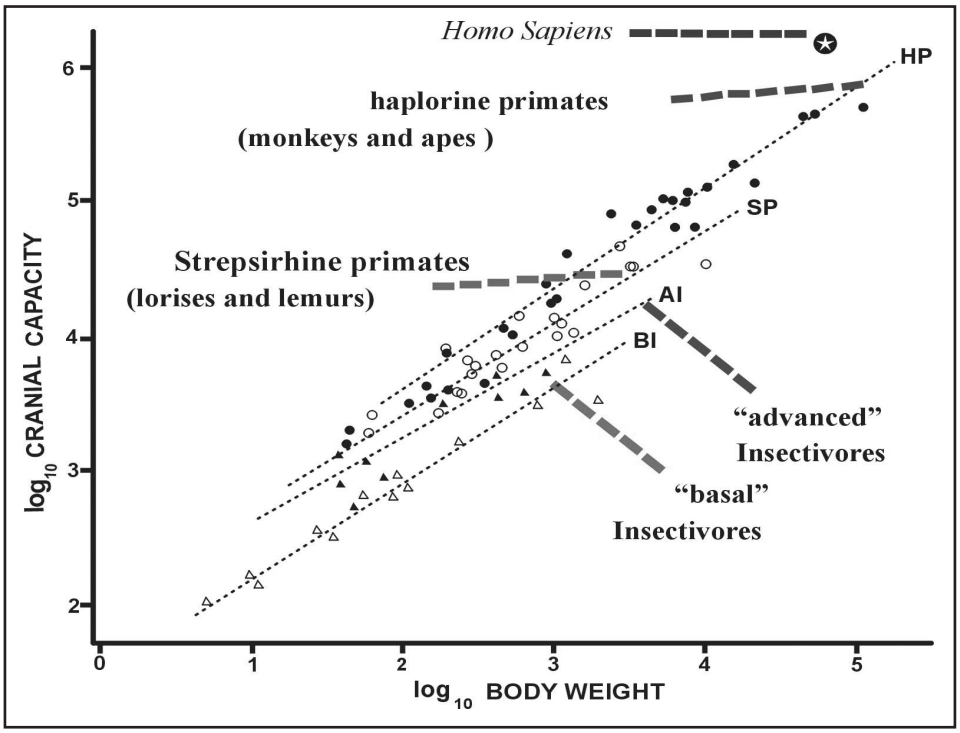
SOURCE: Hladik *et al.*

Figure 1 shows the scaling of the gut area to body size for three groups of species of non-human primates and some other mammals, according to their major dietary tendencies: folivorous, frugivorous and faunivorous. The slopes of the best fit lines corresponding to these three groups differ significantly. Accordingly, the comparison of gut absorptive areas of animals differing in body size would seem to account for different allometric relationships. The absorptive areas vary according to body size, scaled to $L^{2.64}$, $L^{2.37}$ and $L^{1.98}$, respectively for folivores, frugivores and faunivores. A geometrical model was proposed to explain the functional effect of allometry so that animals with high-quality diet (faunivores, and to a lesser extend, frugivores) show a reduced absorptive area, as compared to folivores, assessing for all species a constant flux per unit of mucosal area (Chivers and Hladik, 1980).

Thus, in humans, a clear-cut adaptation to meat eating would imply that the gut allometric relationship coincides with that of the "faunivores", with the lowest absorptive area. This is not supported by the measurements of human gut size that are plotted in Fig 1, all these measurements being grouped on the best fit line of the frugivores (Hladik *et al.*, 1999). These measurements of human guts, carried out by a method similar to that used for non-human primates some time after the study of non-human primates, were not taken into account in the analysis of Aiello and Wheeler.

Returning to the issue of relating increase in brain size to dietary adaptation, there is obviously no direct relationship. Similarly, Martin (1983) in his allometric analysis of the evolution of the mammal brain identified four separate "grades" of relative brain size (Fig. 2) characterized by the slope of the major axis of the relationship between cranial capacity and body weight.

FIGURE 2
Allometric relationships between cranial capacity and body weight in different categories of primates and insectivorous mammals



SOURCE: R. D. Martin, 1983.

Since each of these "grades" includes species with different diets (folivorous, frugivorous, carnivorous), there is no clear-cut relationship between brain size and dietary adaptation. It is thus likely that a compensatory energetic reduction that allows the functioning of the large brain of Homo (with respect to Kleiber's law) may affect all body parts, rather than being exclusively focused on gut tissue.

DISCUSSION: DIET AND HOMINIZATION

Most forest primates have a frugivorous diet, with a supplement of protein provided either by young vegetable shoots and leaves, or by animal matter (mostly invertebrates). This is a most flexible dietary adaptation that allows

them to switch between the various categories of food items available in different habitats throughout the seasons of the year (Hladik, 1988). The ambiguous term omnivore is used either to describe such flexibility or to emphasize a supplement of meat included from time to time in a mainly frugivorous diet. However, it is noticeable that the largest primate species, especially anthropoids, consume mainly vegetable matter to provide their protein requirements. Chimpanzees, that occasionally eat the meat of small mammals, do not receive all their protein requirements from this source, which is anyway rarely available to females and never exploited by the youngest animals (Hladik, 1981).

Considering the unspecialised frugivorous-type human gut anatomy, the dietary history of the genus Homo is likely to display a wide range of variation. During various historical periods, depending on availability and the nutrient content of food resources, our human ancestors would mostly have consumed either vegetable or animal matter (Isaac *et al.*, 1981; Gordon, 1987; Couplan, 1997). The present consensual picture of our past feeding behaviour includes three major phases: (1) After the late Miocene climate shift, hominid feeding behaviour in changing environments progressively shifted from a mainly vegetarian diet to a diet including more and more animal matter, either from hunting and/or from scavenging; (2) the hunter-gatherer way of life and the resulting diet characterized the mid-Pleistocene period, but in the late Pleistocene, during the ice-ages, hominids had to specialize in large game; (3) these successive phases, as described by Gordon (1987), were followed by progressive control of animal and vegetable resources through domestication and cultivation, allowing some human groups to eat more vegetable matter than during previous periods.

Meat was consumed, but it is unlikely that animal flesh (especially lean meat) was a staple for long periods. As highlighted by Speth (1989, 1991), fat and fatty meat provide energy for meat eaters, and lean meat can rapidly become unhealthy if used as an only food. During “lean periods”, meat must be complemented with vegetable matter as an energy source, especially to provide the necessary energy for reproduction.

The high quality foods needed to provide enough energy for the incipient hominids could have been drawn from alternative sources rather than the fat meat of large game. Wrangham *et al.* (1999) have provided a new and very

exciting hypothesis on the possible process of hominization, made possible by the early use of fire for cooking. As far back as 1.9 My (Plio-Pleistocene), the first Homo Erectus tended towards a large body (and brain size), for both sexes, with a reduction of teeth. This was possible by (and likely to be selected for) a shift to a high caloric diet that did not require much mastication. Either a cooked fatty meat or a cooked wild tuber may have provided this type of diet. Cooking in embers considerably improves the taste and texture of both kinds of food and may explain why it could have been rapidly adopted by hominids able to master the technique of fire (with brain increase obviously related to technical skills). However, the best efficiency for obtaining calories would be with cooked starchy tubers (50% more energy from starch after cooking). Furthermore, most wild yam species are non-toxic and available in large quantities throughout African forests and savannas (A. Hladik and Dounias, 1993). Although clearly identified long-lasting hearth locations have never been found by archaeologists before the mid-Pleistocene, the evidence of early utilisation of fire based on charcoal residue fragments mentioned by Wrangham *et al.* would be quite a convincing argument for anyone who has recently visited an abandoned Pygmy forest settlement, and searched for tiny pieces of charcoal. After a few months, no obvious trace of a hearth is visible, although meat and tubers, wrapped in large leaves, have been cooked in the embers by the Pygmies.

Consequently, meat eating certainly played an essential part in hominid history, but the hominid flexible gut anatomy permitted adaptation to various diets. Taking into account the allometric factors in the comparative study of primate gut anatomy, there is no evidence to support theories such as a change in gut anatomy that allowed carnivorousness and a simultaneous increase in brain size. Alternatively, the early cooking of gathered foods – and the nutritional, behavioural and social consequences of this pattern – could have been a major milestone in the hominization process.

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The Trouble with Meat: an Ambiguous Food

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ABSTRACT

In human society, meat is highly prized nutritionally, but possesses a high symbolic value, involving cost and sacrifice. Humans' attitude towards meat eating is ambiguous, as witnessed by cultures that do not condone killing, cannibalism, the sacrificial rituals of slaughter and patterns of abstention, including modern vegetarianism. The "dietary murder" that precedes carnivorousness can either be festive or provoke shame.

THE HUMAN BEING: A MODERATE MEAT EATER

Like all animals, humans need to include nitrogenous substances in their diet. Being an omnivorous animal, man can utilise vegetable proteins as well as animal ones to fulfil his needs of all amino acids necessary to

* With the collaboration of Valerie de Garine.

reach an adequate nutritional status (Dupin, 1974: 87, 89). There is a broad range of human diets. Their caloric content of protein origin commonly represents 11 to 13 percent of the total energetic value of the diet (FAO/OMS, 1973: 10-22). Proteins from plant origin have a narrower and less satisfactory range of amino acids than animal proteins.

Ellen (1994:203) comments that among scientists "the general consensus favours views about an omnivorous diet, progressively shifting towards a higher proportion of non-vegetable matter as technology improved". Perlès (1979: 5) suggests that this drift may go back three million years. It is considered to be a determining factor in the hominisation process (for example Schaller and Lowther, 1969; Rose and Marshall, 1996; Cachel, 1997; Stanford, 1998: 96).

What about non-human primates? Caution is needed when comparing the behaviour of non-human primates to that of past hominids and present-day humans (Garine, 1978: 415). However, it should be acknowledged that primatologists' studies, especially those on apes, have pointed out many features (including ambiguous ones) that are relevant to contemporary human beings. Among non-human primates, meat consumption is occasional and adventurous. It demonstrates the domination of the meat provider (Harding, 1975: 250; Suzuki, 1975: 265). It sometimes involves sharing and cannibalism (Teleki, 1981: 313). It also seems to have a hedonic dimension. It can imply the simultaneous consumption of cellulose (leaves) and animal protein, "wadging" (Tuttle, 1975: 303), reminiscent of traditional human meals which combine a carbohydrate staple and a protein relish (Hladik, 1973: 389; Harding, 1975: 256).

There are all sorts of food derived from animals. Each society has its own range, encompassing insects as well as reptiles, fish and warm-blooded animals. From the total range available, each culture selects those it considers edible, from rats to beef ... or from snails to horses!

HUNTER-GATHERERS

It should, however, be pointed out that in no contemporary society, except the Inuit in the Arctic, does meat constitute the staple food.

In French, etymologically the word "viande" comes from medieval Latin, vivenda, meaning "that which sustains life" (Le Petit Larousse, 2003: 1064). In ancient French, it is "food for humans" (Robert, 1969: 1987). This definition reflects the viewpoint of a prosperous civilisation (in which, however, not all individuals have access to meat).
Eaton *et al* (1998: 79) suggest that during the Palaeolithic period the daily energy value of the diet was 3000 Kilocalories, 35% from meat, 65% from plant food and animal proteins, 190 grams of animal protein, and 30 grams of fat. Contemporary figures are similar.

TABLE 1
Meat consumption (grams per day) of populations mentioned in this article

	Meat (g)	Energy in the diet (%)	Animal fat (g)
Prehistory			
Late Paleolithic (EATON and KENNER, 1985)	190	3.5	30
Artic Inuit (GREENLAND)			
Ammassalik (HOYGARD, 1941)	299	93	169
West Greenlanders (HOYGARD, 1941)	319	?	154
Semi Desertic Africa (BOTSWANA)			
!Kung San (LEE, 1979)	280	30	?
Kade San (TANAKA, 1978)	147	18.7	?
Rain Forest (CAMEROON)			
Kola Pygmies (KOPPERT, 1991)	216	19.6	?
Forest Mvae (KOPPERT, 1991)	185	15.8	?
Yasa* (KOPPERT, 1991)	24	2.2	?
Tropical Savanna (CAMEROON)			
Masa* (GARINE and KOPPERT, 1988)	11	0.8	?
Middle Hills (NEPAL)			
Tamang (KOPPERT, 1988)	0.8	?	?
Europe			
France 1990 (COLLET RIBBING et DECLOITRE, 1996)	249	?	?
* Main animal protein food is obtained from fish			

The Inuit

The Inuit residing in the Arctic, where few plant resources are available, have the most carnivorous diet. According to Hoygaard (1941: 55), the

figures are the following: fresh mammals (mostly seal) 54%, stored food of animal origin (mostly seal) 22%, fresh fish (mostly cod) 16%, imported vegetable foods 5%, native vegetable foods 2%, birds 1%. In a diet of 2800 Kilocalories, the Ammassalimiut Eskimo consumes 299 grams of animal protein, 169 grams of fat, and 22 grams of carbohydrates per day. The West Greenlanders utilise 319 grams of animal proteins, 154 grams of fat, and 35 grams of carbohydrates. The author stresses the importance of fat providing calories in a cold climate; and adds that an Eskimo, contrary to the accepted idea, cannot ingest daily more than 2.5 kg of boiled lean meat, even during a strenuous journey (ibid: 57). This figure is quite high. Today, although carbohydrate consumption is favoured by sedentarisation and the assistance policy of the Danish government, the diet still consists of 90% animal food and 10% vegetable foods. The consumption of lipids is still high, and Robbe (1994: 169) suggests that it is necessary for an adequate metabolic use of the protein diet, eliminating the nitrogenous residues. Looking into dietary sources of metabolic fuel, Draper (1977: 311) mentions the following figures for adult Inuit: (i) pre-modern Arctic Eskimo, protein 32%, fat 66%; (ii) contemporary villages – Wainwright: protein 25%, fat 43%; Point Hope: protein 22%, fat 35%. In comparison, the modern US diet consists of: protein 12%, fat 42%. After a detailed analysis of the nutrient content of the diet, mainly consisting of animal protein, he concluded that "the native diet is capable of furnishing all the essential nutritional elements when prepared and consumed according to traditional custom". In a more recent study, Borre (1991: 57) agrees with this, but points out the low content of calcium, vitamin C and carbohydrates.

However, contrary to the officially held opinion of Western nutritionists, it is possible to conclude that whole populations can adapt themselves to diets with much more animal content than 13% of the total energetic value (Eaton *et al*., 1988: 79). Even Caucasian individuals, such as the explorer Steffanson and his team, were able to do so for one year. These observations underline a certain physiological capacity to adapt to a carnivorous diet (Saffirio, 1975: 86). This should be taken into account when discussing the possible vegetarian or carnivorous origin of man. It conforms to the consensus to which Ellen (1994) referred above.

Other contemporary hunter-gatherers

Recent observations in Indonesia shed light on a new area where high consumption of game meat (mostly of the bearded wild boar, Sus barbatus barbatus) is recorded (Caldecott, 1988; Puri, 1997; Bennett and Gumal, 2001). According to Dounias (2003), among the Tubu Punan of Eastern Kalimantan, meat consumption varied between December 2001 and June 2003, according to the availablity of forest fruits, from 113 to 392 grams per capita per day.

According to Lee, the !Kung San of Botswana consumed 230 grams of meat per day and 510 grams of vegetable products, meat only representing 30% of the total weight value of the diet (Lee, 1979: 270). Tanaka (1976: 112) mentions 220 grams of meat, of which 147 grams are edible portions, and this represents only 18.7% of the total weight of food consumed daily.

Among the farmer-trappers of the Cameroonian rainforest, the figures obtained for the Mvae forest dwellers are 185 grams of meat; and for their neighbours, the Kola Pygmies, 216 grams (Koppert, 1991; Koppert *et al*., 1996). Among both groups, game meat also brings in most of the family income. It is a favourite food, which is offered to visitors and demonstrates wealth and generosity. Smoked meat is a valued festive food. The meat of domestic animals, chicken and sheep, is used during most social events, at family and community level. Beef, mutton and pork are usually purchased from outside. Sheep are slaughtered for wedding feasts.

In relation to this, one should mention the craze for game meat that exists in most urban areas of equatorial Africa. It has been seriously studied in Cameroon (Bahuchet and Ioveva, 1999) and represents a very severe threat to the fauna of the rainforest. Game meat is so highly appreciated that it is possible to find antelope, monkey, buffalo and elephant meat smuggled into France to supply African immigrants in Château Rouge market, right in the centre of Paris (Bouly de Lesdain, 1999).

With the exception of the Inuit and a few hunter populations, meat is a rather rare commodity in contrast to vegetable foods, and this probably contributes to the prestige attached to it in most societies, including our own (“venison” in medieval times) (Jelliffe, 1967: 280).

MEAT HUNGER

Meat appears to be an important element in the diet of many African populations. Lack of it, even temporarily, may be strongly felt. This feeling of "something lacking" has given birth to the ill-defined concept of "meat hunger" in African traditional populations. Pagezy (1989: 38, 42) suggests an explanation for specific groups. Among the Oto, and the Twa Pygmies of Zaire, she observed that the temporary disappearance of this highly appreciated food (fresh meat) from the diet creates severe psychological stress, even though the nutritional value of the diet remains the same, since fresh meat is replaced by an equivalent amount of dried fish. According to this author, this stress may influence the lactating performance of mothers and can result in slowing the growth curve of children. These observations are hardly valid statistically, but they shed light on the possible effect of emotional stress on physiological state. This is an example of psychological factors linked to meat consumption.

Fish and meat in the Marquesan Islands

In the island of Tahuata in the Marquesan archipelago in the Pacific, most of the animal proteins in the diet come from fish (80%), but meat is the favourite food. Animal proteins are of fish origin, which is considered the preferred food in only 44% of cases, while meat (representing only 20% of the proteins) is favoured in 56% of cases. Pork is the meat usually eaten on festive family occasions.

Hunting the cattle, goats and sheep which have returned to the wilderness on neighbouring islands (Motane, Atuona, Hiva Hoa) is a prestigious activity. Besides their scarcity, the danger incurred in hunting these animals in steep mountainous land enhances the prestige of the hunter and the gastronomic value of the game. Killing it and bringing it back home with one's body covered in blood ranks higher than catching large fish (tuna or swordfish) with hand lines. It is one of the few violent activities that confers male prestige in a period when *Pax Gallica* forbids tribal wars. Mention should be made here of the permanent wars and feuds between tribes and valleys, which led to cannibalism until 1867 (Delmas, 1927: 174).

Definitions

The first-hand data we have obtained from the various populations that we studied, mostly in Africa, suggests that the general term "meat" includes in first degree "the flesh of warm-blooded animals, their fat, their blood and their offal" (Robert, 1969: 1857). The definition given by the Littré dictionary in 1959 was: "The flesh of animals we feed on, the red part of the muscle which is the most nutritious part of all animal tissue" (Beaujean, 1959: 2394). This definition reflects our Western values, for many populations may prefer the meat which adheres to the bones rather than the fillet, as is the case in Africa as well as in Mongolia (Hamayon, 1975: 105). It is interesting to note the slightly more cautious entry in the current edition of Le Petit Larousse: "Food obtained from the muscles of animals, mainly mammals and birds (Le Petit Larousse, 2003: 1064), and even more so in the present edition of the Larousse Gastronomique: "Flesh of mammals and birds considered to be food … All the parts of butchered animals liable to be presented to the public for consumption" (Larousse Gastronomique, 2000: 1094-5), reflecting present-day attitudes.

The general consensus is to consider that the noble protein is the flesh of warm-blooded animals. It is either enjoyed or rejected. If culture forbids it, this does not diminish our longing for the pleasure of eating it.

Non-violence and meat

Societies that advocate non-violence demonstrate examples of this meat nostalgia. In the middle hills of Nepal, the Tamang and the Ghale, who practise Buddism and Hinduism, consume very little meat, about once a year only (Koppert, 1988: 64, 84), during the Dasai ritual when buffaloes, goats and sheep are slaughtered in honour of Durga (Kali), the Hindu goddess of death. The kindness and fondness with which animals are treated in daily life contrast sharply with the violence of the slaughtering, the skill of the carving, the subtlety of the sharing and finally the evident gastronomic pleasure derived from eating the meat. On the other hand, ingestion of meat in day-to-day life, even when accidental, may provoke disgust and even result in nausea (Rozin *et al.*, 1997: 74). Here we face one of the major paradoxes of Hindu thinking, which recommends non-violence, but

accepts bloody ritual slaughtering (Zimmerman, 1982: 206). Within the framework of the Buddhist prohibition of meat consumption, the Chinese have developed a refined cuisine termed "su" which attempts to imitate the succulence of meat while using only vegetable products (Mote, 1977: 224). Sabban (1993: 79) describes in this civilisation "the imitation meats, manufactured from soy beans, gluten or other plant foods [that] have in principle the appearance, the consistency of real meat". As the Chinese philosopher Mengzi wrote: "A taste for meat is at world level the most commonly shared penchant" (*ibid*: 81). It is also possible to refer, in the general framework of the Catholic religion, to "fish ham for the lean days in which minced lean fish represented meat, the eel and the tench, both very fatty, representing the lard" (*idem*: 86). In China, at the onset of our era, while sobriety was advocated, poems summoned the soul, asking it to return home to the good life, a life in which such rich dishes satisfy the palate. We read "Oh Soul, come back! All kinds of good food are ready ... [mostly meat dishes] ...ribs of the fattened ox cooked tender and succulent ... stewed turtle and roast kid, served up with yam sauce, geese cooked in sour sauce, casseroled duck, fried flesh of the great crane" (Chang, 1977: 32).

However, we cannot allow ourselves to dwell any longer on such amicable gastronomy, but must poke our noses into the darker aspects of carnivore behaviour.

Cannibalism

Man is a thoroughly omnivorous mammal, in the sense that he can even eat his fellow members. Cannibalism is not only symbolic, it is a material fact. A number of societies have indulged in it and some psychopathological cases have been encountered in our contemporary world. Monestier (2000) has produced a typology on the subject. However, Arens (1979: 165) attempts to show the weakness of many of the witness accounts brought back by European missionaries and soldiers when confronted, from the XVIth to the XVIIth centuries, with the populations of the New Continent, especially the Caribs and the Tupinaba (Metraux, 1967: 45-78). Nevertheless, anthropophagy is not merely the product of the traveller's fevered imagination. The story of Hans Staden, published in 1557, is a first-hand testimony from a spared

prisoner; it may have been embellished, but a good part of it is probably true (Stegnano Piccio, 1988: 122-123).

Enough data is available on prehistoric man to support the cannibalism hypothesis for Neanderthals, for instance, in Krapina, Croatia, (Delluc *et al.*, 1995) or in Moula Guercy, France, (Defleur *et al.*, 1991: 131). It is recorded among Neolithic populations, for instance, in Fontbregoua, France, (Villa *et al.*, 1987) where bones show signs that suggest that human beings have been butchered.

In contemporary times, work carried out on the kuru sickness resulted in a Nobel Prize (Gadjuzek, 1977) and showed that humans were consumed in New Guinea only a few decades ago (Lindenbaum, 1979: 21-24). Reeves Sanday (1986: 4) reports that, among 109 societies where there is serious data on anthropophagy available, this can be attested to in 34% of the cases. Cannibalism appears mostly in the Pacific and in Latin America.

It seems that the nutritional factor is not dominant. Interpreting the human sacrifice of the Aztecs as a means of obtaining enough animal proteins in a demographically exploding population is a thesis that can be challenged (Harner, 1977; Harris, 1978: 188). Closer to our civilisation, the rugby team stranded in the Andean Cordillera after their plane crashed on 13th October 1972, illustrates a case of emergency cannibalism, widely discussed in the media (Mosnier, 1994: 27).

Anthropophagy was practised in Ancient China during the numerous famines that occurred, for instance, under the Han dynasty (Yates, 1995: 161), and in the Middle Ages when Arab visitors and Marco Polo (XIVth century) reported on it (*ibid*: 150). During the Middle Ages, chroniclers mentioned episodes of cannibalism that accompanied periods of starvation (Bonassié, 1989; 1995: 10). Bernheim and Stanides (1992) report that, during the Novgorod famine in the winter of 1230-31, "…some of the common people killed the living and ate them, others cutting up dead flesh and corpses and ate them". Nearer to our times, during the Russian famine of 1919-20, five million people died and it is likely that cannibalism occurred (Dando, 1979: 229). Such horrible episodes may have happened also during the Second World War.

The motivation underlying anthropophagy is complex and not solely nutritional. Someone eats somebody else in order to incorporate his properties.

This, for example, was the case in the cannibalism which sometimes followed headhunting in New Guinea (Zegwaard, 1971: 262). According to Lemonnier (1990: 106) cannibalism might be believed to boost a community's vitality. Sometimes the motives given may be unexpected. In the case of the Guayaki Indians of Paraguay, Clastres (1972: 335) mentions that a human being may be eaten in order to secure a permanent grave for one's soul.

Even gastronomy can be mentioned as a motive. Around 1930, Leenhardt (1937:89) wrote of the Kanaks in New Caledonia: "Among these people condemned to monotonous farinaceous foods, there is a concupiscence for meat… they do not give other reasons for cannibalism and one should hear in the mouths of the elderly their spontaneous memories of past man-hunting: when the yellow flowers of the gaiac tree (*Acacia spirobis*) bloom, it is now that men are fat".

In Polynesia and in the Fijian Islands, revenge and derision were powerful motives. Anthropophagy was often performed on enemies, who had been cruelly tortured before being killed and eaten (Delmas, 1927: 157).

What are we to think about the hungry European crusader who consumed the flesh of Muslims (stewing the adults, cooking the children on the spit) when besieging the town of Maarat Al Numan in 1098 (Bonassié, 1995: 11; Maalouf, 1983 quoting Ibn al Athir and Raoul de Caen: 55)? Today, one may also wonder about the reasons which led the Japanese student, Iseki Sagawa, to savour the flesh of his Dutch girlfriend in Paris a few years ago. And dare we mention the success of a recent novel: "Hannibal"? (Harris, 2000). Anthropophagy is not restricted to remote tribal cultures; it also appears in the cultural patrimony of Western civilisations.

The monstrous nature of cannibalism has been depicted in Greek Antiquity. In a Greek myth, Chronos devours all his children for fear of seeing one of them dethrone him, according to the omens (Hamilton, 1997: 80). This is also the curse cast on the house of Atreus and the characters of the Orestes trilogy. Tantalus, in order to inflict on the gods of Olympus the horror of anthropophagy, killed his own son, Pelops, and served him up to them to eat. He was revived, but the curse pursued the two sons of Pelops. Thyestes committed adultery with the wife of his brother Atreus; and she in turn killed Thyestes' children and offered their flesh to their own father. This tragic malediction underlines the fate of Orestes as described in

Aeschylus' tragedy. Plato and Freud suggested that cannibalism and incest were concrete instances of the surge of a natural, infrahuman, Dionysian stage of life, prior to the establishment of a civilised society (Bousset, 1993: 41; see also Mechin, 1992: 9). They represent deeply-ingrained, compelling tendencies which have to be repressed. According to present day psychoanalysts, the fear of cannibalistic "devoration" is present in contemporary collective imagination. In Euripides' play, "The Bacchae", one of the protagonists, entranced by Dionysian drunkenness, devours her own son (Bousset, 1993: 41). The same author refers to the "…contradictory double dimensions of love and destruction in the same action" (*ibid*: 40), and evokes the Eucharist in relation to it (*ibid*: 47; see also Green 1972: 34). We quote the Gospel according to Saint John, VI, 53-58: "Verily, verily, I say unto you, except ye eat the flesh of the Son of man, and drink his blood, ye have no life in you. Whosoever eateth my flesh, and drinketh my blood, hath eternal life; and I will raise him up at the last day. For my flesh is meat indeed, and my blood is drink indeed. He that eateth my flesh, and drinketh my blood dwelleth in me, and I in him".

The fact that, materially and symbolically, man is an edible food for man may result in a secret uneasiness in relation to meat consumption and an ambiguous attitude towards it.

In spite of his slightly adventurous anthropological views about the primal murder of the father – a tyrant hoarding the females of the primitive horde, Freud (1924: 193) touches on an important point. In most traditional societies meat consumption is a collective venture: it is eaten on ritual or social occasions, communally. The term "communion feast" is well-founded here.

As we saw among African societies, the animals to be consumed are dedicated to a supernatural entity. To eat meat just for pleasure is uncommon and, in most cases, looked down upon. Only wealthy societies, most especially our own Western ones, gorge on it simply for gastronomic delectation. Meat still remains the central point during festive meals at home or in a restaurant.

Solemnity and Brutality of the Nutritional Murder

The evolution of Western societies has contributed to transforming meat into daily, profane and hygienic nourishment, entailing little emotion. It has erased many aspects which are important in less prosperous and less anomic societies. Consecrating meat is an essential step in its consumption in traditional societies. It may be justified by a religious alibi, which may minimise the silent fear of guilt and the secret remorse aroused by the slaughter, ritualising the action and setting it apart from daily affairs. Indian thought is clear on this aspect. According to the religious formulae quoted by Zimmerman (1982: 206): "He does not commit sin who eats meat after it has been consecrated. On the contrary, aside from situations of urgency or distress, there is no worse sinner than he who wishes to father his own flesh by eating the flesh of another without honouring manes or deities" (*ibid*: 207).

Here we come across an important new point. In itself, eating flesh is unavoidably linked to violence (*ibid*: 207). As remarked by Vialles (1987: 4) in relation to contemporary Southern France, "Meat can only be obtained by putting animals to death ... Therefore the animals obviously have to be killed, but we demand an ellipse [a break] between the live animal and its flesh". This hypocritical attitude already existed in Ancient China. Sabban (1993: 86) states that "only the philosopher Mengzi showed sorrow for the animals brought to the slaughterhouse, which did, however, not lead him to deprive himself of meat, but rather to remain far from the kitchen".

Slaughtering an animal implies shedding its blood, an action and a matter which are considered "hot", dangerous and polluting. Blood is never a harmless matter. In European cultures, the more species of venison a hunter killed, the darker his blood became, and the greater was his attraction towards savagery (Hell, 1994: 341-351). Among the Inuit, it appears that the consumption of seal meat gives their blood its thickness and its colour, and allows the seal to survive through the human being, thus drawing the whole process towards humanity (Borre, 1991: 53). Views about blood differ broadly. Consuming fresh blood among the Masai contrasts with the horror it provokes among the Jews. Generalisation would be hazardous. However, most of the time specific individuals (the butchers) are in charge of slaughtering and carving up the dead animals, both

polluting performances that affect them. This is the case of the endogamic "griot" caste in Senegal among the Wolof and Serer. They are musicians and heralds; and they butcher domestic animals and receive pieces for their services, thus having access to more meat than the rest of the population. In the societies of Northern Cameroon, most traditional religious chiefs are assisted by sacrificers, often of slave origin, as they are prohibited from slaughtering animals themselves and handling their meat. In ordinary households, it is the role of the compound chief's sister's son. The identity of the slaughterer is important. His action dedicates the sacrificed animal to a supernatural power, making it a religious ritual performance.

His action also circumscribes the group entitled to partake of the meat. Today still, the kosher meat, out of which all blood has been carefully drawn, is destined for the chosen people, the Jews. The slaughtering and butchering has to be carried out by a sacrificer, the *choret*, who must have high moral standards. Similarly, the *halal* meat of the Muslims implies turning the animal towards Mecca before cutting its throat and shedding its blood. This has to be done by a believer. Blood is a privileged nourishment for the gods, "a precious water" (Soustelle, 1967: 240), a fuel permitting the cyclical maintenance of the universe, as fiercely illustrated by the Aztec human sacrifices (*ibid*: 233). Shedding blood is a serious and symbolically dangerous matter. Smearing it on individuals, altars or idols brings a certain jubilation that accompanies the Aztec or Northern Cameroonian sacrifices as well as domestic pig slaughtering in Southern Europe. Though this excitement is seldom referred to in our hypocritical societies, it is an essential part of what Vialles (1987: 5) calls the "dietary murder" implied by meat consumption.

In traditional societies, the slaughtering is not hidden: it is a key moment in family life; children take part in it. This is the case of slaughtering the pig ("le pêle porc" or "tue cochon") still practised in farms in the French countryside. It specifically implies blood consumption, on this occasion – black pudding ("boudin" in French). Handling meat is not considered disgusting in rural societies. Elias (1939: 99) mentions that, during the Middle Ages, when meat was brought to the banquet table, it was appropriate for a prosperous participant to know how to carve it. Compassion and pity are excluded from these episodes. African societies, such as the Masa and the Muzey, go one

step further. The suffering of the animal is considered a tribute made to the authority of the most powerful deities. It also marks the offering as exclusively theirs. This is why the chickens offered to Mother Earth in the Masa Guisey clan are killed slowly, and plucked and singed while still alive.

An Ambiguous Food

In a less ambitious fashion we may point to the ambiguous character of meat eating. Today Baron Justus von Liebig could no longer celebrate meat and stress the efficacy of muscle meat to restore muscular strength (Fiddes, 1992: 176), on the principle of sympathetic magic. However, since the Pythagorean movement in Greek Antiquity, there has been in Western civilisation a reaction against the barbarity of meat eating (*ibid*: 10; Pouillon, 1972: 18).

Reference could be made here to Christian religions that prohibit the consumption of meat during Lent and on Fridays (Montagné, 1967: 285, 646), seeking purity and mortification through the avoidance of both impure and enjoyable foods. It should be added that the severity of the initial prohibition mellowed progressively into tolerating the flesh of cold-blooded animals (fish) and later of animals pertaining to the aquatic realm: duck, teal, snipe, curlew and even otter, all quite palatable game providing succulent dishes.

Our contemporary period is marked by a revival of vegetarianism, especially among North European and Protestant Anglo-Saxon countries. In the UK, in 1990, there were 3.7% true vegetarians and 6.3% consumers that preferred to avoid meat, a total of 10%. In 1993 the total was 12% (Lepetit de la Bigne, 1993: 33). This trend is in marked contrast with the reputation of beef eating attributed to the British in the XIXth century (Fiddes, 1992: 26). Fashionable ecology and a greater interest in protecting nature, concern about the disappearance of many animal species, emotional reactions to the suffering of animals have all tended to override the gastronomic pleasure of eating meat, spreading views not unlike those of non-violence (such as the Ahinsa of Indian philosophy).

CONCLUSION

What do the various societies we have mentioned have in common with regard to meat eating?

In none of them, except the Arctic ones, does meat represent the highest proportion of calories in the diet. Its consumption is therefore relatively rare compared to that of plant foods.

Consuming meat is an emotionally loaded action: its symbolic value tends to be high. It sets in motion many aspects of material and non-material life. We could be tempted to refer here to the Maussian concept of "total social phenomenon" (Mauss, 1950: 147).

In most societies meat appears to be a palatable and prestigious element. It displays wealth and generosity. Offering it is a central feature of hospitality, and contributes to establishing and sealing communication between individuals and groups. It is a social link and an emblematic marker for all kinds of human groups. Its consumption is often collective and appears as a counterpoint to the social and religious events of individuals, families and communities.

Meat is also a ritual item to be offered and sacrificed: it permits communication with the hereafter. In traditional societies, the use of meat is seldom individual and profane. Most of the time it is ritual and collective, we would be tempted to write "communal".

Its nature is somewhat ambiguous as it arouses some suspicion about how it is obtained. It is the result of a violent action that causes death. In the Northern Cameroonian societies we have studied, there is a symbolic similarity between the human being offering the sacrifice and the slaughtered animal. It incites a certain uneasiness. This appears in the fear of symbolic cannibalism – the abduction of the human soul. The origin of this may raise questions in our minds, but we cannot eliminate the fact that man is an omnivorous animal, capable of consuming the meat of his fellow creatures. Eating flesh seems to be a more serious act than consuming vegetables.

The "dietary murder" that precedes the consumption of meat in traditional societies is a public, festive action that induces jubilation. In our modern society, it is accompanied by a certain feeling of guilt and shame, which increasingly reflects long-standing attitudes that promote restraint, vegetarianism and non-violence.

In addition to concerns about preserving the natural environment and respecting animals' rights, considerations related to good health and longevity appear. Recently, fear of contracting bovine spongiform encephalitis (BSE) has reinforced negative attitudes towards a food that can yield simultaneous pleasure and prestige, but also provoke illness and death.

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A Metaphor of Primitivism: Cannibals and Cannibalism in French Anthropological Thought of the 19th Century

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ABSTRACT

19th century anthropological thought was obsessed with the phenomenon of cannibalism, as reported by travellers, missionaries and incipient scientists, although the theme is ancient and appears frequently in occidental mythology. Anthropological discourse swiftly developed competing views of the phenomenon, ranging from deep-seated atavistic urges (bestialism) to ritualistic practices (culturalism). Here, classification of cannibalistic practices offers insight into this problem.

INTRODUCTION

Among all the criteria recognised as the basis of the "singular other", the consumption of human flesh is certainly the most emotionally significant. More disconcerting or more hateful than incest, anthropophagia was rapidly established as one of the fundamental elements of the structure[1] of anthropological thought in the 19th century. It was however making use of an ancient topic, in the sense that cannibalism has always been established as the classic factor to draw the line between humanity and savagery in the imagination of European societies (Sténou 1998: 52). This construct also appeared in the first reports of western travellers in the Old World (Malaysia, New Guinea, and Africa) and notably in the New World (the Tupinambas of Brazil, the Indians of the Caribbean, the Aztecs of Mexico). It simply reinforced the western founding myths of "otherness" as established by the Egyptians,[2] as well as Greek and Nordic mythology. Thus, Columbus arriving on the northern coast of Cuba would record, according to this tradition, what the Arawak said of other peoples, such as the Monoculi and the Cynocephales who lived further to the east and had already been described in the Western world by Pliny, Saint Augustine and Isidore of Seville (Lestringant, 1994).

All this must be understood in the perspective of western mythologies, of which the Greek world was the epitome of a model of order, in the sense given by Gernet (1982), that of the Cosmos. The Lestrygons, giant cannibals who

devoured strangers, are part of this cosmos, as are the Cyclops in the Odyssey (among them Polyphemus), and they actually formed a mythical fraternity representing a possible inversion of the established order, transforming humans into food. Numerous mythological Greek tales have integrated anthropophagia in the management of conflicts: one rarely eats the other for pleasure – except Tydeus eating the brain of Melanippos, or Candules, king of Lydia, so greedy for food that he devoured his own wife: one eats for vengeance or provocation. Thus, Lycaon prepares a meal for Zeus in which he offers him the limbs of Arcas, his son by Calypso; Atreus killed the three sons of Thyestes and had them served to their father as a course in a banquet; Harpalyce, daughter of Clymenos, the king of Arcadia who committed incest with her, out of vengeance fed her father her three young brothers (of which one would have been her own son); Procne feeds her husband Tereus the flesh of their own son, as vengeance for his cruelty and awful behaviour towards her sister Philomele. The body of man also becomes food in the Odyssey, when Circe transforms Odysseus' companions into pigs (Grimal, 1986). So, from the beginning of the development of Mediterranean societies, "man meat" is a throwback to the biological reality of human nature: the fact that we are animals, thus a possible food, or "consumable" in nutritional terms.

The inventory presented by Amunategui (1971) concerning "beasts" considered edible in our society is particularly instructive. The fact that he begins his book by mentioning cannibals reveals the necessary distance to be maintained between consumers and consumed, disgust and desire. In fact, western myths that include references to cannibalism make of it a sacrificial subject, verging on the religious by any standards, and not as a foodway. Anthropologists of the past century would attempt to interpret anthropophagia from a perspective of knowledge of the diversity of customs to be found in humans. The transition from cannibalism to religious anthropophagia became a necessary transition from nature to culture.

THE ANTHROPOLOGISTS' ANTHROPOPHAGY

Within the first year of the establishment, in 1860, of the Anthropological Society of Paris, an important debate took place on the question of anthropophagia. It began with a paper given by Monsieur de Rochas on the

New Caledonians, which was read during the 24th meeting of the Society, on July 5th 1860, which in turn provoked a discussion on the understanding and interpretation of the practice of cannibalism. Monsieur Boudin, in this first encounter, raised the question of whether this type of practice was of nutritional or ritual nature among these people and if the New Caledonians preferred the flesh of their own to that of the Whites, which was reputed to be too salty, as Dumont d'Urville had heard mention in several archipelagos of Polynesia (Boudin, 1860). Questioned on this subject, Monsieur de Rochas answered that the practice was purely nutritional and that, in fact, the "natives" preferred the flesh of their own (Rochas, 1860). Monsieur de Castelnau then voiced his disagreement, opining that anthropophagia could only have a religious origin. Boudin then argued that a question so important for anthropology should not be lightly set aside, and suggested that it should be included in the themes for a later meeting (Broca, Quatrefages, Boudin, Rochas, Bertillon, Gosse, Castelnau, 1860). Boudin's idea was accepted and French anthropological literature on the subject has been relatively abundant until the end of the century.[3] However, the theme would practically disappear from anthropological concerns after 1914.

Behind this more or less objective and serious discourse, anthropologists moved towards an attempt to establish classification of this phenomenon, in order to better understand the bases of human nature, and to unveil a system of hierarchy of human values in a strongly evolutionist perspective. That is why anthropophagia was classified into different categories which were supposed to be exclusive of each other, proceeding from "the more natural" to "the more cultural".

First came cannibalism for nutrition, which could be sporadic (because of famine, war, accidents...) or "gastronomical" (as described of the Marquesas, but also for New Zealand, Canaques, Papuans, Mexicans, Australians…). This first category, that belonged to "primitivism", was in contrast to a more cultural form of anthropophagia, which was ritualised, either through war or religion.[4] And finally, a form described with much more ambiguity on the part of the anthropologists in so far as they wanted to classify it within the sphere of medicine: what we might call pathological cannibalism.[5]

TABLE 1
Endo- and exo-cannibalism in some societies

	Ethnic group	*Object*	*Mode*	*Source*
Endocannibalism	Tapuyas [strict social endocannibalism] (Rio Grande, South America)	Chiefs (Chiefs), warriors (warriors), children (mothers), elderly (children)	Flesh, bones pounded with maize, hair with honey	Jehan
Endocannibalism	Bhenderwas (Inde - As)	Elderly, incurably sick (family, friends)		Jehan
Endocannibalism	Fuegians (South America)	Elderly females (family)	Flesh	Nadaillac
Exocannibalism	Celebes (O)	Enemies	Heart	Jehan
Exocannibalism	Caribbean	Enemies (men)	Nape of neck, neck, buttocks, thighs, legs	Trélat
Exocannibalism (food) Mixed	Neo-caledonians	Enemies [not Europans, flesh too salty] Enemies + Sorcerers + Subjects		Rochas Montrouzier
Mixed	Bathas (Sumatra)	Adulterers, night thieves, blood relations, prisoners of war	Alive criminals: raw or grilled, salted, peppered and with lemon (must be eaten on the spot where killed) Forbidden to women 60 to 100 individuals a year	Jehan

If, as early as 1890, in *The Golden Bough* Frazer had associated cannibalism with the appropriation of virtues from the dead (Frazer, 1981-1984), French anthropologists rather took their positions from an evolutionist perspective, establishing anthropophagia as a milestone in cultural evolution for the better, since it moved away from the practice of consuming raw dead carcasses. For them, cannibalism signified the passage from nature to culture through the abandonment of the raw for the cooked. Actually, there is a possible rereading of anthropology through the prism of structuralism (Kilani, 1996).

The conclusion of this anthropological discourse seemed to be that the adoption of cannibalism followed by progressive rejection of it by human societies was considered to demonstrate manifest progress towards a model of civilisation; this evolution was described as "obvious" in the diachronic perspective of the evolution of our own societies, but it sometimes had to be "helped along" in the cases of societies that still condoned it to that day. Anthropophagia obviously constituted a phenomenon which situated societies outside civilisation; it demonstrated lack of aptitude to reach civilisation for peoples who still practised it (*Cf.* Corre, 1894: 452); and it could only signify madness or moral deviation when it appeared. (*Cf.* Marie and Zaborowski, 1931). The case of Léger, an imbecile suffering from melancholy, tried in 1824 and condemned to death, is famous in the annals of the anthropology of crime: he raped his expiring victim and ate her still palpitating heart. (Quoted by Trélat, 1870: 340)

One of the main questions to be answered by anthropology of the XIXth century was whether cannibalism had existed since the beginning of time among humans; that is, whether it had been a necessary stage in the process of development; whether it still existed; and in what kind of society it was to be found. The idea was to try to understand whether this practice was proof of the residual, persistent stamp of "nature" (which is to say, "bestiality") or, on the other hand, a special form of cultural adaptation. In this way, cannibalism would be described successively in terms of persistent savagery and animality, particularly for authors like Jehan de Saint Clavien, Corre or Topinard; of decadence for Pruner-Bey; or, at the opposite end of the scale, as a form of social development for Vogt, Girard de Rialle, Letourneau or Zaborowski.

For the partisans of the idea of persistence of animality demonstrated by the practice of anthropophagia, all of whom generally belonged to the school of creationism and monogenism, cannibalism could still be found among certain groups. Jehan de Saint-Clavien, a monogenist, thought that among the "uncivilised" cannibalism was dominant, but "among the civilised nations it is only a sort of accidental phenomenon, isolated, and outside the bounds of civilisation" (Jehan de Saint-Clavien, 1853: 1035). This author however, becomes somewhat confused by the great number of reports and accounts on the subject, and when he attempts to present

the geographical distribution of the phenomenon, he mistakes his sources, and he states at the same time that 1) "Anthropophagia was no more widely distributed in the past than in the New World" (Jehan de Saint-Clavien, 1853: 1035), that 2) "It is useless to reproduce the long list of the anthropophagous peoples of Africa"; and 3), "It is especially in Oceania that one should look for cannibalism" (Jehan de Saint-Clavien, 1853: 1036). Finally he attempts to show that it is a regressive process:

> We must recognise that man in the savage state is only an incomplete and unfinished creature. The persistence of certain appetites and their association to the coarse ideas and ferocious passions which maintain them, only show that the intellectual and moral parts are still stunted in their development. Is saying that cannibalism is one of the distinctive characters of the human species, as certain authors have maintained, not mutilating his nature and taking away from him that which is his essential attribute? If a civilised nation remained cannibal, it would be, in the order of society, what monsters are in the order of the physique. (Jehan de Saint-Clavien 1853: 1040)

Leaving aside ecological or nutritional reasons, anthropology has generally considered anthropophagia to be a phenomenon of a "status of mental inferiority" and not as a characteristic "of beasts and criminals" (Trélat, 1870: 304). Whatever the case, certain authors considered it would affect only the most inferior "races", the most bestial, or those most incapable of the least refinement. Thus, for Topinard, cannibalism,

> the most bestial act to be recorded in the annals of the human species, still exists in Australia, but is progressively disappearing. The majority of natives hide it from the whites […] they would (on the Isaac River) sacrifice plump young girls on certain feasts, and even children would be raised for this ignoble aim. The preferred morsels would be the leg and the hand. What could be the reason for this custom? Everything points to the need for food. There has been talk of expeditions when prisoners were dismembered and devoured. (Topinard, 1872: 289)

In contrast to Jehan de Saint-Clavien or Topinard, who are content to simply pass on reported facts, the physician Armand Corre recommends radical intervention against the practice of anthropophagia in the

establishment of a colony: "But it is not admissible, in any degree whatsoever, that a civilised nation which has become a civilising one should tolerate negative acts. The European does not have to respect ritual sacrifice and cannibalism wherever he finds them well established." (Corre, 1894: 10) For Corre "The white criminal remains European, as the black criminal remains African […and] one could not mention progressive evolution to explain this fact for the black, and mention it at the same time as retrogressive evolution to explain criminality in Europeans." (Corre, 1889: 377)

On the other hand, for the supporters of the "evolutionist" tendency (Vogt, Letourneau, Zoborowski), anthropophagia is certainly an indispensable step for the development of a complex social organisation (Vogt, 1871). "War starts with the origins of humanity. A tribe of hunters does not only hunt game; if this becomes scarce, the enemy himself becomes a source of food", explains Ploix (1872: 26). "It seems certain that cannibalism is not primitive. It appears, at a certain degree of social organisation, consecutive to the development of inequalities which allow certain men to consider others as simple game." (Zaborowski, 1891: 34) Vogt also, makes cannibalism a necessary stage of transition from the state of nature to that of culture: "Man, primitively a fructivore, must necessarily arrive through the progress of his development, to the consumption of human flesh, before then getting rid of this horrid custom through the purification brought on by his religious and humanitarian ideas." (Vogt, 1871: 298) Letourneau tries to demonstrate that human progress is expressed in terms of social organisation and that it cannot be measured in terms of morality, in opposition to the classical statements of creationist and monogenist anthropologists of the times:

> I have already had occasion to observe that, at least among primitives, there is no relation between the intellectual and moral sides of mentality. This point of view is fully confirmed by the study of cannibalism in Africa. Thus, in East Africa, the small population of the Mombouttous, an Ethiopian race, is intellectually superior to its neighbours, for the most part of inferior race and less civilised. They treat them as they would game and organise hunting parties to procure meat. On the battle field they cut up and smoke the flesh of those they have killed. The prisoners are herded, like sheep, to be butchered for meat. (Letourneau, 1901: 109-110, quoting Schweinfurth, "The Heart of Africa")

He then quotes Du Chaillu: "The same moral contrast, extremely interesting for the psychology of human races, has also been observed in West Africa, among the Fans […] who buy the deceased of neighbouring tribes to eat them." (Letourneau, 1901: 110, quoting Du Chaillu, *Voyage dans L" Afrique Equatoriale*) "In other places, customs of more than bestial savagery can coincide with a certain material civilisation." (*Idem*: 110) The lawyer Royer-Collard even attempts to give it legal dimension, writing in the Encyclopedia of the XIXth Century: "It is by respect of the laws and institutions of their ancestors that the Batta are cannibals. These laws condemn adulterers, night robbers and prisoners to be eaten alive." (Royer-Collard, 1869: 186)

Anthropophagia is thus situated in the history of human sacrifice. It is a communion and sacrifice intended to renew, by ritualised cannibalism, the alliance with the supernatural world and to appropriate, by incorporating the matter of the sacrifice, mysterious and powerful forces.

> On all other occasions in which the Australian consumes human flesh or blood, there appears to be superstition and mysticism about the manner of behaving: the sorcerer must taste human flesh at least once in order to acquire supernatural powers; the warrior dips his spear in the blood to make it more deadly; the mother eats her dead child to keep her fertility. Among some tribes, the dead parents are eaten as an act of piety." (Pruner-Bey, 1860)

Strabon had already written that the inhabitants of Ireland thought it respectable to devour the corpses of their parents. Thus they honour them, by giving them a grave which honours them.

Bordier offers another interpretation suggesting that, on the contrary, endocannibalism would have restricted all confidence and sense of mutual security in the midst of a primitive group (Bordier, 1888) and that therefore the equivalent of "matrimonial exogamy", that is human "exophagy" (or exocannibalism), would have had to be established early on. They would then have made war on neighbouring tribes, and these, defeated, were eaten. But, so long as exophagy remained dangerous (because it calls for vengeance) they would have gone back to eating members of their group, mainly criminals. Bordier's demonstration is perfect in the sense that it takes us back to endocannibalism after attempting to get out of it. This

essential concept of endocannibalism was somewhat later formalised by Steinmetz (1896) as the custom of eating one's parents or near relatives. He sees in it a natural remnant of the instincts of primitive man "when he wandered, solitarily, through virgin forests, without realising the possibility of forming a social group of any kind." (Steinmetz, 1896) For Deniker (1900), Steinmetz's theory faces great difficulty in so far as contemporary cannibal groups (such as the Australian tribes) avoid eating their own dead and exchange them with other clans so as to eat non-related individuals. This is what would be observed by Monsignor Le Roy in 1894, among the Fans, when he went up the Haut-Ogoüé in Gabon, where "the dear" deceased were consumed only by neighbours not related to the family." (Le Roy, 1911: 151) But, paradoxically among the same Fans, a criminal, or by default a member of his family, would be killed and eaten as an act of revenge, thus showing that endocannibalism could also be a formalisation of justice and not only a ritual of appeasement to one's ancestors.

Conclusion

The question of anthropophagia is fascinating because it is one of the phobias of the Western World in their encounters with exotic societies. It attributes three causes to cannibalism: necessity, greed and superstition. The regression of this practice can be explained, according to Deniker, simply by the fact that "Ever expanding civilisation makes it decrease." (Deniker, 1900: 27) The diachronic dimension appears important since anthropophagia would be an atavism inherited from our prehistoric ancestors: "A certain number of isolated cases of anthropophagia in Europe, in a civilised environment, without nutritional need, allow us to regard these facts as of atavistic origin, exactly like the teratological persistence of cannibalism among our primitive ancestors." (Bordier, 1888: 71) This would still be present then (in the XIXth century) among the most primitive populations. But the first paradox of cannibalism is that the anthropologists' scientific interest in it developed at the precise moment when it was disappearing, and it seems that before the XIXth century, the western world had lost even the remotest memory of it (Green, 1972).

For the anthropologist today, the problem that remains is how to interpret cannibalism, when nutritional reasons are excluded. Even this exclusion, however, is not so obvious today, since while allowing for the anecdotal nature of reports, or the legitimacy which it can have accorded to the colonial process, there is a revived interest in anthropophagia among the anthropo-ecologists, who are establishing hypotheses of nutritional cannibalism, which Paul Deschamps had already constructed in 1925, around the terms of "want", "famine" and "human raising". Ortiz de Montellano (1978) and Marvin Harris (1979) justified it as an appropriate nutritional strategy in the face of lack of animal protein. Dornstreich and Morren (1974) follow the same reasoning when they explain, for instance, that in medium populated areas of New Guinea, the consumption of 10 adults a year by a group of some hundred individuals would compensate for the protein obtained from a whole herd of pigs.

In fact, the problem certainly resides in the symbolic aspects of the phenomenon, which concern not only western points of view, but also the way we look at "others". Already Jean de Léry in his *Voyage fait au Brésil*, or Michel de Montaigne in his Essais, use the category "cannibal" to shed light on the social logic in position in their own country at that time (Lestringant, 1994). A recent volume of African stories concerning cannibalism illustrates this point of view. Collected from parents or grandparents, these cannibal stories can surprise us today. They reveal a disquieting universe, already described in other terms by different observers (travellers or missionaries), people who found themselves in these cultures as "outsiders". Here, the authors give us an "emic" aspect, that is, as seen from the inside. The Africans tell us African cannibal stories in which the "hunted" are always the narrators, the "cannibals" being the "others"; this takes up the concept of the "other" as an acceptable but phantasmagorical[6] category. These stories might have the structure of tales, but we also know that the tale possesses some virtues, particularly that of being spiritual explorations and also warnings (Bettelheim, 1976). In any case, these tales surely express a certain universality of fear in the face of anthropophagia, the fear of being eaten. Europe also has had its ogres, its werewolves and its ghouls. But the difference in the tales we mention here is that there are no specifically supernatural beings. They are simply humans, and one never

knows who is a cannibal and who is not. Here we have cannibals motivated by greed or pleasure. In other words, a disquieting vision of the world.

We have seen that for the anthropologists of the XIXth century, two theories were in opposition. The first one suggested cannibalism as a necessary stage, common to the development of all human societies, although they failed to demonstrate this scientifically. The second theory explained all social phenomena through religion, without telling us why certain societies were cannibalistic and others were not.

In a famous article, "Table manners, bed manners and manners of language," Jean Pouillon (1972), analysing Freud's writings on the matter, shows the relativism of the prohibition of incest and cannibalism: he indicates that the first is generally justified and often violated, whereas the second is not justified, but respected (Pouillon 1972). Obviously here the interpretation is ethnocentric: our societies have to judge affairs of incest more often than cases of cannibalism. Thus, human flesh (which we never call human "meat") would be, in our culture at least, more of an object of desire than an object of want.

If cannibalism is further distanced from us than incest, it is because it's a stranger to us. "We have talked about love. It is hard to switch from people who make love to people who eat each other," wrote Voltaire in his *Dictionnaire Philosophique* (1994). However, incest prohibition is common to humanity, while cannibalism is not. The prohibition of incest (actually of incestuous marriage, not the incestuous sexual act) is a mark of culture, just as the "cooked". But that is not of the case for cannibalism (its prescription or prohibition have the same cultural status). After all, what anthropologists said about anthropophagia reflected their own representation of the world and not that of reality; they were first influenced by the extravagant tales of travellers, then by the moralizing discourse of missionaries, just as African oral tradition expressed collective anxieties. Thus, in this view, numerous cannibal populations would have perpetrated uncontrolled anthropophagia, eating, almost randomly, any parent or enemy. However, certain anthropologists understood the difference and placed the accent on the ritual aspect of cannibalism. As for marriage, where a group can practise exclusively either endogamy or exogamy, anthropophagia is structured. Its practice and rituals reflect the group's cosmogony. This is why one cannot at

the same time practice exo- and endo-cannibalism, as some authors claimed. (*Cf.* for example Jehan de Saint-Clavien, 1853) In so called "societies with progressive personality enrichment" one goes from the inferior status of adolescent to adult status, then to old, and then sometimes to that of ancestor: death appears then as a necessary step in the ascending progression of man. The ancestor is respected and his body, then associated with indestructible power, must remain within the group, thus justifying endocannibalism. On the other hand, in so-called "warring societies", the adolescent warrior's dream of a perfect death is the one found in the course of valiant fighting, since only the warrior who dies in combat can be elevated to consecrated immortal status; if he escapes death, his status will decrease with age (Bastide, 1970). These societies have a pronounced tendency to value bodily strength and the power of hedonism. In order to take the vital strength of the enemy and increase their own power, individuals of these societies will be more easily prone to exocannibalism. Thus, as opposed to incest, cannibalism, because it possesses rituals, is integrated into the cosmos.

Finally, we can speculate on which is closer to the "savage": the Yanomami who eats his dead ancestor; or the Marind who eats an enemy, aiming at cosmic harmony; or the Westerner who invents industrialised warfare ranging from nuclear bombs to anti-personnel mines, for the gain of political or economic power, yet who is overtaken by violent nausea at the very idea of eating flesh from his own species. In essence, this means that each society believes itself to be the most developed in existence, and that outside its boundaries, only chaos reigns. According to Jean Pouillon (1972), the existence and perpetuation of a culture determines who its members are. But, while we may define our own culture in terms of the difference between ourselves and others, we still do not accept the principle of symmetrical relations between cultures.

NOTES

1. Anthropophagia: the eating of human flesh. Cannibal (comes from *cariba* Caribbean): it is said of an animal that takes nourishment from the flesh of an animal of the same species.
2. According to Juvenal, the Egyptians reported that the Tintirites had eaten an enemy that had fallen into their hands.
3. 49 articles are concerned with anthropophagy in the BMASP between 1859 and 1899; 11 in the *Revue d'Anthropologie* between 1890 and 1909.
4. And after the evolutionist classifications of the end of the XIXth century, anthropologists would suggest new scales of values, starting from an "ecological" vision of cannibalism towards a much more culturalist and symbolic perception.
5. The presentation of the diversity of forms defined by anthropology would often be a subject of voyeurism under the cover of surprise. (*Cf.* Villeneuve, 1979; Monestier, 2000)
6. Arens questions the very existence of anthropophagy, which could simply be a phantasm. "The significant question is not why people eat human flesh, but why one group invariably assumes that others do so." (Arens, 1979: 139). This position was criticised as "revisionist" by Abler (1980) and Forsyth on the face of facts, and ideologically by Vidal-Naquet, 1987. In any case it does not take into account the most tangible facts (for example Glasse, 1963).

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Meat: Between Ritual and Gastronomy

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ABSTRACT

Tribes of certain areas of Africa regard meat eating as an important part of their diet. However, the rules governing this are complex and strict. Different meats have different values and roles. The social, ritualistic and symbolic aspects of meat eating are here explored, together with implied undertones of ritual sacrifice and cannibalism, among other aspects.

EXAMPLES FROM AFRICA

The San and Pygmy hunter-gatherers represent some of the best-known carnivorous societies in Africa, although behaviour with strong symbolical associations in relation to meat can be observed even in agricultural societies.

* With the collaboration of Valerie de Garine.

The danger of meat

A preference for meat can be found everywhere, but not all meats are palatable, or even edible for a self-respecting human being. Among the Masa and the Muzey of Cameroon, this is so in the case of the flesh of dogs, crows, donkeys and kites. Their meat is considered bitter. Here, it is worth mentioning that the range of animals consumed by Masa and Muzey children is broader than that of adults, and may include "junk" foods such as insects or amphibians, which are considered to be too dirty to be eaten by status-conscious adults. Their consumption is considered disgusting or ridiculous, though not perilous.

However, meat is a dangerous food for both material and symbolic reasons. Animal protein has the property of rotting rapidly, especially in societies where the climate is hot and where appropriate preservation techniques are not available. The edibility of meat varies according to its level of decay in different societies. (We could mention here the maturation of meat and the hanging of game in our own society.) For example, the Masa and Muzey have nine different terms to designate the various degrees of freshness of food (Garine, I., 1997: 205). The first term refers to meat which is "so fresh that it may cause nausea"; the second refers to fresh food just ready to eat (the French say "à point"). Then come four terms corresponding to various stages of decay, but which do not preclude human consumption. The last two refer to advanced rotting and carrion. The acceptability range of meats is broader than in our Western societies. However, Masa and Muzey are aware of the health risks (gastric trouble incurred by ingesting "over-ripe" meat) and one might raise the hypothesis that the prohibition preventing small children from consuming animal protein is based on this awareness.

For the Masa and Muzey, most meats are said to be "hot": they belong to the category of foods which are palatable by themselves. "They can be eaten without adding salt. They are so pleasurable that people gorge on them", which can result in diarrhoea.

Symbolically, the meat of totem animals is affected by food taboos of varying intensity according to the society involved. Everywhere, meat is at risk of being polluted. The subject has been abundantly described (for instance by Douglas, 1971) and I shall not consider it at length here. This aspect cannot be dealt with in general terms; each society has its

own concepts. For example, among the Masa and Muzey, flesh can carry three different kinds of pollution. (i) "Yaona". This term refers to the breaking of a customary prohibition or the performance of an action which is contrary to what is considered natural, for instance, a male goat attempting to mate with a ewe, or a herder copulating with cattle. The meat is considered improper for consumption except by the son of the owner's sister (nephew), who acts as the traditional garbage disposal for his mother's brother. (ii) "Tokora" pollution, resulting from killing a dangerous animal or a man. (iii) "Ndagara", which refers to physical and symbolic contact with what is related to death and funerals. For instance, the meat of animals slaughtered on these ritual occasions.

Even if not polluted, meat should not be handled carelessly. Some meats are too "strong", too loaded with magical power to be ingested by everyone. Sometimes the venison of large game, animals which have been exposed to evil powers at work in the wild bush, is forbidden for magically vulnerable individuals, such as pregnant or lactating mothers, or young children. A person has to be sufficiently armoured magically ("*blindé*") to be considered mature enough to consume certain animal species. This is the case with the Gabonese puff adder (*Bitis gabonica*) in Southern Cameroon, which is reserved only for the village chief and elders.

Carving and sharing

We shall not elaborate on sharing meat and game, described at length by, for instance, Altman (1987: 134-146); Bahuchet (1985: 359-375); Lee (1979: 240), and Robbe (1994: 275-285).

The rules of sharing tend to favour the privileged individual: categories such as elderly men (Lee, *ibid*.), the direct ascendant, the brother's mother, the father's sister, and the in-laws. Each society has its own system, but in most cases the hunter is not favoured, although he may receive special parts of the animal, such as the head (among the Masa). He seldom receives the lion's share of his quarry and may even be forbidden any part of it, as is the case among the Aka Pygmies (Bahuchet, 1985: 375). This results in a kind of mutual insurance system, entitling him to a share of meat from other hunters even if he comes back empty-handed.

Even when carving is a crude operation, as among the Pygmies, all parts of the animal are not equivalent, and this is not simply a matter of palatability. The heart, the liver and the head often receive preferential treatment. Among the Masa and Muzey, the liver, especially the pointed lobe ("the male liver") is the favourite ritual offering. This is also the case for blood that is shed, which may be used to soak altar amulets or simply constitute an offering, a privileged fuel, for supernatural beings.

The physical state of meat is also an important consideration, and here it is tempting to refer to Lévi-Strauss' "Culinary Triangle" (1965). In the savannah groups we have studied, raw meat may be perilous. It is bloody and may attract dangerous powers. However, meat which has been barbecued or grilled is not considered serious food, not totally civilised. It is mainly consumed outside the home, in the bush or at the market place. The Muzey consider it rather dangerous to ingest it during ritual offerings, where it is the privilege of small children, who are pure and still close to the powers of the hereafter. The authentic, civilised and serious family foodstuff is stewed meat, mostly consumed as a relish.

MEAT AND PRESTIGE IN AFRICAN SAVANNAH POPULATIONS

The Koma, who live on the Alantika mountains in North Cameroon, display an unexpected attitude towards meat. Although they raise cattle, they only consume 12 grams of meat per capita per day, which represents 1.2% of their total food weight (Koppert, 1981; Koppert *et al.*, 1996: 244). They appreciate game meat, which has become scarce. They reject the meat of goats and sheep, believed to cause itchy skin, and chicken which is considered a disgusting animal. On the other hand, cattle meat is highly valued and its slaughter constitutes the central episode of the main ritual, "the cow dance". It is an important event at family and community level. Cattle slaughtering, and the meat sharing involved in this, enhance the prestige of the head of the household and allow him to rise on the scale of male society (Garine, I. de, 1996: 209). Obtaining recognition and prestige by offering meat on ritual and profane occasions is a universal feature, it demonstrates wealth and generosity.

In Senegal, among the Serer of the Baol region, upon the burial of a wealthy and respected head of family, the members of his age group wishing to honour him announce publicly the amount of cattle they are planning to donate in his memory. A few days later, during a special ritual, a number of these animals are slaughtered and their meat ceremonially distributed to family members and others who attend, enhancing the prestige both of the deceased and of those who offer the sacrificed animals (Garine, I. de, 1962: 260).

Meat among the plains populations of Northern Cameroon (Masa, Muzey, Tupuri)

These three groups are found on the flooded savannah of North Cameroon and South-West Chad, close to the Logone river. They practise a mixed economy: farming, fishing and raising cattle, sheep, goats and chickens. They also do some small game hunting. However, the meat is seldom consumed.

Preference and prestige

Meat is a highly prized food, both in terms of palatability and prestige. It is mostly served as a relish to accompany the main cereal food. Like the staple, it rates high among preferences. It is offered to a guest to demonstrate the host's wealth, generosity, luck in hunting or herding, and even the support he receives from supernatural powers. Like our "daily bread", it bears the highest symbolic value among foods. Mention could be made of the weekly festive consumption of meat in Christian cultures, the "Sunday joint" in the UK and, in South-West France, the "poule au pot" – the fowl which good King Henri IV wanted each of his peasants to be able to put into the pot on Sundays.

Oral literature often refers to meat in terms of gastronomy, a highly enjoyable food, especially if it is fat or "mulu". In Masa vocabulary, "ti funa", "eating the sorghum cake", means living; but to lead a good life is "ti mulu", "eating fat stuff". At the annual festival of the Muzey clan of Pe, a leading female participant covers her head with the fat of the peritoneum of a goat

sacrificed to the clan's protecting spirit, parading around to symbolise the flourishing prosperity of the kinship group.

Among the Masa, the "guru" custom requires the young men (the "gurna") of the village to go into the bush and live with the cattle herd, drinking its milk and consuming abundant sorghum porridge in order to become fat and beautiful, impersonating the well-being of the whole community. Here, meat is also a prized food; and stealing neighbouring tribes' cattle in order to consume their flesh in gluttonous and derisive ways marks their own tribal domination. The songs composed by participants in the guru fattening sessions to boast to others often refer to milk and meat: "We, the gurna of Nuldayna, we drink milk and eat meat. You from the Bangana, you only graze your cattle on the grass of the bush". Gluttony is displayed conspicuously by the gurna, who have ritual access to the meat of the cattle slaughtered during the funeral of a powerful individual. It is a symbolically dangerous victual, which they may devour violently, and often still raw.

On gluttony

Meat arouses greed. We witnessed among the Muzey an attempt at witchcraft carried out by an old man to make the head of a household die, in order to feast on the meat which would be offered at the funeral. This was not his first attempt to obtain meat galore!

Voraciousness for meat is socially repressed. Songs are composed by participants in the guru in order to stigmatise and mock those who manifest an excessive greed for meat. They may refer to "that girl who is so crazy for meat that she did not hesitate to prostitute herself to obtain it", or it may be about "that wife who was gluttonous enough to have eaten a whole cow's head, bought by her husband at the market, by herself".

In the oral literature, many episodes refer to characters seeking meat and covertly attempting to devour each other. The hyena wants to eat the male goat, the cat the pigeon. The central plot is "who is going to devour whom?" An important character is an evil, selfish and obese glutton ("Hlo" among the Masa, "Kada" among the Muzey), who constantly attempts to fill himself with meat and is chastised for it. One example will suffice: "A

wealthy man offers a castrated male goat to the person who will agree to accompany him to his grave. Our glutton accepts, resulting in his being buried alive".

The prestige and noxiousness of game

Among the Muzey, game meat is highly prized. This population used to hunt very actively thirty years ago when large animals were still available. Today they still hunt on foot and horseback, mostly in collective hunts that assemble hundreds of hunters from neighbouring communities and set fire to a common hunting ground to flush out the game.

The Muzey make a distinction between various categories of wild animals. (i) Those that are small but can sting. (ii) Those that are small and can be killed without risk: birds, rodents, small mammals of all kinds, frogs, reptiles and insects (especially grasshoppers and termites). These are common game to be obtained freely. (iii) Large animals that can be killed without any magical threat – excepting clan totems such as the oribi (*Ourebia Ouribi*) for the Bugudum clan or the red-fronted gazelle (*Gazella rufifrons*) for the Holom clan. All other antelopes are fair prey, such as the kob (Kobus kob), the bontebok (*Damaliscus korrigum*) or, more modestly, the grey duiker (*Cephalophus grimmia*). (iv) Dangerous animals: elephants, hippopotamus, lions, leopards, buffaloes, roan antelopes (*Hippotragus equinus*), eland (*Tragelaphus oryx*) and wart hog (*Phacocherus aethiopicus*). These animals are considered to be like human beings, in that they have a soul ("ngusta") which can come back and torment the hunter, causing a specific sickness, "tokora", and impede future success in hunting. The hunter has to undergo a purification ritual. He goes to the bush and has to pass through a particular vine (*Cissus rufescens*) split in half, upon which he symbolically leaves his pollution. Killing these dangerous animals is considered a feat and allows the hunter, when the time comes, to have his grave decorated with stakes of hardwood trees, thus displaying for ever his bravery to the passer-by.

We shall not deal here with the intricate rituals relating to game meat that involve the participation of the traditional religious authorities.

Hunger foods

The bravery of men at hunting and at war is praised by individual refrains ("tora"), which can also be played on whistles. They proclaim the arrival of a brave man, when he attends a funeral or returns from hunting: "My name is Corporal, he who kills animals for his father!", "When I return from my hunt, my mother waits to receive the meat in her lap, my father rushes towards me [to receive the meat]".

It should be noted that among the Masa and Muzey, meat sharing is always a violent episode. Snatching his quarry from a hunter is a valued feat and may lead to bloodshed during collective hunts. Even when ritually-slaughtered cattle meat is divided, altercations may arise between the participants over the allotment. Wounds which result when carving large game do not elicit revenge, they are considered normal incidents.

The social function of meat

Consumption of the meat of domestic animals is a counterpoint to all social events, especially those of the family cycle (births, weddings, christenings, burials). They have a ritual function. They also display the wealth and hospitality of the host. It is only during a visit that "profane" meat consumption can be observed, the size of the slaughtered animal reflecting the consideration the host has for his guest. Offering meat is an expression of joy; a guest is not only treated to meat, but is also given a piece of it to take home. In order of prestige, the animals offered are cattle, sheep, goats and chickens. The first are only offered on ceremonial occasions, mainly funerals. The social standing of the deceased is assessed according to the number of animals slaughtered for his burial.

Among the Muzey, a castrated male goat is the most highly prized animal to be offered to a visitor, especially to the in-laws. A husband has to keep his father-in-law and more especially his mother-in-law satisfied or they may magically prevent their daughter from giving birth. Social visits, births and especially funerals are occasions to satiate the in-laws with the fat meat of castrated animals. Upon the death of his father- or mother-in-law, a son-in-law is expected to bring a head of cattle, or an equivalent sum in cash, to the funeral. Failing this, the in-laws may

retain his wife until he fulfils his obligation. This gift is called “bakna”, “the skin”. Conversely, the in-laws make a gift of meat to their son-in-law when he departs. It has to be consumed outside his home for fear of introducing the contamination of the burial. Similar ritual meat exchanges operate among the Masa of the Guisey clan. Daughters married to outsiders bring flour and animals offered by their husbands on the occasion of the festival of their own clan, to be eaten during the event. They also receive a meat gift to take home to their husband’s village.

The religious function of meat

The flesh of domestic animals is not only used to fulfil social obligations, it is also a link with the hereafter. The Masa and Muzey keep separate in their compound certain domestic animals, sometimes merely a chicken, as a token of alliance with a supernatural being. This animal cannot be sold, although its offspring will be slaughtered to honour the deity. Among the Masa, the head of family keeps a cow consecrated to the celestial deity (Laona). It will be slaughtered at his funeral and be the seed animal for the herd he will own among the dead.

Meat offerings allow communication with all supernatural powers, deceased ancestors, deities and spirits of all kinds. Humans feel they are cornered by hungry supernatural beings that have to be constantly placated with gifts of meat from all kinds of domestic animals (except pigs and ducks, recently introduced and still outside the ritual field). The main deities have their own specifications. The water deity, Mununta, requires black-coloured animals (including dogs). The celestial god (Alaona [Masa], Lona [Muzey]), who is usually beneficial, requires white-coloured animals, especially sheep, to be strangled, as it does not appreciate bloodshed. Matna, the deity of death and evil, and Bagaona, master of the evil in the bush, demand red and tawny animals, especially goats, to be violently slaughtered, since they will gorge on the spilt blood. They are the leaders of a cohort of smaller evil deities and of human sorcerers and witches who yearn for human flesh. Some sacrificial occasions are considered to be so dangerous that the slaughtered animal must be easy to distinguish. Its

TABLE 1
Occasions implying the consumption of meat during
the food cycle of the Muzey

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sacrifice to the Rain God			■									
Sowing finger millet				■	■							
Sacrifice to the rains					■	■						
Sacrifice to fix the limits of flooding					■	■						
Imprisonment of the spirits during the growth of the crops						■						
Sacrifices of the repose of Mother Earth							■					
Ritual for the growth of red sorghum and millet							■					
First fruits to Mother Earth of finger millet, sorghum and cucumbers								■				
First fruits to the ancestors of finger millet, sorghum and cucumbers									■			
First fruits of Bambara groundnuts									■			
First fruits of bulrush millet										■		
Rituals to the guardian spirits of the clans and to Mother Earth	■	■	■									
First fruits of the late varieties of sorghum											■	■
Sacrifice to the cotton market												■
Sacrifice to the rice market	■											
Sacrifice for the safety of food stocks	■	■										
Rituals for the building of granaries and houses		■	■									
Fishing rituals	■	■	■	■	■							
Hunting rituals	■	■	■									

Muslim celebrations and weekly festive day (Friday)
Christian celebrations and weekly festive day (Sunday)
National celebration WITHOUT FIXED PERIODICITY
Rituals related to individual life-cycle: birth, christening, initiation, wedding, funeral

throat is not cut: it is pricked with a knife; and a strip is cut from the middle of the skin to avoid it being used as a loin cloth.

As mentioned, the guardian spirits of clans or individuals determine food taboos on various animals. All spirits request at least one annual celebration. The list is an open one, as every individual during his life may experience episodes during which he has to ask for supernatural help; or he may be witness to a miracle. Two sacrifices are compulsory: a minor one to establish the link, and a major one for giving thanks. Every year at the same date a ritual will be performed to request the protection of the supernatural power in question.

All year round there are many ritual occasions when meat is eaten, and these are likely to have a perceptible influence on the diet. (See Table 1)

Ritual meat-eating episodes

Besides the fixed calendar for rituals, supernatural powers may ask at any time for an offering, which usually involves slaughtering an animal. They may send a dream to the person they wish to ask for a sacrifice from, or try to attract his attention by causing inconvenience, trouble or sickness, to himself, his family or his belongings. The Masa, Muzey and Tupuri possess geomantic divination systems consisting of several hundred signs standing for the categories operating in society and represented by pieces of broken pottery or stems of reeds. Meat is symbolised by a sign meaning "something found in the bush, in small or large quantities, fresh or rotten", i.e. meat, game, dead bodies.

Similarity between the person offering the sacrifice and the slaughtered victim

Beside signs symbolising the various supernatural powers and the person consulting the divination system, other signs designate the offerings, and specifically the domestic animals to be slaughtered. Each of these potential victims is also represented by its blood. After a process similar to throwing dice, each sign is counted as one or two, odd or even numbered, like digits. The diagnosis is made by relating the signs which have the same digits. The signs of the demanding supernatural being are compared with those

representing the petitioner; a victim is sought among the animals. There is a symbolic similarity between the person offering the sacrifice and the slaughtered animal; sacrificing an animal whose blood has the same digit as the petitioner would be equivalent symbolically to killing him also. This is the first instance in which we encounter symbolic homology between a human and the animal he is offering to slaughter, both made of flesh, so that the requesting deity is identified as well as the animal. The side on which the slain chicken falls will determine whether the sacrifice is accepted or not. For a male deity, it should fall with its right side up; for a female deity, with the left side up. In most cases a specific person butchers the animal. For example, in the case of a sacrifice to the traditional earth priest, for an ordinary person here again it would be his sister's son since he is considered immune to the pollution which might affect his maternal uncle.

Blood is sometimes intentionally shed to please the most dangerous power, the deity of evil and death. In all cases, small pieces of raw liver are offered to the spirits. The liver itself is often grilled and consumed by small children, who are not at risk. The rest of the meat is cut into pieces and stewed; it will accompany the sorghum staple. Portions of the cooked food will in turn be offered to the supernatural powers: "My deceased father (or god), here is your sorghum porridge and its meat relish. Come and eat. Give us a good crop, numerous children, etc…" By conforming to the diagnosis of the diviner, the inconveniences may stop. If this is not the case, the process is repeated a few times. If everything goes wrong, the person in trouble may undergo a psychopathological crisis. He may join a possession group (or "college"), to be cured by its leaders and end up by naming and being possessed by the demanding deity. From then on he will regularly slaughter animals for his protector and will also act as an intermediary between the supernatural power and other individuals molested by the same deity. In the process he will take part in the rituals of the petitioners and generously partake of the meat of the slaughtered animals. The possession groups, "su fulina" ("the people of the spirits"), have a leader, the "sa billa" ("the man with the throwing knife"). They have to obey his orders when asked to perform the slaughtering of animals for their protecting deity and have constant access to the meat of the sacrificed animals. Apart from rituals pertaining to each possession college, the possessed are welcomed to most other rituals. They are believed to be

symbolically "ridden" by the deity they impersonate. They act like decoys, guaranteeing the attendance of supernatural powers during ceremonies and the acceptance of the offerings made to them.

The annual commemoration of each clan and of its guardian spirits (Vuntilla, "the beginning of the moon") is marked by impressive slaughters. For instance, among the Muzey, the feast in honour of Ful Mugudugu, the python spirit protecting the Djarao clan, involves sacrificing 50 chickens and 30 goats. The members of the corresponding group gorge on meat and express their appreciation to the college chief. To maintain his prestige he constantly needs to treat those attending his rituals to plentiful meat. They compose songs to praise him and his wealth: "Our chief is not a poor man. He has chickens at home. He has goats at home. He has cattle at home. Our father, Koya, he is that way! The drum beats and he catches me a chicken, he catches me a goat, he catches me a cow!"

The same songs of praise operate among the Masa in Bugudum: "What is this violent wind blowing? It is Béré, (the protector of the clan of Duma), the chief of the millet beer, the master of the meat, who is among us".

In addition to the rituals concerning the community, some social events connected to the participants' families imply presenting a new wife or a new baby to the association chief. This ceremony is called "entering", bringing chickens and goats which will ultimately be slaughtered and eaten ritually. The members of the possession clubs consume a much higher quantity of meat than the rest of the population. Disregarding the ritual pretext, possession associations act in reality like gastronomic clubs. A group recruits its members among people who are slightly marginalized because of psychopathological problems, but also old ladies (usually menopaused) with no further duties to perform in society.

Possession delineates a field that is special in terms of time and space, something like a sacred domain within which the participants can behave differently from those in ordinary life. For instance, they display their craving for meat in a very conspicuous and vulgar way, which is contrary to the restraint with which food is handled in normal life. This disorder and brutality is reminiscent of the Bacchantes in Greek Antiquity, who tore apart live kids with their bare hands (sparagmos) and devoured the raw flesh (omophagia) (Bourlet 1983: 35).

Searching for the appropriate offering through the system of divination suggests that there may be a symbolic equivalence between the person who consults divination and the animal slaughtered to placate the supernatural wrongdoer. As mentioned, if the animal has the same symbolic number as the person making the offering, it should not be slaughtered for fear of killing the petitioner. This equivalence appears also in the archetypal sacrifices of European civilisation, for example the sacrifices of Iphigenia and Abraham. In both cases, at the last minute the human being is replaced by an animal, a doe instead of Iphigenia in order to obtain the destruction of Troy (according to Euripides' happy ending), a ram instead of Abraham's son to obtain the defeat of Israel's enemies (Bloch 1992).

Among the plains populations of Northern Cameroon, people who have experienced trouble with specific supernatural powers or who have invoked them, need to exchange their body (which has been symbolically held for ransom) with that of an animal which will be consecrated, slaughtered and consumed. The sufferer "exchanges his body", on the basis of an offering, with the being who has stolen his soul and symbolically eaten it. Fear of being symbolically devoured is present in most of the African societies we have studied. The imaginary world is populated with powers ready to consume you symbolically, ill-intentioned people as well as supernatural deities. It is difficult in such an uncertain field to obtain a clear explanation of the process. If the soul or the body are concerned, both aspects seem to be equivalent. All the soul eaters seem to practise symbolic cannibalism. They may even be obliged by the initiator to devour the soul of cherished close relatives in order to obtain various magical powers. Many types of black magic operate: in Southern Cameroon the "gwelli" and "ekong" of the coastal populations (Mvae, Yassa), and the "fona" in Northern Cameroon. These consist of stealing and devouring the vital principle of an individual in order to make a slave of it for personal benefit, such as working in one's cocoa or cotton plantation. Among the Masa and Muzey there are three kinds of evil-doers: the fire women and men, the sorcerers and the sorceresses, "the people who eat". In the oral literature, the leading supernatural man-eaters are: Matna (the deity of evil and death) and Bagaona, his assistant, corresponding to violent death in the bush. They both rejoice in blood and human flesh. They are the leaders of the

various groups of cannibals, sorcerers and wrongdoers. They come together to partake in feasts of human flesh.

Ogres and cannibals

Ogres are anthropophagi present in the traditional literature of most civilisations, including our own. Stegagno Piccio (1988: 123), referring to our Western world, mentions "fabulous tales populated with ogres, child eaters... a leitmotiv in the Germanic collective soul". She refers to Tom Thumb, who ends up by making the ogre eat his own daughters, or Hansel and Gretel forced to fatten in a cage to become a witch's meal.

Fear of symbolic cannibalism, performed by the prowling soul (*doppelganger*) of evil people, is a constant and concrete aspect in the daily life of the Masa and Muzey. Young men are recommended to be very careful in choosing their bride, to gather as much information about her as possible in order to avoid marrying a man-eating sorceress, who might be a temptation, as they are said to be often very attractive. One example will suffice to illustrate the point. In 1991 in the Muzey village of Domo Suluku, a woman was accused of having symbolically eaten the liver of her husband, causing his sudden death. She successfully underwent an ordeal and relived her crime shortly afterwards. She could not help it: it was in her nature. This evil condition is inherited by boys from their fathers and by girls from their mothers. Today still, small children are prevented from sleeping on their backs, which exposes their livers to the magical little red bird sent by the sorceress. A species of large bat is driven away by wild screams for the same reason.

In the district of Yagoua, a small town in Northern Cameroon, harsh arguments result almost daily from such accusations. The accused are brought in front of the traditional court. Old ladies may even be flogged to make them confess their crime. People go to jail simply for being accused of symbolic cannibalism. In former times, among the Muzey, people considered guilty of this accusation were buried alive, together with their children. Among the Mésmé, the Muzey's southern neighbours, after the execution, the liver of the convicted person was examined in order to confirm his guilt (Garrigues, 1974: 190). This problem of symbolic cannibalism perpetuates a feeling of

insecurity even today, as nobody is very certain about what act his or her roaming soul might have done during his sleep. Each individual is legally responsible for the misdeeds of his double and could "be punished with imprisonment for from two to ten years, and with a fine of from five thousand to one hundred thousand francs." (Article 254, Section 251 – Witchcraft, Penal Code, Republic of Cameroon, 1965, 1967: 211).

Among the forest populations of Southern Cameroon, as elsewhere, some individuals are endowed with charisma and constant success. Here this is attributed to internal symbolic power, which takes material shape in the form of a small land crab or a spider. This may come out at night through the person's mouth in order to eat other people's souls. To discourage this cannibalistic principle, it is necessary to mix human flesh (obtained from a corpse) with cucumber oil cake (in the case of men) or peanut oil cake (in the case of women), and smear some of this on one's lips before going to sleep. The crab climbs to the lips, smells the odour of a human being, feels satiated and does not have to go out and create trouble to satisfy its craving.

To paraphrase Lévi-Strauss (1962: 17), in the African cultures we have discussed, it is obvious that meat "is good to eat and good to think about", but we cannot overlook the fact that there can also be a whiff of uneasiness attached to it for fear of symbolic cannibalism.

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Meat: the Staple Diet for Arctic Peoples

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ABSTRACT

Communities of hunters and herders living near the Arctic circle eat meat as a staple diet. They consume impressive quantities of meat, which in their cultures assume considerable symbolic importance. Curiously, inuit traditional cultures suffer little from cardiovascular disease, raising questions for medical research. Changing economic patterns have altered tendencies in hunting, with corresponding changes in these cultures' pathology.

INTRODUCTION

In numerous Inuit ethnic groups, one single word, *neqe*, carries the meaning for both meat and food. It illustrates the high value bestowed on meat both from a nutritional and a symbolic point of view. The same propensity to favour a meat-based diet has been observed in different socio-cultural models: among sea mammal hunters of eastern Greenland (Ammassalik and Scoresbysund) on the one hand, and reindeer herders in north-eastern

Siberia (areas of the Lower Kolyma) on the other; their average consumption of meat has been estimated at around one kilogram per day, per individual, for adult males in these two groups.
In this article, we will consider the ways in which meat is consumed in Arctic regions, why it is more highly valued than any other food, and what part it still plays today in these societies, where values and life styles have changed considerably.

Aspects of the Preference Shown for a Meat-Based Diet by Arctic Populations

Nutritional aspects

Regions that surround the North Pole are characterised by their harsh climate and their scarcity of animal resources and, even more strikingly, vegetable resources.

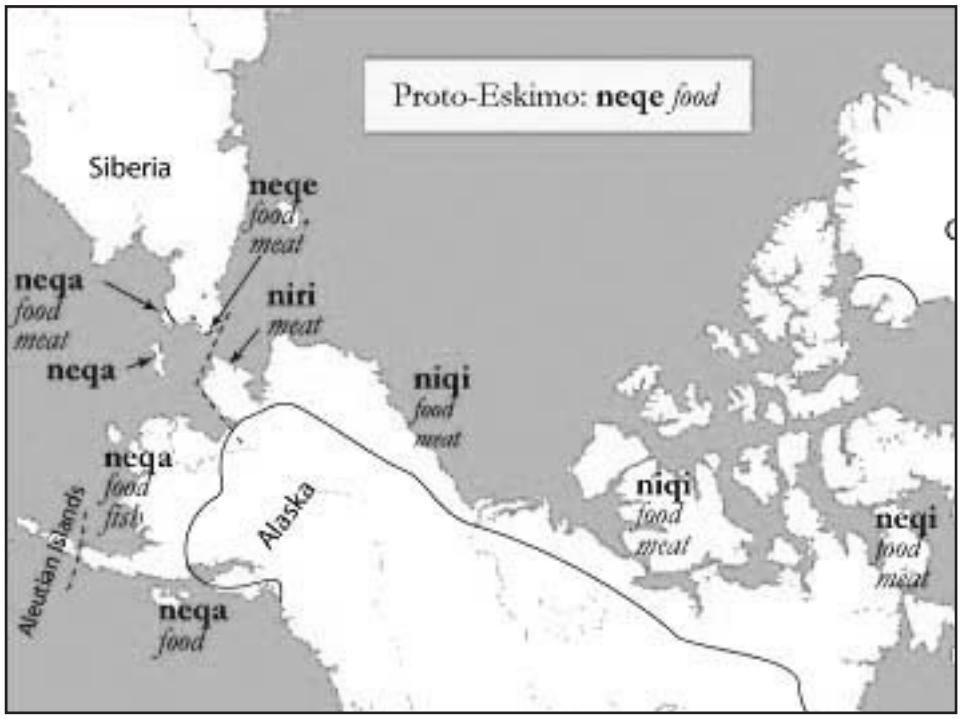
Of all foods available to Arctic populations, hunter-gatherers and nomadic herders say that the meat of sea or terrestrial mammals is the most filling, and that it is the food that best helps them keep warm. Its nutritional properties are an appropriate solution to the energetic demands of the body in cold regions where it is, additionally, necessary to exert a great deal of physical energy. In order to combat the rigorous climate, the hunter or reindeer herder will consume such enormous quantities of meat, either raw (in dried, frozen or fermented form) or boiled, that foreign travellers have always been impressed by this fact and never failed to comment on it. These feeding habits are established from the earliest stages of life, when the mother, while still breast-feeding, gives the infant some cooked meat to suck on, and then gradually gives him small portions that she has pre-chewed, until the child comes to partake of the same food as adults, though in smaller quantities.

Symbolic aspects

For the native populations of the far north, meat from mammals is considered to be the real food. It is considered by them to be the best and most nourishing

food of all, whether for its taste or for its health-enhancing qualities. To be hungry is actually "to hunger for meat". This fundamental notion is confirmed semantically, since both meat and food are designated by the same term in the vernacular language of most Inuit groups as shown in Figure 1.

FIGURE 1
Map of the Arctic showing the areas of use of the word *neqe* – meaning both food and meat – in most of the Inuit ethnic groups



SOURCE: Fortescue *et al.*, 1994

To feel full is to have eaten meat (and fat which inevitably accompanies it); other foods such as plants, fish and even the flesh of birds, which bring an appreciated variety to the diet, are generally thought of as snacks, as appetisers before a real meal, or as make-shift food while waiting for the time

when hunters actually catch their game. A meal is one of the most precious gifts a person can give a relative or someone to be honoured, a meal where meat is especially prepared for the occasion and shared in a communal spirit; alternatively chunks of meat are sent for later consumption.
This idealised conception of a good diet based essentially on meat is traditionally transposed to the afterlife. In Greenland, the personal destiny of a deceased person could take him to different places, the most enviable one being at the bottom of the sea, where the dead had unlimited access to sea mammal meat; whereas the other netherworld, in the sky, would only offer its occupants flesh from young crows and berries, and was considered far less desirable (Victor and Robert-Lamblin, 1993: 336).

As for the nomadic herders of the Siberian far north, to this day they still perform sacrifices of domesticated reindeer for their celebrations (weddings, funerals, and various reindeer festivals), during which the collective consumption of the sacrificed animal's flesh retains a ritual character of great symbolic importance. This act of incorporation represents a genuine act of communion with nature, and communion between the living and the dead.

The Diet of Sea Hunters and Nomadic Herders of the Tundra

In this section, I will describe the diet of two Arctic populations among whom I did field work, for which we also have data gathered in the past by anthropologists, physicians and administrators.

Sea mammal hunters of Ammassalik in eastern Greenland

The region of Ammassalik lies just below the polar circle. However, its climate is particularly harsh and creates extreme living conditions not to be found at the same latitude on the western coast of Greenland, which is favoured by the warmth of the Gulf Stream. In Ammassalik, the yearly average temperature is -2° C; the average temperature of the coldest month (February) is -9° and the warmest (July) is +7°. Roughly speaking, 260 days of the year the ground is covered with snow, and a great ice

pack, caused by the presence of the Glacial Arctic Current, prevents any navigation or contact with boats for nine months of the year. This fact explains the high degree of isolation from other Eskimo groups of the small population of Ammassalik until its late discovery by Westerners in 1884, when it was found to have 413 members (Robert-Lamblin, 1986).

In the area of Ammassalik, land fauna is limited to a very few species (polar bears and foxes), each of them with just a few individuals. The sparse vegetation is covered with snow for most of the year. The basis for survival of nomadic families established in this environment has come from the sea: mostly seal meat and, to a lesser degree, narwhal, walrus, some fish, shellfish and crustaceans. The traditional diet of this human group was mainly sea mammal meat and blubber. This has been the theme of several studies that describe the variety of techniques used for the hunting, transformation and conservation of these animal resources, as well as the rules for sharing, distributing and consuming them. For a description of this food and its preparation, we can refer to the very complete ethnographic study by Paul-Emile Victor, conducted in 1935-37 (Victor, 1995).

However, quantitative aspects of consumption have always been particularly difficult to record in a group of hunter-gatherers, whose diet varies enormously according to the seasons of the year and from one year to another, depending on the hunting grounds they adopt, the migration of the game they hunt, and the state of the ice, besides the hunters' ability to catch game, their state of health, and the number of mouths they have to feed in their restricted or extended families.

P.E. Victor stresses the extreme irregularity of eating patterns, and the capacity of the Ammassalik people – much to the surprise of westerners – to swallow meat until, in their own words, "their tongues stand up in their mouths". In 1936 Victor noted: "When there is an abundance of food, the Ammassalimiut eat as if they would have nothing more to eat the next day, or for days afterwards [...] their stomachs can stand fantastic binges. But they are equally able to have a colossal meal as spend several days without consuming more than a tiny piece of blubber".

The memory of terrible famines is still quite fresh in the collective memory of the East Greenlanders (Victor, 1993: 109-146) and even today, certain families experience difficult periods of want.

The Norwegian physician A. Höygaard was the first to quantify the Ammassalimiut diet, between November 1936 and May 1937. According to him, it contained an average of 76% sea mammal meat (mainly seal), 16% fresh fish (mainly cod), 5% imported vegetable products, 2% local plants and 1% birds (Höygaard, 1941: 55). He demonstrates, by weighing all foods for several days, how much the diet can vary in the same area, depending on habitat location and the period of the year; such was the case among hunters in one location, during a given period of the year (*ibid*: 151-168). We can thus see (*ibid*: 167-168) that for three hunters of the village of Sermiligaaq followed between the 7th and 12th of November 1936 – a good period for hunting – the mean caloric input in their daily diet was of 4023 calories (with individual variation of between 2370 and 5180 calories) and that the diet was composed of 65% protein, 30% animal fat and 5% carbohydrates.

In another study, the Danish administrator E. Mikkelsen, and P. Sveistrup, attempted to record changes over time in mean annual consumption of meat and blubber by inhabitants of this region. Their calculations were based on the number of seals hunted each year, estimated by counting the number of pelts sold at the commercial base or kept for domestic use. This calculation of the quantity of meat consumed took into account game species and estimated weight. Furthermore a deduction had to be made for feeding dogs or heating and lighting homes.[1] By their reckoning (Mikkelsen and Sveistrup, 1944: 117 and 165), the yearly consumption of meat and blubber per individual in Ammassalik was:

- 521 kg of meat and 287 kg of blubber in 1897-1898/1899-1900;
- 369 kg of meat and 184 kg of blubber in 1900-1901/1904-1905;
- 299 kg of meat and 150 kg of blubber in 1905-1006/1909-1910.

Using the same method as Mikkelsen and Sveistrup, I have also tried to calculate the decrease in hunting activities in Ammassalik over time. It clearly emerges that throughout the 20th century the volume of seal captures did not keep pace with demographic growth of the human population (Figure 2). During the period after the Second World War in particular, the spectacular development in this area that followed its opening to the outside world induced diversification of economic activities among the population. Besides

the traditional hunting activities, new ones were developed: commercial fishing, handicrafts and service industries gained importance, particularly in the small administrative regional capital of Tasiilaq.

FIGURE 2
Evolution of the annual average number of seals per Greenlandic inhabitant in Ammassalik, Eastern Greenland (seals of all species)

Periods	Average number of seals per Greenlandic inhabitant
1898-1910	12.2*
1910-1920	8.7*
1921-1930	8.8*
1931-1938	8.7*
1946-1951	5.5**
1952-1961	5.3**
1962-1971	3.6**
1972-1978	3.5**

SOURCE: * Estimations of Mikkelsen and Sveistrup (1944: 86)
** Personal estimations according to skin sales

Adopting the same criteria as Mikkelsen and Sveistrup, I calculated the meat consumption of East Greenlanders living in Ammassalik (Robert-Lamblin, 1986) and of those who had emigrated further north in 1925 to Scoresbysund, an area where game was even more abundant (Robert, 1971). My analysis shows that while nutrition has markedly changed due to ever-increasing imports of European goods through the multiplication of sea and air communications, meat consumption nevertheless remains very high among East Greenlanders, who essentially still live by hunting. We can see in Figure 3 that the inhabitants of small localities situated at the extremes of the district of Ammassalik, such as Sermiligaaq and Isertoq-Pikiiti, consume on average as much meat as their parents did at the beginning of the 20th century. And, if we take into account the fact that children do not consume the same quantities as adults, we estimate for those villages an average of 1kg of meat per adult per day. For the other

localities, the consumption is not as high, and the range of meat consumed varies by a factor of one to five when we compare the results for Kulusuk with those of Isertoq-Pikiiti. Tasiilaq, a town of administrative employees, should be considered apart.

FIGURE 3
Ammassalik 1976. Seal hunting yields by settlements. Global figures for various seal species and averages per active male and per East-Greenlandic inhabitant

Settlements	Tolal number of seals for the year *(1+2+3+4)*	Total kg of seal meat	Number of men aged from 15 to 59	Average number of seals per male between 15 and 59	Number of East Greenlandic inhabitants	Average numbers of seals per inhabitant	Seal meat: average quantity per inhabitant (kg)
Kuummiit	1541	39 390	120	12.8	461	3.3	**85**
Kulusuk	985	26 800	115	8.6	401	2.5	**67**
Tiileqilaap	1385	30 045	58	23.9	201	6.9	**150**
Isertoq and Pikiiti	2546	62 975	46	55.3	190	13.4	**331**
Sermiligaaq	2022	51 840	39	5.7	169	12.0	**307**
Tasiilaq (administrative centre)	1440	33 915	254	5.7	903	1.6	**38**
For all Ammassalik district	9919 *(1+2+3+4)*	244 965	632	15.7	2325	4.3	**105**

1 : Fjord seals, total: 9126. Estimated weight of meat per animal: 20 kg *
2 : Hooded seals, total: 553. Estimated weight of meat per animal: 85 kg *
3 : Greenland seals, total:137. Estimated weight of meat per animal: 30 kg *
4 : Bearded seals, total: 103. Estimated weight of meat per animal: 110 kg *

SOURCE: *Statistics department of the Ministry for Greenland

Reindeer herders of north-eastern Siberia

The Russian ethnologist Bogoras described the foodways of the Chukchee (in north-eastern Siberia) at the end of the 19th and beginning of the 20th centuries. In the same vein he stresses the importance of meat for these people, whether they were "maritime" – that is sea mammal – hunters

or nomadic reindeer herders of the interior tundra. Bogoras thus notes: "The staple food of the Reindeer Chukchee is reindeer meat, and that of the Maritime people 'sea meat' – the meat of sea mammals" (Bogoras, 1904:193). And the ethnologist not only observed this marked preference of the locals for meat, as opposed to fish, but also mentions the enormous quantities they are capable of ingesting: "The principal meal of the Chukchee is in the evening… At this time the Chukchee eats much and ravenously. They swallow large quantities of meat, gnaw the bones, and try to outdo each other in quickness... There are some exceptionally great eaters among the Chukchee. I was told about one Reindeer Chukchee of the Telqä'p tundra who was able to consume at one eating a two-year-old reindeer buck… He could stay without food for two or three days. Then, after a sumptuous meal, his stomach would be enormously distended, so that the skin would look quite smooth, and he would spend a whole day motionless, digesting" (*ibid*: 200).

One century later, during fieldwork among nomads of the tundra in the region of the Lower Kolyma (eastern Yakutia), we researched certain aspects of the reindeer herders' nutrition. Sharing the life of several camps of nomadic Chukchees, Evens and Yukaghirs, during the course of several days we could observe the importance of their consumption of wild or domesticated reindeer meat, to which was added the occasional elk in the more forested areas. Apart from the qualitative study I was conducting (Robert-Lamblin, 1998), we managed to establish a quantitative estimate of daily consumption of reindeer meat as an average of between 800g and one kilo per adult male (Malet *et al.*,1999: 407). This estimate was based on the consumption of reindeer carcasses freshly slaughtered during our stay, whose weight we could calculate. It must be pointed out however, that on the scale of an annual cycle these quantities can vary and present a pattern where periods of plenty and periods of lesser abundance alternate. In the ordinary seasonal cycle, we know that the end of winter is generally a difficult period as far as food is concerned, whereas autumn is more favourable. Moreover, various other parameters need to be taken into consideration, such as the presence or absence of game and the increase or decrease of domestic reindeer herds. For example, the fragile balance between men and natural resources is submitted to climatic hazards, such

as a brutal change in temperature, which can produce a coat of ice on the ground, that deprives the animals of access to vegetation, or a drought often accompanied by fires in the tundra, or again an epizootic, attacks by hungry wolf packs, and so on. All these phenomena have strong repercussions on the populations which depend directly on these resources for their survival. Periods of want also exist in these areas.

CONCLUSION: THE "PARADOX" OF ESKIMO DIET

The hyper-proteinic diet of Arctic populations has long raised discussion among nutritionists and physicians. "Obviously, without Western contact, Eskimos were totally carnivorous and their food was almost free from carbohydrates, except for a few berries, roots and leaves in summer" (Bang *et al.,* 1980: 2659). However, despite the prevalence of meat and fat in their diet, the incidence of cardiovascular disease was observed to be low among communities that still followed a traditional way of life, particularly in the small communities of sea mammal hunters. Among the more "acculturated" on the other hand, whose life-style and foodways had undergone profound changes, an increase of these diseases was observed.

Dyerberg and Bang (1981) pointed out the great difference observed between Greenland, Denmark and the United States in the mid-1970's in male mortality rates due to ischemic heart disease (Figure 4). After close examination of the composition of lipids from fish and sea mammals frequently eaten in north-west Greenland, these researchers and one of their colleagues (Bang *et al.,* 1980) drew attention to one essential characteristic: these foods appear to be rich in polyunsaturated fatty acids of the n-3 family, that give heavy consumers of these products protection from cardiovascular disease. Bjerregaard and Dyerberg (1988) have also shown that for the same period 1968-1983, mortality by ischemic heart disease was certainly lower in Greenland than in Denmark – regardless of gender –, but also that death from this disease was particularly low in the small Greenland communities (who still have a traditional life style and consume great quantities of foods coming from the sea).

FIGURE 4

Factors influencing mortality from Ischemic heart disease in Greenlanders

Age standardised death rates from Ischemic heart disease (*in percent of all deaths in males aged* 45-64). Figures in Greenland based on the years 1974-1976		The degree of saturation of fat in Eskimo and Danish food (*in percent of total fat*)		
	Mortality rate from Ischemic heart disease	Fatty acids	Eskimos	Danes
United States	40.4	Saturated (S)	22.8	52.7
Denmark	34.7	Monounsaturated	57.3	34.6
Greenland	**5.3**	Polyunsaturated (P)	19.2	12.7
		P/S ratio	**0.84**	**0.24**

SOURCE: J. Dyerberg and H. O. Bang 1981: 300

As far as the population of Ammassalik is concerned, on the eastern coast of Greenland, the physician P. Helms has shown that during the years 1967-80, the mortality rate from coronary disease (IHD) was 30 times lower in that area than in Denmark and eight times lower than in the population of Greenland as a whole.

However, an increase in this type of disease occurred in Ammassalik when its number more than doubled between the years 1948-60 and 1971-80 (Helms, 1981: 245 and 248). According to Helms, this is probably due to the changes in diet he could observe. He estimates that in 1945 Greenlandic traditional food accounted for 74% of nutritional needs, but later imports of sugar and cereals had a strong impact in that area (*ibid*: 248). This marked increase in the consumption of carbohydrates and sugar per inhabitant is illustrated in Figure 5.

FIGURE 5
Growth over time of average consumption per inhabitant
of imported European products in Ammassalik

Periods	Farinaceous food* (kg)	Sweetened food** (kg)
1899-1900 / 1904-05	2.24	0.54
1920-21 / 1924-25	12.37	3.25
1935-36 / 1938-39	28.44	10.99
1945	34.14	15.37
1978	58.42	52.60
* Rye flour, wheat flour, biscuits, various cereals ** Caster sugar or lump sugar, brown sugar, sweets, soft drinks		

SOURCE: For 1899-1939, according to Mikkelsen and Sveistrup;
for 1945-1978, according to Helms.

As a consequence, we can conclude that, despite their considerable consumption of animal meat and fat, low frequency of cardiovascular disease has been recorded among Arctic populations that still follow a traditional life style, that is, small communities of hunters and fishermen. As we have seen and as A. Hubert also pointed out, the explanation for this paradox resides in the characteristics of lipids that come from sea produce, which is rich in polyunsaturated fatty acids (Hubert, 1995). Changes in their diet involving fewer lipids and protein and more sugar, and the increasing use of margarine and butter (saturated fats), together with a more sedentary way of life, led to the appearance and development of new pathological conditions in these areas.

As I was able to observe[2] in the diet of today's Arctic populations, sugar and cereal products have been widely adopted, even in the most remote areas, and they have become absolutely indispensable. Nevertheless, meat consumption from local resources remains all-important for these hunter-gatherers of the far north and their families. This staple diet of meat retains for them symbolic value that is strongly related to their cultural identity.

NOTES

1. According to these authors, the fjord seal (Pusa hispida Schreb.), the species most commonly hunted in Ammassalik of the five species present in the area, yields an average of 20 kg of meat and 12kg of blubber. Some 25% of this has to be subtracted as lost or for dog food. A third of the blubber was used for food and two thirds for heating and lighting (Mikkelsen and Sveistup 1944: 100). The bearded seal (Erignathus barbatus), also found in the area, and the hooded seal (Cystophora cristata), a migrant animal, are larger game (Fig. 3), but less frequently captured.
2. In 1967, in order to spend eleven months of the winter far away from the commercial centre, a family of hunters in Ammassalik, consisting of two adults and six children, took with them 270 kg of sugar, 400 kg of rye flour, 100 kg of wheat flour, not counting cakes or other cereal products. (Robert-Lamblin, 1986: 49). These foods were just complements to the sea mammal diet, which would be their staple during their stay. Among reindeer herding nomads of the Siberian tundra, we also observed a very high consumption of sugar (up to five spoons per cup of tea) and bread (which

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Meat Gluttons of Western Mexico

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ABSTRACT

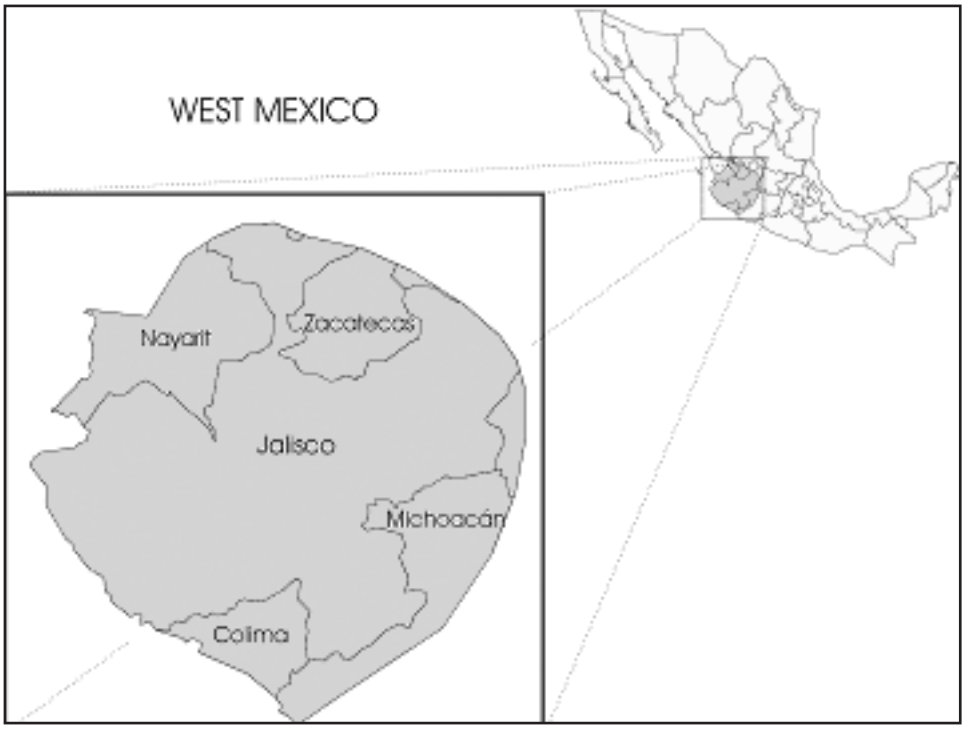
The people of a certain area in the west of Mexico have inherited a pattern of diet that is based mainly on meat, prepared in a variety of ways. This chapter contains a rich description of the diet of these people and their eating customs. The lack of culinary sophistication is remarked upon, together with its probable cultural roots.

ENTRÉE

This article is a report on customs related to meat consumption in western Mexico, a geographical area roughly covering the present-day states of Jalisco, Colima, Nayarit, Aguascalientes, the west of Michoacán, and the south of Zacatecas (Figure 1). The region is characterized by having been,

in pre-Hispanic and colonial times, an intermediate area between what we call Meso-America and its northern periphery: the former, civilized and sophisticated in culinary matters; the latter, also called Arido-America, firstly nomadic and barbaric, during pre-Hispanic era and part of the colonial period, but also a mining region with extensive livestock from the mid-16th century to the present day.[1]

FIGURE 1
Map of Western Mexico



The area we refer to as western Mexico is a macro geographical and cultural area whose unifying characteristics derive from its principal productive activity, the breeding of livestock, at least until the middle of the 18th century. Culturally mixed foodway traditions have developed there, ranging from a limited autochthonous diet to the consumption of diverse kinds of meat – introduced by the Spaniards at the time of the Conquest in the 16th century.

To describe in greater detail the diet of western Mexico, we have decided to deal with it under two headings: public and private cuisine. However, in both cases we will try to distinguish gourmet food from popular cuisine.

THE PUBLIC SPHERE: EATING OUT

As far as the public sphere is concerned, at the time of writing – particularly in Guadalajara, the large macro-regional capital – gourmet and urban food is similar to that found in the other large Mexican towns, with the exception of Mexico City, which is undoubtedly superior to the rest, being the great metropolis. (For the purposes of this study, we exclude from this classification luxury, cosmopolitan tourist centres, where international influence has had a strong impact.)

In the area under study, records on urban cuisine characteristic of the bourgeois (González Turmo, 1995: 307) and the *nouveau riche* are few. There is emphasis on so-called international and continental cuisine, whose predominant influences are the United States and western Europe. Moreover, in a limited number of places, ethnic cuisines can be found: French, Italian, Spanish, and Asian food from China and Japan, as well as food of Arab origin.[2] As far as "gourmet" cuisine is concerned,[3] truly Mexican food is scarcely represented, with the exception of what has been recreated in recent years, thanks to the influence of international culinary fashions, above all the French. This could be called *nouvelle cuisine mexicaine*.[4]

Meal times

To understand the public culinary contexts of western Mexico and perhaps those of the whole country, it should be pointed out that there are three fundamental meal times, each with specific tendencies, and a period when midday snacks are consumed. These are described below.

Breakfast

Breakfast in western Mexico, in contrast to Mediterranean countries, is a hearty meal and may include a range of dishes only eaten at that time of

day. Rightly, it is called *almuerzo*,[5] a term that implies large amounts of heavy and nutritious food. *Menudo*, eggs, and chilaquiles are exclusively morning foods, as is pork or beef with chilli. Birria is also a breakfast dish, as are tacos of *cabeza, tripa, suadero, bistec* and seasoned pork prepared in a style known as "*al pastor.*"[6]

It should be said that *menudo* is an archetypical morning dish, found both in bourgeois and popular cuisine throughout the entire region. Roughly speaking *menudo* is eaten between midnight and midday, since night party-goers may eat it after a night of revelry, usually at dawn, or as well-off people's parties draw to a close. Nevertheless, this dish is most frequently consumed by workers at cock-crow, very early in the morning, as many consider it the ideal dish to prepare a man for an intense day of hard work, compensating for poor nutrition, exorcising violent hangovers and even curing certain diseases, according to popular wisdom in this area. *Birria*, another characteristic dish of western Mexico, is also eaten in the morning and is considered to be the ideal breakfast for travellers before boarding a bus that will take them to their destination. This habit is to be found mainly in rural areas where the only thing consumed at daybreak is a cup of coffee or an infusion of cinnamon, with a shot of alcohol added.

In the last ten years, breakfast has acquired preferential status among middle and upper-class Mexicans. Business breakfasts are quite common, as well as those attended by well-to-do housewives, later in the day, after freeing themselves from husbands and children, at work or school. These liberated women can enjoy a good meal and spend the morning chatting with their friends.

Midday snacks

In the sphere of popular public food, midday is the time for the *botana*: in addition to *birria* and the already mentioned *tacos*, we find various stews, where meat predominates and is almost always seasoned with a spicy sauce. We also find *barbacoa* from the pot, certain varieties of seafood, and in the area of Guadalajara, "*tortas ahogadas*." This last snack is sandwiches of white *birote* bread, filled with pieces of pork fried in lard, called *carnitas*. These *tortas* are "*ahogadas*" (drowned), in a choice of two

sauces, one has a mild tomato flavour and the other is very, very spicy. Generally, these dishes are consumed at street stands or in very simple restaurants (Ávila/Ruiz, 1998: 177). These establishments attract people from the lowest strata of society, as well as those from the elite: taste does not discriminate on socio-economic grounds.

Lunch

Lunch-time, which means the hours between two and four in the afternoon, is when people usually go to so-called "folkloric" restaurants. These offer regional specialties or specialties from other parts of the country, often accompanied by music appropriate to the ambience. Dishes are almost always a preparation of some kind of meat. Lunch-time customers also go to *cantinas* and *fondas* specializing in fish or seafood. In all of these establishments, copious alcoholic drinks are consumed – especially beer, tequila, and rum. At the same time, the few restaurants that offer sophisticated Mexican food tend to be more crowded at midday than in the evening.

In this type of restaurant, it is uncommon to eat good meat, in the sense defined by the gastronomic canons of western Mexico. The meat is almost always seasoned with a spicy sauce that exploits the bountiful range of Mexican chillies. As is known, cooking meat in sauce tends to diminish its flavour. It might be said that, as far as we can observe, a sophisticated taste in meat eating has not yet spread to the whole area under study.[7] The public meal at midday, among the affluent social strata in this country, has gained sophistication thanks to the recovery of Mexico's economy in recent years and the cosmopolitan impact on urban society. In some cases, this food can be considered fine cuisine. But it still has less influence among the people of Guadalajara and other populations of western Mexico compared to the yearning they have for meat, prepared in any manner whatsoever. In fact, the quasi-compulsive fondness for meat is what pervades public and private cuisines in Western Mexico (Ávila/Ruiz, 1998: 170).

Supper

Generally, the places crowded at night in western Mexico tend to be unsophisticated and serve popular food. It is the reign of the so-called

fritangas, sold in restaurants, accompanied by small amounts of alcoholic drinks and served in a family or neighbourhood atmosphere. Beer and tepache are the alcoholic drinks most frequently found in these establishments. The meat is eaten in *pozole, tostadas, sopes, enchiladas, tortas, tamales*, and *tacos* with different fillings; in all these dishes, corn and numerous varieties of chilli also play a fundamental role. *Pozole*, a classic dish, is eaten particularly at night. The *fondas* which serve *carne asada*, prepared in different ways, are equally popular, although their establishment in this area is relatively recent.

At the same time, due to massive migration, as well as interchanges of trade and customs, one can witness the development of what we might call "popular international food", in the shape of hot dogs, hamburgers, pizzas, and sushi, which permeate almost all regions of Western Mexico, each with their own local varieties. However, for the time being we shall not dwell on this topic since it concerns what is considered to be "global cuisine". We will only reiterate what various cooks have pointed out: "People enjoy novelties (meaning new dishes), but they always come back to what they know best."[8]

Meat is eaten morning, noon, and night, as well as between meals. But we insist that taste in meat-eating tends to be on the non-sophisticated side. For example, from an international perspective, beef, which international taste dictates should be hung for a certain time and then cooked rare, in western Mexico tends to be recently butchered and grilled to excess.

THE PRIVATE SPHERE: EATING AT HOME

Whereas public food in western Mexico has a tendency to flaunt social status and assert it through external signs of wealth, with the encouragement of recently acquired gastronomic tastes, in the context of private cuisine things are different. In fact, the relative sophistication shown in certain public eating habits disappears when at home. There, instead, foodways are characteristic of people's sober and austere traditions. Gluttony ends and temperance begins, a temperance which for gourmets often seems to border on meanness. These characteristics are evident even in well-to-do households, referred to by historians as old *criollos*, in reference to their status as heirs of the conquerors and colonizers who once were part of the elite.

Breakfast

In the cultural environment of daily life at home, breakfast is perhaps the most lavish meal of all, with fruit juice, fruit, eggs, bacon, and meat dishes, accompanied by hot sauces, the inevitable beans, maize *tortillas*, and sometimes bread. Also, due to the influence of our neighbours in the north, cereals and some dairy products are consumed. But these fashions are anathema to any gourmet worth his salt.

Lunch

At midday soup or pasta are generally served. In many homes, as in cheap *fondas*, rice follows, to which many times a fried egg is added. The main dish is generally prepared from some kind of meat, but in this case, because of frugality and the dubious quality of materials, the charm of the meal is greatly reduced. Meat is presented in a number of Spartan forms. If "bistec" is served – whether pork, beef or occasionally veal – the slice is so thin that the diner can almost see through it. Likewise, a good cook will try to fool the gourmet with *pacholas*, a characteristic dish of the region, made with ground beef, to which is added a generous dose of air, due to its being ground on the *metate*. In fact better-quality meat, including fillet, is eaten only if guests are present. When there is chicken, if the family is large, the normal portions are cut in half in order to make it go as far as possible. Until recently, beef broth was made practically every day, but it was often a thin broth full of bones and overcooked vegetables. Broth was also served instead of pasta, while meat, not always of the best quality, was served as the second dish accompanied by cooked vegetables and sometimes rice.

Among festive dishes should also be mentioned those prepared with goat and pork. The latter is simply fried in its own fat over a low flame, so as to later produce *carnitas* and *chicharrones*, another archetypical dish of Western Mexico. This treat is seldom made at home, but is often eaten there after buying it from a favourite street stand.[9]

Three or four decades ago, beef was cheaper than it is today, with the exception of fillet steak. Chicken came next in cost, and then pork, of which loin was the part fetching the highest price, since people had not discovered that leg had better flavour. There was no culinary sophistication (and this

is still true today) regarding the maturity of meat, the amount of cooking it should receive or how it should be prepared. Eating meat rare provokes widespread repugnance, the more so if it appears bloody. The perception and behaviour of people in western Mexico with regard to meat consumption might be considered odd in a region culturally identified as a land of cowboys, cattle and meat.

Supper

At home in working-class neighbourhoods, night meals are less attractive. Leftovers from the midday meal might provide a treat, but these are not always available, since food from day-time meals has often been eaten up completely. The picture then becomes more sober and somewhat gloomy: a table, on which light falls dimly, with a basket of *pan de dulce*, accompanied by two beverages, one being poorly made coffee left over from midday, and the other boiled milk. Sometimes there is chocolate dissolved in milk or water. The great treat at night would be a plate of beans, accompanied by reheated tortillas. If these are *frijoles de la olla*, that is, recently cooked and served in their cooking liquid, not refried in lard, they can be delicious with tomato and onion. But that is all there would be.

LIVESTOCK AND MEAT

In Western Mexico, pre-Hispanic societies consumed meat and animal protein in a limited but sufficient fashion. However, its consumption was modest in comparison to that of modern, highly carnivorous societies like those of the West. Three groups of "meats" could be distinguished. The first was that of domesticated animals, such as the hairless dog called Xoloizcuincle[10] (*Canis familiaris*) and the turkey (*Meleagris gallopavo*). A second source of meat was game such as chichicuilote (turkey) (*Bartramia longuicauda*); hare, boar (*Tayassu pecari, Tayassu tajaçu*) and deer (mammal game); iguanas (*Iguana rhinolopha*) and snakes (edible reptiles). The third source of protein were insects such as *chicatana* ants (*Oecodoma maxicana*)[11] and grasshoppers (*Sphenarium magnum*), which for the most part are hardly ever consumed today.

Much has been written about the fact that the pre-Hispanic peoples and, in particular, the Mexica, relentlessly consumed quantities of human flesh, which would have complemented their intake of animal protein. It is even said that due to this practice they rapidly adapted to eating pork when it was introduced by the Spaniards, since this is supposed to have a taste similar to that of human flesh. However, since we have no access to anyone who admits to eating human flesh, it is impossible to confirm such a similarity with pork (Díaz del Castillo, 1985: 186-187; Sahagún, 1992: 506; Harris, 1982: 154; Hassler, 1992). In fact, some biologists argue that such a similarity is improbable because the physiological constitution of these two greater mammals is very different, especially in terms of muscular mass and the molecular structure of the fat, so they should not taste the same.

The introduction of cattle

Early in the 16th century, the Spaniards introduced cattle, horses, donkeys, sheep, goats, mules, and pigs, as well as some domesticated fowls, with the exception of the above-mentioned turkeys. From then on, the herds greatly multiplied throughout the country, but to a much greater degree in Western Mexico (Chevalier, 1982: 125). The main reason for the increase in livestock in that area was its geographical setting: all northern territory during the early colonial period was beyond limits to agriculture. It was then sparsely populated and its inhabitants were mainly nomadic groups, generally referred to as *Chichimecas*. This frontier coincided roughly with the course of the two rivers linked to Lake Chapala, the Lerma and the Santiago rivers. At the time of the Conquest the courses of these two rivers represented the east-west axis of western Mexico. This frontier corresponded to an isohyet of between 650 and 700 mm. of annual rainfall. The southern part of this area was populated by conquered peoples under the cultural influence of the central region of Mexico, but at that time peripheral to the powerful Meso-American culture, whose societies were demographically denser and much more sophisticated in general, including culinary matters.

In this setting, where territories were more extensive, possessing a range of habitats of little geographic density, but apt for livestock breeding, herds grew at a remarkable pace. And thus a carnivorous cattle-raising culture came

into being. This was all in sharp contrast to the cultural norms of central and southern Mexico, which were more densely populated areas, with well-developed agricultural traditions and finely balanced diet based on a number of different vegetable foods. Only in some areas of Western Mexico, such as the south of Jalisco, can one still perceive traces of bygone sophisticated eating habits, halfway between a solid, civilized Meso-America, and a hunting, carnivorous north. Even today, in these western and south-western regions, the use of condiments is limited in comparison to those used in the centre and south of present-day Mexico.

The province of Ávalos and its area of economic influence illustrates the way in which livestock-raising developed in the area – this province represented the heart of western New Spain. When the magistrates of New Galicia, Contreras and Oseguera, visited the towns of Ávalos in 1552, they confiscated from Alonso de Ávalos the Elder, conqueror and chief landholder in the region, five cattle ranches that he had been able to establish in just three decades after his arrival in 1523.[12] All of them had plenty of cattle for the period and, consequently, on top of the settlement pattern inherited from pre-Hispanic populations was superimposed a new organization of territory. Formerly empty lands were transformed into pastures, roughly defined, and some of the pre-Hispanic cultivated lands, where maize had predominated, became "bread-providing lands" producing wheat for the Spanish cattlemen and their servants.

To offer a clearer idea of the rapidity in which cattle-raising spread in the territory of Ávalos, we may cite some examples. According to Alonso de Ávalos, from whom it was confiscated, the ranch of Cacaluta possessed 1,500 pigs; the Tizapán ranch had more than six-hundred mares and more than 3,000 cows and calves; the Toluquilla ranch had more than 8,000 heads of large livestock, mainly cows and mares; there was also the Huejotitán ranch where de Ávalos owned more than 300 colts and mules, and that of Cocula, where there were more than 4,000 heads of cattle. This group of ranches alone accounted for some 16,000 heads of cattle, in addition to the 1,500 pigs mentioned above, and considerable herds of mules and horses (Fernández, 1999: 79-81). Moreover, at the hacienda of Miahuatlán, slightly to the south of the province of Ávalos, Alonso de Ávalos possessed at that time 40,000 heads of large livestock (Hillerkuss, 1994: 210-226).

Thus, from the early colonial period, livestock formed the basis of the economy of the western region of Mexico. Maintaining this economic system implied recourse to certain types of social arrangements that, among other things, encouraged marriages between the great landowning families. These families enjoyed close links with the viceroy's seat of government thanks to the strategic importance of their principal productive activity. Their role involved supplying meat, as well as beasts of burden, both to the central ruling apparatus and to the mining enclaves to the north.

The demographic crisis of the indigenous population, which began with the Conquest itself and continued until the first half of the 18th century, created an enormous opportunity for the consolidation of livestock as the main productive activity in Western Mexico. While depopulation due to extinction of the native communities led to land being abandoned, livestock flourished: it did not need local labour to survive. As it increased and became consolidated, livestock-raising incorporated more territory, previously barren land, into the area's macro-regional organization and logic. It was a scenario similar to that which occurred in northern Europe after the demographic crisis of the High Middle ages, caused by the Black Death (Vincent-Cassy, 1995).

Bovine livestock, according to the interpretation in Ramón Serrera's work (1997), seems to have experienced greater production to the south of the Lerma and Santiago rivers, in part of the central plateau that reaches to the northern border of the kingdom, along the Pacific coastal plain. Sheep-raising was differently distributed, since this became extensive solely at higher altitudes in the eastern region of western Mexico. In the domains of the Santiago River Valley, there were only a few isolated centres where sheep were raised, in regions of mixed animal husbandry. In warmer territories, the species produced poor results. But in the region of Guadalajara in certain seasons, major herds of sheep from the Bajío came to pasture, starting from the last quarter of the 16th century (Serrera, 1977: III, VII; Chevalier, 1982: 129).

The first species to multiply in the west of New Spain in the first half of the 16th century seem to have been large livestock: cattle and horses. Smaller livestock appear to have spread throughout these territories some decades later, at a time when several hundred thousand heads of cattle

from Querétaro and Mezquital Valley were herded towards the Chapala basin on a seasonal basis (Chevalier, 1982: 129; Salvucci, 1987: 46; Melville, 1994: 154). The exception was perhaps the pig, known to have arrived in herds, accompanied first by conquerors and later by colonizers (López Portillo, 1976: 132-33; Zavala, 1990: 129). Through other sources it is known that these migrating herds arrived beyond the basin of Chapala, to the west of the present state of Jalisco. The members of just one of the families dedicated to this activity during the second half of the 17th century usually brought each year 80,000 sheep accompanied by 50 black slaves.[13] Although these herds returned annually to the Bajío to be sheared, a liking for mutton seems to have developed in parts of western Mexico owing to their presence, since by the end of the 17th century and in part of the 18th, the consumption of lamb in Guadalajara appears to have been relatively high. However, towards the late 1790's, the number of sheep slaughtered for consumption in Guadalajara shows a drastic reduction in comparison to previous decades (van Young, 1981: 45). But in those times, the majority of sheep that were eaten came from neighbouring haciendas, mostly from the great ranches to the south of the city (van Young, 1981: 49). Perhaps the decline in sheep and bovine migration permitted the introduction and multiplication of goats, which in time became one of the favourite meats in the zone and the basis of one of its archetypical dishes: birria.

LAST COURSE

At present the quantity of meat consumed in Western Mexico is high, as it is in the entire country, but its preparation is not very sophisticated. The flavour of meat eaten in this area is distorted by the fact that it is prepared in a great variety of hot sauces, including archetypical dishes like *birria or pozole*. In principle, this relative intricacy in food preparation is due to the relatively small number of ecological zones that make up the area in question. It is, as has already been observed, a zone of transition between Meso-America – whose wealth of resources made possible the development of high cultures – and the great, semi-arid north. Even so, it still shares with densely populated Mexico City the millenia-old tradition of corn, beans,

and chilli, which has sustained the process of Meso-American civilization and its areas of influence.

The nutritional basis of the pre-Hispanic inhabitants of Western Mexico was, as in agricultural New Spain, the Meso-American triad complemented by the consumption of other resources, such as game and insects that were rich in proteins. On the arrival of the Europeans, with their highly carnivorous eating habits, Indians and Mestizos of the area soon got used to eating like Europeans – above all meat, a nutritional source of the first order, food that could be prodigiously multiplied thanks to the area's rural conditions.

The importance of livestock in Western Mexico was such that it became highly developed, with its own characteristics. To a large extent, livestock allowed the regional elite to accumulate enormous riches in land, cattle and diverse commercial activities, with the exception of mining. The latter, though the most highly valued source of wealth during the colonial period and afterwards, developed only marginally in this area. However, raising cattle and related activities exercised such a strong influence that livestock marketing produced certain repercussions in other parts of the territory. Within our area of study, the presence of livestock made possible a high level of meat consumption, which gave rise to the appearance of dishes such as *menudo*, *birria*, and *pozole*, though from meat products that were often, paradoxically, of dubious quality.

Ensconced in a transitional zone between two geographical and cultural worlds, these regional societies became insular. Their colonizers had to work hard to recreate their former living conditions, in addition to which their cultural parameters were not at all sophisticated: the main criterion for success and social prestige was territorial accumulation and, by extension, its exploitation. Under such conditions was born and developed an austere, closed-minded, frontier society – bearing in mind its relative isolation and limited range of production (Moreno, 1993: 97), where temperance and cupidity were valued far above a gourmet passion for food and other excesses characteristic of sophisticated societies.[14] Thus, in such an austere and acquisitive society, sumptuous styles of consumption failed to make inroads, and, as for food, the elite ate almost the same as the poor. In fact, bar the gastronomic sophistication that has appeared in recent years thanks to capitalist expansion characteristic of a world with multiple cultural

influences, in Guadalajara, as in Mexico as a whole, it is extremely difficult to draw a dividing line between the food of the rich and that of the poor.

In contrast to other cities and colonial domains, such as Oaxaca or Veracruz, in Guadalajara and its region the limited variety of food products, the limited indigenous influence, and the austerity characteristic of a border zone, has caused its communities to indulge more in ideological leisure – religion in this case – than festive leisure, which includes food. This might explain in part why, in spite of being Mexico's second capital for centuries, Guadalajara and its region has not developed, at least until very recently, awareness of food and its refinement in the sense expressed here, as occurred in Mexico City and Puebla, for example.

Be that as it may, the region's food, characterised by its consumption of meat – not necessarily of the best quality and prepared in a quite simple manner – is a pivotal part of the identity of the people who have lived there. And this identity has very strong roots, which shape their way of seeing the world and behaving in it. It is above all popular, rural, and livestock-related. This confirms what Ginzburg (1991: 185) said about the substantial importance of popular culture for the social fabric. In fact, to a large extent, it is the strength of this popular culture in Western Mexico that has caused the originality of some of its customs, habits, and behaviour, which have eventually become symbols of national identity. Such is the case of the stereotyped man on a horse, the ranchero; the popular music of the mariachi; and an emblematic drink, tequila, that has with considerable effort managed to earn a place in the international world.

NOTES

1. In this area, people ate in an unsophisticated way because they remained north of the pre-Hispanic and early colonial agricultural frontier. The area is far from the 650 to 700 millimeter isohyet of annual rainfall, which impeded the growth of most basic crops, with certain rare exceptions.
2. The yellow pages directory lists about a hundred restaurants that serve ethnic cuisine, which is not very many for a city bordering on five million.
3. As an initial position statement, it could be claimed that fine cuisine implies a reflection on methods of preparing different foods that in western Mexico appeared with the ascendancy of the bourgeois. Any food designated as fine has its basis in popular cuisine, but has been recreated by the skill of the chef – the specialist – and

this expresses in gastronomy an image of reality that pertains to the social elites. In addition to recreating, through culinary expression, a certain vision of the world, fine cuisine has unlimited access to a wide range of specialist ingredients and utensils, and is therefore influenced by exogenous gastronomic traditions.

4. For the last two decades, traditional Mexican cooking has entered a suggestive phase of "re-creation" thanks to chefs influenced *by nouvelle cuisine*. Two parameters emerge from this influence: a liberal and sometimes daring approach to combining flavours, aromas, and colours; and delicacy in the presentation of dishes. But, for the most part, this tendency has appeared in restaurants for the elite.
5. Ed. Note: For this and other italicised words see Glossary at the end of the chapter.
6. This type of meat preparation is of Greek and Turkish traditions.
7. As proof of this, the percentages that follow show the approximate consumption of foods in one of Guadalajara's most prestigious restaurants: beef, 45 per cent; chicken, 30 per cent; fish and shrimp, 15 per cent; pork and non-meat consumption, 5 per cent each. The low rate of pork consumption can be explained by previous outbreaks of trichinosis that affected the pig herds. Nevertheless, in popular restaurants pork consumption is much greater. (Information from Federico Díaz de León).
8. Words of Laura Medina, a cook representative of Guadalajara food specialties.
9. Not long ago, in small towns it was quite common to see animals slaughtered in the gutter for human consumption, and the hide was used as container for the meat being sold.
10. *Xoloizcuincle* comes from the Nahuatl root, xolotl-itzcuintli (young dog), according to the *Diccionario de Mexicanismos* (3rd Ed.) by Francisco J. Santamaría. Mexico: Editorial Porrúa, 1978, 1125.
11. *Ibid*., p. 373.
12. The ranches in question were Cacaluta, Tizapán, Toluquilla, Amatitlán, Huejotitán, and Miahuatlán.
13. Regarding this, one can see papers belonging to Beatriz de Arteaga y Sotomayor in Cocula and official writs from the *Real Audiencia de México* "so that labourers from the hacienda were not taken by force." Archives of the Hacienda de la Sauceda (care taken by Rodolfo Fernández), box B, sheaf 42, document 86, f. 5.
14. One example of these attitudes is summed up by an informant, the manager of a luxury restaurant in Guadalajara: "Here people are touchy about prices, they don't like to spend much..." (Communication from Federico Díaz de León).

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GLOSSARY

Almuerzo.- A term of Moorish origin that means a hearty meal, eaten from early to mid-morning, and designed to stave off hunger until lunch, which is eaten rather late in Mexico.

Al pastor.- Way of cooking meat, impaling it on a vertical or horizontal metal spit, with fire underneath or to one side, depending on the spit's placement. The spit revolves with the meat attached, and it can be placed nearer or farther from the fire, according to the cook's requirements. This way of preparing meat, usually pork, lamb, or chicken (usually whole) resembles that used in the Mediterranean world. The vertical model appears above all in Greece and the Middle East. The horizontal appears more in North Africa and the Western Mediterranean.

Barbacoa.- Word of Caribbean origin (apparently Arawak) designating a method of preparing meat in a pit, mostly lamb. The floor of the pit is covered with stones and a wood fire is set alight upon them to burn for about three hours. When the fire burns out, the stones are red hot; the meat, wrapped in maguey or avocado leaves, is then placed on a grill over the stones. The upper part of the hole is covered with more leaves, covered with earth. It is left to cook for some eight hours and later uncovered to be served up. There is also a *barbacoa* not made in a pit, but prepared in a sealed pot.

Birote.- A crusty roll of white bread, speciality of Guadalajara. One variety is made with sour dough. It is said that this bread cannot be made outside the Guadalajara area, because the particular climatic conditions there are necessary for its preparation.

Birria.- Meat dish, most often made of young goat (or a mature female), cooked by steaming. It is flavoured with a variety of chilies and spices, among which cumin is prominent. It used to be made of discarded beef or pork, including viscera, which workers had obtained as a gift from hacienda owners, who consumed the finer parts of the animals themselves. The isolated expression, *una birria*, still denotes something of low quality, even when not associated with this dish.

Bistec.- A slice of pork, beef or veal, generally lean. Comes from the English expression "beef steak", but in the Mexican context no distinction is made as to the origin of the meat.

Botana.- Various foods eaten before the midday and evening meals, usually accompanied by an, like the Spaniard's *tapas* and *pinchos*. They are usually eaten in a different place from where the main meal is eaten.

Cabeza.- The word head in this case designates pork for *pozole* and beef for *tacos de cabeza*. In both cases the head is cooked with aromatic herbs and spices.

Cantinas.- Cantinas are a kind of tavern, where people come to drink and eat *botanas*. They are like Spanish *tascas*, but with their own peculiarities. Beer and liquor of all types are consumed, perhaps with an emphasis on rum. Table wine is relegated to the celebration of mass and left to the priest, while generous aperitif wines are allotted to nuns; both are glaringly absent in cantinas.

Carne asada.- Grilled meat

Carnitas.- Pork, cooked in a large copper pan or pot. It is fried in lard over a low flame, often in the street, and usually as a leisure snack, especially in the country. In cities, it tends to be prepared daily, in specialized outlets and sometimes in restaurants.

Chicharrones.- The greasiest and commonest parts of the pig, including the skin, prepared and consumed along with *carnitas*. The generic name of *chicharrones* usually includes both of these. *Chicharrones* are for the poor and hungry what *carnitas* are for the rich and "those who are watching their health".

Chichimecas.- Generic name given to the nomadic indigenous people who inhabited the territories beyond the agricultural border of Meso-America in the north of Colonial New Spain. They were renowned for being indomitable, barbaric, and superb warriors. Peace was not made with this tribe until the end of the 16th century.

Chilaquiles.- A dish prepared with small squares of dried tortilla, fried and bathed in sauce ? usually tomato based. It is sometimes cooked with egg, or chili sauce without tomato. In Western Mexico it is usually served sprinkled with dry cheese and onion.

Criollos.– The descendents of Spanish families, who have not intermarried with indigenous people or those of mixed blood.

Enchiladas.- A dish made of whole tortillas rolled like tacos, with onion or meat filling. They are prepared by dipping the tortillas in a sauce made from a mild, not hot chili sauce, called *chilacate* sauce, which is also poured on them when served, sprinkled with dry, grated cheese, cream and lettuce.

Fonda.- Place where food is served, generally simple and modestly priced. In broader terms, *fonda* is the Spanish word synonymous with the gallicisms: *restaurán, restaurante,* or *restorán*.

Fritangas.- All types of popular food, whose common denominator is being fried in oil or lard, and made with a base of corn *masa.* Generally, they are prepared with beef or pork, ground or shredded. They are usually served with a topping of lettuce or cabbage, radish, bits of cheese, and sometimes cream. They are bathed in a mild tomato sauce, made with broth in which the meat was cooked, seasoned with garlic, marjoram, and diced onion. The diner can add the hot sauce of his choice.

Masa.– A generic word for dough, although the unmarked term in Mexico nearly always refers to corn dough, as used for making *tortillas* or *tamales*. This is prepared by first soaking the corn kernels in water with lime.

Mariachi.– Music and the band that produces it. The word is said to come from *mariage* or marriage in French, referring to the occasions on which these bands were hired. Mariachi bands have fiddles, guitars and other string instruments, with a brass section for the riffs. The music is romantic, and at times very loud and evocative, producing the accompaniment for traditional Mexican songs.

Menudo.- Dish of boiled and seasoned tripe, eaten like a soup with abundant broth. It is served with oregano or mint, fresh Mexican lime juice, onion, and hot sauce or chilies. These can be green Serrano chilies or dry chilies (*chile de árbol*). Accompanied by tortillas.

Mestizo.– People of mixed Spanish and Indian blood, the majority of the population in Mexico.

Metate.- A neolithic-style, oblong grinder with a flat, curved bottom and almost imperceptible edges. A grinding stone, semi-cylindrical in cross-section, and of a length similar to the width of the flat surface, is scraped along this to grind and fluff various foods. It is mainly used to make *tortillas* and *pacholas*, and to grind chiles and seeds, when preparing *mole* (a mixture of spices and other ingredients used to make sauces) or *pinole* (a maize-based powder, with sugar and flavours, eaten as a sweetmeat).

Pacholas.- Small patties of ground meat and seasoning, made on the *metate*. The *metate* serves to expand them and make the food go a long way. Once made, the *pacholas* are fried and then served with a mild tomato sauce, flavoured with marjoram and onion, similar to the sauce served with *tostadas*.

Pan dulce.- Common pastry of old world origin, in a wide variety of forms depending on local tradition. It includes items of puff pastry in various forms; some of biscuit dough; and others with a bread centre and sugar decorations on the upper surface. They are also known as lardy cakes, to distinguish them from white breads of European tradition and dark breads of local tradition.

Pozole.- A dish cooked with grains of corn and flesh of the head of the pig, garnished with radishes, cabbage, or lettuce. Cabbage or *repollo* is more frequently used in small towns, while lettuce is used in urban areas.

Sopes.- The word *sope* includes two generic types of small corn *masa* pancake, one eaten as such, and the other, fried. The first is prepared in the same way as a tortilla and when freshly made is eaten with accompanying foods. When cold, they are fed to the dogs. A variety of *sopes* are eaten with meat and vegetable filling, and called *gorditas de comal*. Fried *sopes* have the same initial preparation as the others, but once cooked they are reworked while hot, to make a ridge around the sides, so as to form a kind of bowl with straight edges that is then fried and served like *fritangas*, with beans at the bottom, then meat with mild tomato sauce, lettuce, cabbage or radish, and cheese on top.

Suadero.- Part of the cow often sought by those who love *carne asada* . It comes from the animal's back, and owes its name to the place where the saddle or riding gear is set on a beast of burden, placed over a cloth called *sudadero* (*suadero*) or *carona*, between the saddle and the animal's skin, to soften contact with the back.

Tacos.- Corn tortilla rolled around some filling, or simply seasoned with salt or hot sauce.

Tamales.- Corn *masa* additioned with lard, shaped in square-sectioned cylinders, filled with meat, beans, or something sweet, wrapped in banana or corn leaves, according to the area where they are made or the type of *tamal*, and then steamed. There is a variety made of ground, tender corn, with salt or sugar. Other kinds, from the south of Jalisco and the centre of Michoacán, are made from a *masa* prepared with ashes and not lime ? as are the majority of products made with cooked corn. The variety in Jalisco is prepared with an egg coating, similar to puff pastry, and has beans between the layers of *masa*.

Tepache.- A beverage made of fermented pineapple with *panocha* (brown sugar), served with a spoonful of bicarbonate of soda.

Tortas.- A kind of sandwich, prepared with or without a top (open faced). *Tortas ahogadas* (see below) are of the first kind: the bread roll is sliced open only on one side and the filling inserted. The combined *tortas* are served without tops. They are prepared like *tostadas*, with beans, meat, vegetable, radish, and sweet sauce with oregano.

Tortas ahogadas.- Made with white sourdough bread (*birote*), filled only with *carnitas* and sometimes spread with beans. Served in a very hot sauce, usually made by combining for every kilo of tomatoes, sixty dried red chilies and sixty cloves of garlic, plus vinegar and spices. These represent a culinary sacrifice, almost a ritual dish, whose force has been weakened in recent years by the accompaniment of a mild sauce, similar to that used with *fritangas*.

Tortilla.– A flat, round pancake made of maize dough, which has been the basic bread of the Meso-American people since the Neolithic era. In the north of Mexico, people commonly eat tortillas made of a dough of wheat flour, with added lard.

Tostadas.- Fried, crispy *tortillas* topped with beans, meat, and other ingredients characteristic of *fritangas*: vegetables, radish, cheese, and sauce. They can also be garnished with cream and avocado slices.

Tripas.- Pork innards of various kinds fried in lard and served in tacos with hot sauce. This constitutes a false cognate in relation to *tripe* in French or English, which would be translated as *callos* or *mondongo* in the Spanish of Spain.

Meat among Mediterranean Muslims: Beliefs and Praxis

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ABSTRACT

Meat among Mediterranean Muslim societies is rare, sacred and highly valued. There are complex religious and magical beliefs surrounding meat, the sacrifice of life that it entails, and its consumption. An analysis of the historical roots of meat eating and linguistic clues from Arabic dialects reveals the social and ritualistic representations of these peoples' attitudes towards meat.

"How fat is that meat, as white as wool!"[1], says a Marazig Bedouin of Nefzawa in Southern Tunisia during the feast following sheep shearing (Boris, 1951: 194).

All around the Mediterranean, meat is a luxury and most of the time only eaten on festive occasions. The Mediterranean peoples are more commonly consumers of vegetable and dairy products, while meat is accorded a special status. "There are, between butchered meat and human life, mysterious and frightening concordances," says Jeanine Jouin (1957:

302). Although or because it is often missing, meat is surrounded by many beliefs, among which abound prohibitions and prescriptions mainly according to gender, magic and religion.

Muslims may eat many kinds of meat and in this chapter we will consider the beliefs, praxis and social usages attached to meat eating.

Belief Systems and the Status of Meat

By using linguistic comparison, the study of the word may clarify the status given to meat in Muslim countries. In Arabic, the word for meat is *lahm*, a term common to Semitic languages. It exists in Hebrew in the form of *leḥm*, but with the meaning of "bread".[2] In each of these languages, the word designates a staple-food: among the Hebrews, who were mainly farmers, cereals yielded bread, while among the Arabs, who were mainly shepherds meat, is the most highly valued food.

The impact of religious and magic prohibitions

In these societies, where Islam dominates institutions and guides temporal and spiritual lives, religion totally regulates foodways and classifies meats as lawful *hallal* and unlawful *haram*, which determines the prohibitions (see Mohammed Hocine Benkheira, 2000).

To be edible, cattle and game must be killed respecting precise rules: the head of the animal is turned towards the direction of Mecca; slaughtering consists in cutting completely through the windpipe and both jugulars without removing the knife until the entire severing of those parts is completed; as the animal is struck, words are pronounced which consecrate it (*bismillah*) and it is then drained of all blood. The consecrating words represent slaughter always as a sacrifice, and make all meats sacred. Among Muslims, anybody may slaughter so long as this ritual is observed; while among the Jews, only the priest *kohen* is allowed to do so.

It should be stressed that religious prescriptions for meat are equally important in all three religions from the Middle East, even if they do not adopt exactly the same forms. Among Christians, Lent and fasting days exclude meat, but not fish, in principle. Among ancient Hebrews, Jews and

Muslims, there were and still are many similarities which, in addition, are observed by Middle Eastern Christians. These are mainly:

a) The rejection of blood: all animals are bled, so that they refuse any kind of blood-based dish, such as black pudding.

b) The prohibition of pork, which is not traditionally eaten by Middle Eastern Christians.

c) The prohibition of carnivorous animals, birds of prey, horses and ostrich in Northern Africa. However, those prohibitions are not so regularly observed among all Muslims, as we shall see. All other meats are allowed, if the precepts of slaughtering are respected. So they may eat livestock, poultry, fish and nearly all birds.

However, religious prohibitions can be overlooked if you are ill and in case of pressing need: "To save your life, you may eat anything, even horse; however, if you are able to choose between pork and the carcass of an animal not lawfully slaughtered, you must choose the latter." This is a precept commonly found in Maghrebian countries (Daumas, 1869: 258).

In the case of a previously unknown animal, Islam refers to the book of *Leviticus.* The prohibited meats are nevertheless rare and vary according to regions, times, societies and religions (Rodinson, 1971: 1083-4). Thus, in the Xth century, pork and chicken were prohibited among the Sabeans of Harrân in Egypt, but not among the Greek Sabeans of Egypt (al-Mas'ûdî, 1896 trad.: 222). The descendants of Sidi Abd Allah Djebbari, in the Moroccan Djebel, cannot eat the head of a ram for fear of becoming blind, while they can eat the male goat's head (Biarnay, 1924: 50).

The case of the horse is rather complex: Persians in country areas of the north ate it in the 14th century (Fakhru'ddîn Râzî, in Nicholson, 1899: 27), as have Turks for a long time. Leon the African, towards the beginning of the 15th century, records that the Mamelukes of Egypt, of hanefit rite,[3] generally ate horse meat; and, when they had some maimed animal, they brought it to the butcher, who killed it after fattening it for as long as necessary (Leon the African, book 8: 228). Towards the end of the 18th century, M. d'Ohsson claims that the Ottomans do not eat horse meat, whereas the Tatars do because of their way of life: they are poor, have no knowledge of agriculture or trade, and live only by war; the horse is their

sole resource. On the other hand, in the Maghreb, where it enjoys special status, horse has never been eaten, nor dog for that matter.

The wild boar *khallouf* enjoys an ambiguous status; Kabyles of Algeria generally refuse to eat it because it "digs up the dead", just as they will not consume hyenas which eat carrion. But then the "jambon de Paris" that, in Tunisia, some ate with pleasure in certain circumstances, was not orthodox either (Gobert, 1961: 315).

There are, in addition, incompatible associations and therefore prohibitions, such as mixing milk with meat among the Touaregs of the Ahaggar, the Bantu and Nilotic Christians, and Animists of Sub-Saharan Africa (Grivetti, 1980: 205). We know that it is a fundamental prohibition among the Jews, and it may have influenced these populations with whom the Jewish communities of the Draa, in Southern Morocco, were in constant contact.

Some particularly prestigious parts of animals, such as the head and liver, are in certain circumstances prohibited to Maghrebian women who have just given birth. (See below.) Among the Aeneze and Bedouins of the Middle East, women cannot eat sheep's head, feet or liver (Burckhardt, 1831, 1: 60; Biarnay, 1908: 395). Although there is no given explanation for its specific prohibition to women, in the whole area concerned in this study, they are forbidden grilled liver because it is the organ of feelings; according to ancient scholarly medicine, humours are born in the liver, from where they spread throughout the body. "The vital spirit, *ruh*, is born from the vapour of the liver" (Avicenne, 1956: v. 416, 418)[4]

Many practices take into account gender opposition, as for the Ouargli women of Algeria: ram and male goat testicles are a food reserved for those who wish to give birth to a boy (Biarnay, 1908: 342), while they are forbidden to eat udder (*idem*: 328).

The sacrifice

In addition to the major sacrifice of *"aîd el-kebîr*, at the end of the pilgrimage period, on the 10th day of *dhul-hijja*, and which commemorates the sacrifice of Abraham, there are many other sacrifices of social significance, especially that of the 7th day after birth, when the child is given a name. In order to increase its sacredness, many Maghrebians perform it besides a *koubba* or

zaouïa. This type of chapel was built in honour of a saint; it is a place of pilgrimage and pilgrims beg the saint for recovery from illness, the fulfilment of a wish or the begetting of a child. They can also consecrate to the saint a child who has arrived late in their life or after several stillbirths. The father or head of the family brings the animal and sacrifices it in front of the sanctuary. The *akhdîm*, who looks after the sanctuary, takes the head, feet, skin, one quarter of the meat and the intestines. What is left over is distributed among those present (Biarnay, 1908: 437).

The animals thus solemnly sacrificed are livestock, often from the family's own flock or herd. They must be males, perfectly formed and without defect: ram, bull, buffalo or dromedary.

Beliefs and representations

Because it is rare, meat has always been highly valued, as illustrated by its importance in some medieval Arabian literature: the "Book of the misers" of the Iraqi Jâhîz portrays, in the 9th century with much humour many miserly hosts, and particularly those who ration out the meat on their table.

Another literary example is an Egyptian allegorical work of the beginning of the 15th century, rather similar to our medieval battle between "Carême" and "Charnage".[5] It tells of the battle between King Mutton who reigns over the meats and King Honey who reigns over the sweets, vegetables and cereals. King Mutton wins in the end (Finkel, 1932: 122-148).

Supernatural characters and properties are attributed to a product resulting from a sacrifice and submitted to rituals. Thus many protective and healing beliefs are attributed to the meat of *aïd el-kebîr*'s ram. At this festival every family must sacrifice an animal. Even if the surplus of meat should in principle be distributed as alms to the poor, it is more often kept either dried for *qadîd*[6] or preserved in fat for *khlî* .[7] These preserves will be used in situations considered serious, such as illness or weakness – or for feasts.

In addition, meat has an influence on the behaviour of man. "The person who refrains from eating meat for forty days, wastes away. But the person who for forty days only eats meat, inevitably becomes cruel". This is an Algerian saying (Ben Mansour, in Daumas, 1869: 278).

In the same vein, the emir "Abd el-Qader pronounced a rather peremptory classification of characters when he said to general Daumas: "*khamsa ya'kulu khamsa*" (five eat five), for which he gave the following explanation. "In the world, there are five peoples, who like five different animals, and from these they derive their habits. The Christians eat pork: they ignore the feelings of jealousy, and are generally fond of good food and grabbing whatever they can. The Turks eat horse-meat: their heart is hardened and they totally lack compassion. The Egyptians eat rats, and just like them, they are inclined to theft. Negroes eat monkeys: they have a passion for dancing. The Arabs eat camel: like the camel, they incline to resentment." (Daumas 1869: 278-9)

Eating meat not only has an influence on the morality of man, but also on his body: in Algeria, they say that the Prophet declared a preference for meat above all because it improves the hearing (Daumas, 1869: 277). In Tangier, they claim that the Prophet said: "The man who has not eaten meat of my female camel or of my locust is not of my people" (Biarnay, 1924: 49-50). For a long time, in this whole area, the flesh of the *saqanqûr* (*Scincus* lizard) has been considered a strong aphrodisiac. In Iraq of 9th century, to recover sexual power, men consumed it only during the lizard's mating season, thus insuring the presence of the aphrodisiac substance (Jâhîz, 1988: 338). This belief is still strong in Northern Africa.

Higher value of meat at childbirth

When a woman has just given birth, she must observe many rules in order to recover the lost blood and ensure abundant milk (Aubaille, 1998). Poultry and its broth is the prescribed food for the mother of a newborn child in all countries around the Mediterranean, including the Yemen. "The child must be protected by chicken flesh", they recommend in Egypt, where poorer classes consider that chicken must be eaten daily. In the oasis of Tabelbala, the women only eat poultry (Champault, 1969: 318).

Everywhere, poultry often acquires a propitiatory value. Hen or cock broth is not the same since the sex of the bird determines the future marriage of the child: it will be hen for a boy and cock for a girl. This belief exists from Northern Africa to the Middle East.[8] Eggs, too, have many symbolic values: fertility, happiness, wealth; they protect and are propitiatory.

On the other hand, some foods are prohibited to the mother and her family. In the Metidja, south of Algiers, " In order not to lose the newborn baby, for forty days after the birth neither the mother of a newborn child, nor her husband, nor the children eat *zellif* (oven grilled mutton or goat's head and feet)" (Desparmet, 1919: 222).

Liver, which has a very special status, provokes a number of attitudes. In Turkey, in order to have abundant, pleasant tasting and fragrant milk, the mother of a newborn child must eat mutton liver; by a reasoning of analogical magic, in the Aurès, the Chaouïas, favour the heart and liver of the doe-hare, because it is known to be prolific and suckles all its youth at the same time (Gaudry, 1929: 102). Similarly, in the oasis of Tabelbala, the young mother eats the dried and powdered liver of the she-camel, because it is a good nursing mother (Champault, 1969: 318).

On the other hand, in Northern Africa, especially for the men, they grill the offal – heart, lungs, kidneys – of the ram which has been sacrificed for the seventh day after birth, when the child is named. They are careful not to roast or grill the liver of the victim, which would mean the rapid death of the newborn's father or mother. It is boiled, cut in small pieces and distributed to everybody, even to people outside the home, so as to promote tender affection for the child, since the liver is considered as the seat of motherly love (Jouin, 1957: 308; Rodinson, 1973: 343).

Dietetics and classification[9]

Among Muslims, whether breeders, nomadic or sedentary, the status of meat, either eaten or sacrificed, represents certain differences according to country and culture, as regards prohibitions, permissions and practices. However the scholarly knowledge of ancient medical tradition is partly present in the system of representations in traditional popular medicine of the Maghreb and the Middle East in modern times. In the classification of foods given by medieval doctors (such as Ibn Mâsawayh, Râzî, Avicenne), meats were qualified with two concepts pertaining to the organic: *lathîf* – thin (also the case of many spices) – or *ghalîzh* (the case of various meats and vegetables). In the Hippocratic system which recommended the balance between the

humours of the consumer, his condition and the nature of the food, meat which had a dry and cold nature had to be counteracted by:

- products with hot properties, such as salt, spices, condiments;
- products of fat nature (equivalent to humid), such as the fat of the meat itself, the fat of the sheep tail, and oil.

Hippocratic medicine practised by the Arabs and Persians classified meats according to the patient's humours and applying the theory of opposites. "The phlegmatic, of humid constitution, whose body is used to a good life, has to eat various kinds of birds and poultry" (Kuhne, 1980: 314). The meat of the young chicken produces pure blood, but the two-year-old lamb, which has tasty meat, is thick food; the old male goats and old bulls produce black bile (Avicenne, 1956: v. 165, 171-2). "Sometimes the appetite increases when coldness and acidity [in the stomach] dominate; thus, you have to eat butter, fats and juicy fatty meats", recommends the Sevillan "abd Rabbihi, in the 10th century (Kuhne, 1980: 318).

Various meats were considered thick, hard and difficult to digest; they were those of adult animals and of game. To make them digestible, they had to become tender, and so they were cooked twice: first boiled, often simply with onion and coriander, then "prepared": minced with condiments and spices, such as in Iraq in the 12h century (al-Bagdâdî). At the same period, this was similarly prepared in the Spain of the Almohads when they cooked rabbit, goat, hare, stag, wild ass or camel. Game particularly was strongly seasoned with garlic (very hot and thin) and when served, raw garlic crushed in olive oil was poured again on the dish (al-Tujîbî, 1997: 138-142). That final seasoning of very hot products (raw garlic, olive oil) is the only example that we know of in all documented medieval recipes. To-day, hot pepper is abundantly used. In fact, only what is boiled is seen as perfectly digestible, because boiling is likened to a process of pre-digestion.[10] The soft texture of meat and, in extreme cases, pureed meat, is one of the characteristics of those foods. The dominant spice for meat dishes was cinnamon. Today still, in the Middle East and Northern Africa, cinnamon, either from China or from Ceylon, is present in all cooked meat, because it removes "the rankness" *zankhit al-lahm*,[11] that "strong meaty smell". These foods were recommended to persons of hot constitutions and adults in the prime of life.

The thin and tender meats are those of young animals (lamb, kid, chicken, young pigeons, veal); they are very humid and generally were not boiled first, but directly put in the cauldron with oil and/or spices; they were then minced or roasted. Chicken meat is not fat, so it was always prepared in Iraq with sesame oil (al-Bagdâdî) and in the Maghreb with olive oil (al-Tujîbî). According to al-Bagdâdî, those meats might never be associated with garlic or onion. They were good for young children, women and the elderly; Avicenne in the 11th century, recommended them for the summer diet (Avicenne, 1956: v. 821-7).

By virtue of their hot properties, aromatic herbs have an important part in the cooking of meat; they were often used for prophylactic and curative purposes. Condiments and spices restored the balance between meat and the consumer according to his constitution, his age, his condition and the season; and they also played a central part in the association of tastes: thyme, sage, rosemary, garlic, onion, parsley, mint and most of all hot cayenne pepper and sweet peppers which arrived from America in the 16th century, were of foremost importance in popular dietetics, which aimed at balancing the nature of the products.

Witness the following recipe of the 12th century, still present in the Maghreb, of chicken prepared as *tâjîn*. It was first boiled with hot spices, pepper, dry coriander, garlic, cinnamon *qorfa* and saffron flavoured vinegar. Then it was cut up and the pieces were put in the *tâjîn* and cooked in the oven with the strained juice, dry fruit, almonds, and chickpeas. Before serving, it was garnished with pieces of hard-boiled egg and mint. It could also be sprinkled with cinnamon and ginger (al-Tujîbî, 1997: No. 9-10).

PRAXIS

Meats for eating

Although meat consumption is low in those societies of rather vegetarian sedentary farmers or nomadic shepherds, who mainly live on dates and dairy products, they seem to have at their disposal a great diversity of domestic animals. These are listed in the numerous medieval books of

medicine, which all commented on diet, and actual cookery books such as those of Iraq, Persia, Arabic Spain, etc.

In 8th century Southern Persia, the Christian doctor Ibn Mâsawayh (1978-1979) listed "beef, veal, goat, one-year and two-year-old lamb, ram, camel, hen, chicken" Later, Fakhru'ddîn Râzî (14th century), a Northern Persian living close to the peoples of Central Asia, added to that list young and adult pigeon, and horse, exceptional because it is never eaten elsewhere (Nicholson, 1899: 27).

In Southern Irâq, in Lahssa, not far from Basra in the 11th century, it is interesting to note that they sold in addition to donkey, ox, sheep meat, etc, that of dogs and cats. The head and the skin of the animals might be put next to them so that the buyer could know what he was buying. Concerning dogs, "they fatten them like sheep in the pasture; and when they are so fat that they cannot walk, they kill them and eat them." (Nâsir-i- Khosrau, in Shefer, 1881: 229). It is, to our knowledge, the only reference of it and is reminiscent of the Chinese custom of fattening certain species of dogs. A connection between China and Basra, one of the principal harbours of the Persian Gulf, can be speculated on: we know that at that time they had maintained maritime exchanges since at least the 7th century, and that there was an Arab colony in Southern China (Canton) between the 9th and mid 10th centuries. In the Maghreb and al-Andalûs, in the 13th century, one-year and two-year-old lamb, mutton, kid, camel, beef, and also donkey, bull, rabbit and poultry, goose, chicken, cock, capon, pigeons, and small fattened woodpigeons were eaten (al-Tujîbî, 1997: 114, 160, 156, 166, 162).

All these more or less precise listings of meats are for societies of farmers in fertile countries. The situation has always been quite different in societies of nomadic shepherds living in dry countries and deserts. For the Bedouins of the Middle East, "the milk of goat and camel, pressed dates in leather bags, locusts, rats, gazelles, and hares are common foods.[12] Among those mentioned, the dromedary is present almost everywhere, but its meat has been for them, until now, a luxury just as was bread.[13] The meat is dried and then ground into flour" (Volney, 1998: 280). In the Saharan Tell, the dromedary is occasionally eaten; but in the Sahara, according to General Daumas, its consumption is more frequent (Daumas, 1869: 257). In Mauritania to-day, they eat lizards and occasionally dromedary, whose

meat is particularly appreciated. It dries easily in the sun because of its natural salt content due to the saltiness of the environment, found also in the waters they drink and the plants they graze on.

For a long time, sedentary populations have always reared sheep, cattle or buffaloes in the plains and, depending on the country, goat in the mountains, rabbit, pigeon and, ever since the discovery of America, turkey. The Marazig farmers of the Nefzawa, in Southern Tunisia, eat mutton, goat, sometimes dromedary, but rarely dog; the animal is entirely eaten (innards, various glands, etc.) (Ristorcelli, 1938: 80).

The main meat source are sheep of various races, the preferred one being the "fat tail" or "barbarine" imported a long time ago in the Maghreb – it is represented on roman mosaics of Tunisia. The tail, *lîya*, just like the hump of the dromedary, *sanâm*,[14] is everywhere a prime cut furnishing very fine fat.

Chicken dominates in Egypt where, since Antiquity, they use artificial incubation in ovens and intensive raising of livestock; the scholars of the Expedition of Egypt have described this with admiration (Rozière and Rouyé, 1822: t. XI, 401-427) and before them Leon the African admired it also (Leon the African, 1930: II, 226).

Raising pigeons was very important all over the Mediterranean. Large circular dovecotes where built, such as those still seen in the province of Leon in old Castille. In Lower Egypt, at the beginning of the 19th century, it was the only meat available; they were bred in large sugar-loaf shaped dovecotes (Ali Bey, 1993: II, 7). The importance of these birds is due to three functions that they perform: (i) their meat was, and still is, considered one of the best, as found in Morocco in the famous *bastila*;[15] (ii) they yield, as they have done for ages (it is still the case in Egypt) a much appreciated fertilizer, the columbine; (iii) during the Middle Ages they trained carrier pigeons to deliver messages.

However, meat consumption greatly differed between the city and the countryside. In Egypt, in the 17th century, in great cities such as Alexandria or Cairo, people ate whatever they could find inside and outside the cities: moles, mice, snakes, frogs, still-born veal, cats, foxes, wolves, beavers, as the Armenian, Simeon of Poland, relates with disgust in 1615 (Kapoïan-Kouymjian, 1988: 35).[16]

The importance of game

Until the 19th century, game was varied and plentiful, and in some countries provided a large part of the meat consumed. There were no privileges that allowed only aristocrats to hunt such as in our western feudal states, except in the parks of the royal residences of Persia and Iraq.[17]

In southern Persia, in the 8th century, the list of game gives an idea of the diversity of the wild fauna: hare, wild ass, stag, francolin, crane, ostrich, sparrow, lark, white partridge, turtle dove, torcaz dove, duck and swift (ibn Mâsawayh, 1978-1979). Fakhru'ddîn Râzî (14th century) in Northern Persia mentions game (*gûshtî ahû*): hare, wild ass (*gûrjer*), fox, goat (*gâwikûhi)*, mountain sheep, duck and goose, crane, turtle dove, wild pigeon, sparrow, quail, snipe, partridge, pheasant, and *qatâ* (a kind of buzzard) (Nicholson, 1899: 27). In the Maghreb and al-Andalûs, in the 13th century, game includes ibex, gazelle, stag, hare, hedgehog, partridge, starling, small birds (al-Tujîbî, 1997: 114, 160, 156, 166, 162).

In the deserts, the Bedouin were accustomed to hunt gazelles, antelopes, ostriches, oryx, which have unfortunately practically disappeared since the introduction of guns. Gerbils, turtles and various kinds of *dab* lizards, scincus *saqanqûr*, etc., are still found. Among the Aeneze and Bedouins of the Middle Eastern desert, they ate a kind of black wild dog called *drebûn*, living in the Djouf (Burckhardt, 1831: 1: 222). Doughty, in 1876, mentions the fox (1: 372, 656) and describes how they appreciate the great lizard, *thób*, which is for them nearly like a human being (Doughty, 1949: 157). Raewuski related that their usual meat was locusts, gerbils, gazelles, hares, and that with dried locusts *gerad* dressed with melted butter, they made a dish called *wafimat*. This word is also used for a dish of lizard with melted butter.[18]

In 12th century Egypt, they used to eat field rats (*fâr al -matûlid)*, found in the deserts and the lowlands after the Nile has retreated; they called them by the euphemism "thrush" (or "quail", *sumân*) of the lowlands (el-Bagdâdî, 1964: 197).

During the 19th century, the list of game diminished everywhere due to the introduction of guns, both in the Maghreb and in the Middle East. Nevertheless, if wild sheep and gazelle have nearly disappeared from the Maghreb, hedgehog and hare are still much appreciated, along with partridge and lizard.

However, game raises a problem as to the ritual purity of the meat: whether you can eat it if you have not ritually cut the animal's throat. The Koran says: you just hunt without killing. When they hunted with falcon or dog, as with the Sloughi, the animal might not kill its prey and the hunter could ritually cut the throat. To-day, the question is solved with the use of fire-arms, because it is considered that the animals are ritually killed, since there is bloodshed, as they say in Turkey (Sauner-Leroy, 1993: 239) and also in the Maghreb, as we have witnessed.

Temperance or enforced frugality?

Scarcity of meat, as we have already said, was more or less a serious problem in the Mediterranean area until after the Second World War. The Arabic language implies frugality that is enforced through the word *qaram*, which means meat and hunger for fresh meat.[19]

Of that enforced frugality, we have many examples. In the 18th century, the Christian monks in Egypt ate meat only at the two great feasts of Christmas and Easter. Then the strictness relaxed and they were allowed meat once a month, and only during the 19th century were they allowed to eat meat once a week (Wassef, 1971: 319).

The daily diet in a poor folks' home in Algiers in 1850 makes the same point:

> for both communal meals, there was plain round bread, dates or *leben* (curdled milk), kous-kous (*kouskoussou*) and *berkoul* or *bûrghûl* (boiled, cracked wheat); three times a month they added a portion of meat; oil, hot pepper and salt seasoned that frugal fare. That is the diet of the poor in Algeria (Angelani-Delorme, 1852: 168).

For the egyptian *fellah* to-day, cooking means eating meat, or eating fat **(***zhafâr*). He can only have meat, in the best of cases, once a week and more often every fortnight; the rest of the time, he has bread, some fermented cheese and vegetables. But for special occasions such as the feasts of marriage and circumcision, meat is compulsory; for this reason, people often get into debt (Wassef, 1971: 326). In Syria to-day, eating meat

every two or three days is considered a sign of relative abundance (Antaki, 1973: 80).

The most valued meat is that of the *"aîd el-kebîr* ram or dromedary and it was often the only meat eaten throughout the whole year. Traditionally, immediately after the sacrifice, the men grill the offal and the rest of the meat is boiled by the women, and preserved, as we have seen above.

Among these populations of shepherds, the flock[20] is their main item of wealth "and, excepting rich and powerful families, meat is eaten only on feast days or as a mark of hospitality. They keep the bulls for breeding, the cows for milk, butter and cheese, and the sheep for protection from the elements and for clothes, using the wool and the skins. They sell those animals only on special occasions: to marry off a girl, to buy a good horse, to acquire good weapons and also to honour a guest" (Daumas, 1869: 257). This remark, which dates from the mid 19th century still represents the current situation, even though radios or televisions may have replaced weapons as gifts.

Among the nomadic people of the desert, the situation is no better. In the Middle-East, at the beginning of the 19th century, some tribes of Aeneze of the Nedjd had never tasted the meat of domesticated animals and were exclusively living on dates and milk. But sometimes they killed a gazelle. They considered gerbil (*gerboa*) a delicacy because of its delicate taste (Burckhardt, 1831, 1: 60).[21]

However, to welcome a guest, whether of high rank or not, was for these people, an occasion for eating meat:

> they killed a lamb, boiled it with *bûrghûl* and camel milk, and served it on a large wooden platter, placing the meat all around the dish. A wooden bowl with melted fat was placed in the middle of the *bûrghûl*, and each piece of meat was soaked in this before being eaten. If a camel was killed, which happened very rarely, it was cut into large pieces; some of them were boiled and the fat was mixed with *bûrghûl*; the others were roasted and served over the *bûrghûl*. The whole tribe would partake of the delicious feast. Camel meat was preferred in winter rather than in summer because it is fattier then, and the female is preferred to the male (Burckhardt, 1831, 1: 62-3).

The qualities of meat

Besides its purity (*hallal*) which pertains to the religious domain, much attention is paid to freshness. When it is sold at the butcher's or in the market, meat comes from animals killed that morning and hung up behind the butcher's block, where it is immediately cut up. In Egypt, in the 16th century, butchers kept their shops open until midnight, while others closed at sunset and then went and hawked their meat in the streets (Leon the African, Book 8: 226-227).

The meat must smell good, which is made clear by the rich vocabulary that exists to express stench: *zankhit al-lahm*,[22] as well as *ghamir*, or "dirty, bad smelling, stinking meat and fish" (Kazimirsky, II: 502). Then *"ufûnah* indicates "putrefaction" (*ibid*: 302); *"alaba* is "evil smelling" for rotten meat (*ibid*: 336), and so on. In this context, good smell is associated with freshness: *samrun* or *samarun* is "the smell of fresh meat or fresh fish" (*idem*).

There are also many terms expressing the appetizing smells of cooked or cooking meat, the smells and fumes from the kitchen, and the aroma of cooking fat, all of which in those societies announce a good meal, because there will be meat.

Prime cuts

The fatty pieces have major importance in these nearly vegetarian societies. The fat (*shaham*) also gives rise to an abundant vocabulary: *suhârah* is a "piece of melted fat, or the marrow"; and *sahûran* refers to the seller of roast meat, who also sold melted fat during the Middle Ages (Kazimirski, 1860, I: 1380). When fat floats over the broth and is visible, they call it *ra'âs el-burma* "the head of the pot": it is a prime piece in a dish in the village of Takrouna, Tunisia (Marçais et Guiga, 1960, t. 3: 1619). The same expression, *ra'âs el-qadar*, existed with the same meaning a thousand years before and more than four thousand kilometers to the east, in Basra (Jâhîz, 1951: 66). Among the Chleuhs of the Moroccan Sous (*l-udeg*) designates the fat which floats over the broth, from the Arabic root *wadaga*, *waddaga* "to season a dish with fat" (Destaing, 1920: 144); a classical Arabic term, closely resembling the sound of this word, *wadafa,* has a similar meaning: "to liquefy, to melt (the fat)", and *istaoûdafa* "to melt fat" (Kazimirski,

1860 *s. v.*). Conversely, Armenian gave the Turkish language the word *lakash*, which means, in Ankara and Malatya, "meat without fat, poor meat, unfit for sale" (Dankoff, 1995: 53).

In Algeria, at el Golea, they season the traditional dishes *aish bœrig* with salted fat *shaam ghaoui har ouita* in Tindouf or *tchicha marmouna* in Tamanrasset (Sekelli, 1973: 14, 34, 36). *Ghaoui* is rancid fat (Beaussier, 1958: 720), a greatly appreciated flavour. In the Maghreb and the Middle East, the fat of barbarine sheep's tail (*lîyâ*) flavours and gives its character to many kinds of salted dishes and some sweets such as an almond cake in Syria.

Among camel (or dromedary) herding societies, the fat of the hump (*sanâm*[23]) is greatly appreciated and, when the hump looks fat, this is proof of the animal's good health, because in time of famine it shrinks. El-Isfahânî (d. in Baghdad in 967) quoted a pre-Islamic anecdote that was shocking in his day, as it probably is to-day: to satisfy the craving of a pregnant woman for female camel fat, they killed the animal just for its hump (*K. el-Aghânî*, Vol. X: 28; René Basset, 1914: 132).

Marrow is considered a most delicate food, and is sucked from the bone with great delight. Two verbs close in form, *naqâ* and *naqaía*, mean "to empty a bone by sucking out the marrow" (Kazimirski, 1860, II: 1320). *Naqî* is "marrow" (Steingass, 1892: 1421) and *nikz* is "the little bit of marrow left in the bone which has been emptied" (Kazimirski, 1860, II: 1335). In Morocco, *makh* refers to the brains and the marrow (Tedjini, 1929 *s. v.*). Nothing is ever lost. Jâhîz related in the 10th century how in Basra "the bones of a sheep's skull, jawbones and others are broken up after the surrounding meat has been eaten; they are then cooked in water; the fat which floats up is used to prepare some dishes such as "asida", a very popular kind of broth (Jâhîz, 1951: 47).

The head, *zellif*, is a prime dish offered to those one wants to honour or express friendship to. Offal (liver, heart, lungs, kidneys, etc.) is grilled and often offered only to men, as mentioned above. Intestines, *kersha*, on the other hand, may have an opposite value: in Egypt, they are considered food for the poor who cannot afford meat (Wassef, 1971: 263).

Cooking techniques

Meat is part of the "haute cuisine", which requires meticulous attention, both for those living in the city and those in the country, in past times and at the present day. Meat was and still is cooked for a very long time, until it comes off the bone and reaches almost a gruel-like state**.** In most cases, it is eaten either grilled or roasted, and never raw; *harîsa* originally referred to a prestigious dish, in which the meat was practically pureed. This is probably the reason why the vocabulary for raw and insufficiently cooked meat has negative connotations: *ânîs* from the verb *ânusa* (Kazimirski, *s. v.*), *nâ''* "to be raw, uncooked (meat)" and *nahî*, "to be insufficiently cooked" (*Farâ'id at-toulab*, p. 599, 608).

In Arab societies, where people eat with their fingers, the ideal is to obtain food so perfectly cooked that it falls to pieces easily. Also in the Christian Mediterranean meat has to be cooked for a long time. In cooking vocabulary, many words illustrate the interest in meat: the primary meaning of *habbâ* as a verb means to love, and among the Marazig of south-Tunisia, it is to overcook the meat, reducing it to shreds (Boris, 1951: 268).

Jâhîz of Basra, once more gives us useful information about his fellow-citizens: A miser recalls a word of the Prophet: "When you cook meat, add much water: if one of you does not find any meat left, at least he will have the broth" (p. 16). In fact, for most people, the broth is what makes the staple food pleasant: bread can be soaked in it or couscous sprinkled with it. Arabic has some terms to designate meat broth, *maslûqa*, *marqa*, *zaûm* (Bocthor, 1882, *s. v.*). Since it concentrates the main flavour and goodness of its ingredients, it is considered to be the richest and most nourishing concoction. Everywhere it is the first food given to the mother after she gives birth; and in Egypt, *al-maslûqa al-sabâhiyya*, "morning broth", is traditionally given to newlyweds the morning after their wedding (*idem*, *s. v.*).

The long braising and boiling of meat is mainly done by women in the home. On the other hand, roasting or grilling, generally done on the embers, is essentially a male activity. In the ancient world, it was linked to the cooking of the sacrifice and carried out in a temple.

Raw meat

Foodways vary according to populations. Burkhardt, in 1830, wrote that some Arabs of Yemen ate raw slices of meat, which he said to be also the case with the Abyssinians and the Druses of Lebanon (Burkhardt, 1831, 1: 242). Nevertheless, raw meat is not rare meat, and it is much more frequent in the case of the liver. The Mauritanian nomadic camel shepherds disgust their highland sedentary neighbours of Southern Morocco, who accuse them of eating nearly raw meat;[24] in fact, when they kill a dromedary, they immediately grill the liver with the fat of the hump and they eat it hardly cooked or even raw.[25] The eating of raw liver is also found among other groups. In the Middle East, among the Bedouins, when a sheep or a ram is killed, those present often eat the liver and the kidneys raw, sprinkling them with salt.[26] Raw liver is a delicacy in Lebanon and Jordan (Jaussen, 1948: 65).

This type of consumption can be explained in practical terms by the necessity of quickly eating the liver, which is more sensitive to the high heat of these climates, to save precious nourishment, but also to appropriate oneself of the power believed to be present in that part of the body. Another explanation may come from the scholarly medical conception that the liver is formed from coagulated blood, a similar conception to the popular one that led to a law of the *hadîth* that excludes the liver and spleen from the general prohibition on blood: "two bloods are lawful for us" [the liver and the spleen] (ibn Mâdja, XXIX: 31; Ahmad b. Hanbal, II: 97, in Rodinson, 1973: 346).

In Morocco, in the Gharb, raw meat of a sacrificed animal has the value of compensation when offered to men and women who visit the family of a circumcised child (Zirari, 1999: 175 n. 42). In addition, to chew raw meat (*frisa*)[27] is one of the rites of some brotherhoods, such as the Algerian Aïssaouas, in the course of divination or healing sessions (*hodra*) (Dermenghem *et al*., 1951: 312). When they invocate the *jnûn*, everything is the reverse of "normality": thus the gruel (*rûîna* or *zammita*) that they eat has no salt or sugar. Among the Bedouin camel shepherds, in time of famine and drought, they open the jugular vein of an animal to drink its blood.

Collective purchase and sharing in Maghrebian societies

The scarcity of meat leads certain groups of farmers to buy it collectively and share it. It is often difficult for one family to kill an animal of the herd, but it becomes easier when several gather together. Such is the tradition among Kabyle and Berber societies of the Maghreb, where the village community strongly regulates the life of the group. They buy a communal animal and share the meat. This is called *thimecherêt* among Kabyles, such as the Beni Snous of western Algeria, who perform it on the second day of the Ennayer festival, or the first day of the Julian year (Destaing, 1905: 59),[28] that is, thirteen days later than according to our calendar. In a book by Laoust-Chantréaux (1990:124) we find a photograph of a *timcrett*, in the village of Aït Hichem (Algeria) on the occasion of ritual sacrifices. Oxen are sacrificed and the pieces of meat – a large batch per family – are laid out on rows of fern leaves, *ifilku*, for each household to come and gather. *Luzi'at* is the Berber word that refers to the day of shared meat ("*uza"*).[29] Laoust describes it among the Ntifa of Demnate, in the north-east of Marrakesh. Everyone pays his contribution to buy a bull or a non-gestating cow, after having chosen a *damen* who will be the responsible for the purchase. When the number of participants is fixed, the animal is slaughtered, skinned, gutted and shared according to the number of persons in each household. The butcher cuts up the animal leaving some meat around each bone, he also distributes the offal a little further away. He carefully spreads the portions on a mat and then shouts: "Here it is, it's done! Prepare your stick for the draw!" Everyone then prepares his mark (*ilan*, stick or stone with a distinctive sign on it, called its "fate") and gives it to the person in charge of making the distribution, while one of the group stands apart with his eyes closed. They all send home for a plate to hold their share of meat. The one "in charge gives all the marks to the man who stood apart: he takes them and mixes them, while saying "fate be propitious to you!". Taking one at random he places it on the first portion and so on (Laoust, 1920: 93, 102-4). The offal, skin and head [which cannot be shared] are then auctioned out by the *dellal*, a kind of auctioneer (Basset 1963: 31). In Tunisia, among the Marazig of the Nefzawa, *krâma* is a "communal meal where meat is eaten", from *karram* "to slaughter a sheep or a goat (not

bought in the market) and to eat its meat". During the research carried out in 1935-38 by Boris, meat was rare and people ate it once or twice a month. Moreover, they attached prohibitions to it: boys could not eat any: "it would be shameful for them to accept meat; if it were offered to them, they should put it aside to bring to their parents. This could happen during a journey of tribes grouped for the transhumance; before leaving, they collectively sacrificed an animal for a communal meal." (Boris, 1951: 58, 261).

It could also happen that the community would take charge of the fate of an animal that dies. Among the Aït Sadden of Fès, "the family or the neighbours meet to fix a price for the owner, if the meat is good and if the animal did not die of disease. Such is the custom to help a parent who has lost an animal (Basset, 1963: 31).

Meat is also offered as a present of great value. In Tunisia, "you must never refuse, on any account, a present of fresh or preserved meat, either cooked or raw, because it would be to risk death. They say that this has often been borne out by real events" (Graf de la Salle, 1946: 117).

CONCLUSIONS

Sacred, highly sought after, and always appreciated, this is what meat means in the Mediterranean, for Muslims, Christians and Jews alike. This highly valued food has been the attention of religions, which regulate its consumption by strict rules regarding purity and use. Apart from religious prescription, the Mediterranean populations have many prohibitions and prescriptions that come from "notions of magic", mainly concerning women and particularly the more vulnerable mothers-to-be.

Though generalization is difficult, it seems that in cities most people have fewer chances of eating meat or good meat, while in rural areas there are more opportunities to consume it.

The case of the North-African farmers, the Kabyl of Algeria and the Berbers of Morocco, who lived autonomously, is instructive. They practised a system of mutual aid, which both made evident the interdependence of group members and maintained a sense of community. It was not so much the scarcity of meat, but practical thought that led them to buy an animal

collectively and share it according to certain rituals. In so doing, they obtained fresh meat from time to time without having to face the problem of preserving it; at the same time, they maintained the coherence and life of the community. And everywhere, the consumption of meat is always associated with communal events: festive occasions of all kinds, whether religious or magico-religious, but also as a manifestation of welcome.

NOTES

1. All the translations of French quotations are by the author.
2. For example, in Beth*lehem*, the Hebrew name of the little town where Christians say Christ was born, and which means "house of bread".
3. One of the four canonical rites of Sunnism, which in particular spread among the Turks.
4. See the excellent article by Maxime Rodinson, 1973, Kabid "le foie" in E. I.[2]
5. See the very precise description given by Pierre Larousse, in his *Grand Dictionnaire Universel du XIXe siècle.*
6. The ram furnishes the *qadîd*; "They cut the meat in pieces, wash it, salt it to slow down the fermentation, soak it in oil, then expose it to the sun to harden it like wood. It can then be easily carried and preserved for a long time. It is softened by the fire and then mixed with other food, such as *kesskessou* and rice. It is not at all unpleasant to eat". (Daumas 1869: 251-2) It is *sharmut* among the Mahria shepherds of north-west Soudan. They do the same for beef which is often preserved by desiccation; it is also the Spanish *cecina* or the Turkish *pastourma* made from buffalo meat and which, in the Middle East, is a long preparation of lean meat, cut up into strips, first dried then put in salt, then salted once more with a spiced mixture and placed into great jars to render their juice; it is finally washed and again dried in the sun.
7. There are many meat preserves in oil or fat. In North Africa, the meat is dried then put in fat to preserve it: *khlî'*. The Turkish *qâvourma*, *"âourma* in Lebanon and Syria, is a fricassee of grilled or roasted meat which is then preserved in oil or fat (Barbier de Meynard, 1981, II: 478).
8. Palestine: Granqvist 1980: 88 ; Fez, Rabat: Mas 1959: 50; among the Moroccan Berbers: Rahmani 1938: 237; Renissio 1932: 132; Casablanca: Mathieu and Maneville 1952: 116; in Oujda, personal enquiry, 2000. In Dordogne, France, they similarly used to say, not long ago, that the mother of a newborn child had to take hen's broth for three months. It was good for her milk.
9. In France, meat is classified according to colour: white for poultry, rabbit, veal, pork; black for game; red for beef.
10. In the Hippocratic system of the humours, digestion is explained in terms of cooking.

11. According to Madeleine Farah, an American woman of Lebanese origin, 1990: 69. The word *zankhit* is used for oil, clarified butter and many kinds of food (Kazimirski).
12. Count Wenceslas Severin Raewuski, *Impressions d'Arabie* (1818). Manuscript of the National Library in Warsaw, still undergoing editing (p. 123 of the manuscript).
13. Cf. The excellent description of the slaughtering and sharing of a dromedary among the Rwala Bedouins of Syria in Aloïs Musil (1928) 1978 , *The manners and customs of the Rwala Bedouins*. New York, AMS Press inc. pp. 96-97.
14. The vocabulary of the hump is rich: Arabic *hawadah* (petit Belot), and *naûf* "summit of the hump of the dromedary" (*idem*).
15. That famous dish is from medieval Spain; it was a pâté (*pastilla*, *bastila*) of pigeon. The Andalus Muslims when they migrated brought it to North Africa, to the cities, particularly Fez.
16. The author is Armenian and refers to animals of his culture, but some of them are not African. So the fox must be the fennec, the wolf the jackal, and for the beaver, which also is not African, I did not find an equivalent.
17. Those parks, of which Xenophon, at the end of the 5th century BC speaks with admiration, were large reserves of wild animals created by the Persian prince, Cyrus, at that time in Phrygia, south-west of Anatolia (Xenophon, 1951: 21), and later on the Abbassids of Bagdad.
18. Count Wenceslas Severin Raewuski, *op. cit.*, p. 123 of the manuscript.
19. From which we have the meaning of the verb *qarima* "brûler du désir (de l'amant)" (Kazimirski *s. v.*).
20. Cf. The Latin *pecunia* "fortune in livestock" from *pecus* (herd) gave the French *pécunier* and *caput* "head of the herd " gave the word "capital".
21. Cf. el-Bagdâdî and abd el-Kader mentioned above.
22. For this lexical study see my article on classification of odours, 1999.
23. *Sanem* is the "hump" in classical Arabic (Kazimirski), but in Morocco, it is the hump's fat (Tedjînî).
24. Narjis Alaoui, personal communication, in 2001.
25. Hayyat bint Ahmed, personal communication in 1999.
26. Burkhardt, *idem.*
27. The verb *farasa* is employed first for carnivorous animals which tear apart their prey, and *frîsah* is a cadaver (Kazimirski *s. v.*, Beaussier: 736-737).
28. Description of this in the Rif, in Biarnay, S. (1908: 254-56)
29. *Waza'a* "Distribute, divide, share. To go shares in order to buy an ox or fruit, and share it" (Beaussier, 1053); the Classical Arabic wazm "piece of meat an eagle carries to its lair" (Kazimirski, 1529, II).

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Cows, Pigs and... Witches!
On Meat, Diet and Food in the Mediterranean Area

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ABSTRACT

There is a popular belief, fuelled partly by nutritionists and partly by fashion, that there is such a thing as a "Mediterranean diet"; and this is held forward as a prescription for healthy eating and an admirable lifestyle. What is curious about this belief is that meat, and particularly pork, seems to be mysteriously excluded. This article redresses the balance.

INTRODUCTION

Not long ago, in the mid nineties, I happened to be working on a book on Mediterranean food habits (Medina, 1996). Its purpose was that of offering a clear, interdisciplinary global perspective on this topic, in an open-minded approach, and deconstructing the myth.

The very title of the book, *Mediterranean Food,* was by no means haphazard. From an anthropological point of view, food turns into a frame of reference, a wider concept than that of *diet* or *nutrition,* which encompasses on the one hand, nutritional processes and on the other dietetic regulation and control, as well as the whole socio-cultural fabric implied by a lifestyle-oriented perspective. Thus, the book aimed at reaching far beyond the term *diet*, and focused on food from a socio-cultural point of view, considering it not only as a medical and nutritional phenomenon, but as a multidimensional fact.

Given the nature of the book's premises, which were linked to the study of lifestyles, every chapter inevitably included innumerable references to meat. A whole chapter was devoted to pork and various ways of preparing it in the Mediterranean area (Fàbrega, 1996). This triggered immediate criticism and comments on the part of some doctors and specialists in nutrition. Without going into detail, suffice it to say that all comments revolved around one specific point: how can meat, worst of all pork, be included in a book on Mediterranean *diet*?[1] From their point of view, there could be nothing more alien to this *diet* than the saturated fat of meat, most especially pork. Such criticism puzzled me and caused me to reflect. In the following pages, I will try to explain what I mean by this.

"MEDITERRANEAN DIET" AND MEAT

As has happened with other geographical areas, the Mediterranean[2] – today, more than ever – has been revisited, reinvented and conceptually reconstructed as a symbolic space and a cultural referent. From the perspective of food, as well as from other perspectives, the Mediterranean area has been examined, appreciated and given due recognition, although at the same time, as a direct consequence of this process, it has been rendered rural once more, and somewhat folkloric. All aspects of the Mediterranean, such as production, climate, habits and so on, have become for Western societies and a few other societies, a model of health and of an enviable lifestyle.

Nowadays, the *Mediterranean diet* is internationally recognised and promoted as a recommendable and healthy regime. A recent article in the Spanish press made the following comment: "in recent years the

mediterranean diet has suffered from the fluctuations of gastronomic fashion: after having suffered for a long time from disdain and ostracism on the part of nutritionists, it has become a sort of panacea, defended by many as a real alternative to modern gastronomy..."[3]

However, in as far as it is a *diet* – and consequently, according to the general meaning of the word, a *food regime*[4] – there has been a tendency to isolate such a regime and alienate it from cultural aspects, other habits and lifestyles, to which ingestion is necessarily connected and from which it cannot easily be separated.

Very often, chiefly among doctors and nutritionists, certain foods have been almost "deified" as essential elements of such diet, as is the case of legumes, greens and vegetables, fruit, cereals and olive oil. Ros (1996: 341), for example, defines the traditional Mediterranean diet as rich in vegetables, legumes and fruit, fish and olive oil, with a moderate consumption of wine and a relatively low intake of dairy products and sugars, and practically no industrially processed foods. Thus, according to this author, the most recommendable and healthy foods for the prevention of cardiovascular disease would be, among others, cereals, fruit, vegetables, legumes, fish, dried fruit, nuts and olive oil.

Yet, other foods have been ignored or eliminated from such a "dietary model". In this sense, the least recommended foods – according to the same author – are, among others, *whole eggs, solid dairy products, sweets and desserts, sausage, offal and patés, veal, beef, lamb, pork and ham (lean meat), chicken or beef sausages, venison and game*[5] (1996: 343-344). He also points out that the most appropriate food habits seem to be those included within the traditional "Mediterranean diet" (345). From a different, yet coinciding point of view, the above-mentioned newspaper article[6] draws attention to the fact that "although Spain benefits from the Mediterranean diet, our food habits also have some nutritional shortcomings, such as the abundance of *meat, sausage and fats*".[7]

Thus apparently, from a nutritional point of view, certain foods, among which meat – especially red meat, pork and its by-products – play an outstandingly negative role for our health. Not only are they not considered to be part of the Mediterranean *diet* in their own right, (they would not fit into the above-mentioned definition of the *traditional Mediterranean diet*),

but they are on the blacklist of dietary recommendations and have even become "a nutritional problem".

From such a perspective we witness, as Hubert argues (1998: 157), the "construction of a representation in the realm of science". However, if the issue is considered from a broader perspective, that of *food habits*, it will become more compatible with a commonsense view.

Mediterranean Food and Meat

There is no denying that meat in its many forms, in spite of the scarcity of it forcibly imposed by historical and economic conditions, is an essential part of food habits and lifestyles in the geographical area considered to be home of the Mediterranean diet. More so if one considers, with González Turmo (1993: 33) that Mediterranean society has been eminently carnivorous, even when meat consumption was confined to dishes based on minced meat, in an effort to increase the volume of insufficient quantities and make good use of the less appetising bits.

From time immemorial, meat has been extremely important in the food habits of Mediterranean societies. As Romero de Solís argues (1993: 52), whereas among the Hispano-Iberian tribes of the coast the staple food was bread, among the plateau and mountain inhabitants, it was meat. González Turmo points out (1993: 32) that until the 17th century pasture, and consequently cattle and game, abounded all over Europe. In Sicily, for example, game was so abundant that it was cheaper than anything that could be found in the marketplace. It is around the mid 15th century that, due to increased ploughing for more cereal cultivation, meat started to become scarce in Europe.

Goat, mutton and, from the 15th century onwards, also pork, have been the most commonly consumed meats. In spite of long periods of shortage, meat consumption in a Mediterranean country like Spain was greater than in other European countries which were more populated and made greater use of cultivated lands (González Turmo, 1995: 222).

Traditionally, meat has not only been an important element in the diet of Mediterranean populations, but also in their social and cultural lives: their annual cycle,[8] their representations of the world, their imagination,[9] or

important aspects of social organisation, such as gender roles and distinctions. De Garine observes that in trying to formulate "the Mediterranean lifestyle", it is necessary to mention the characteristics which preside over the social organisation of food production: that is, food preparation and consumption, and the corresponding gender-based work distribution. If men are responsible for the sacrifice of domestic animals, their slaughter and sometimes salt preservation, women are responsible for all activities relative to preparation and preservation, as well as for the choice, which is often creative and always personal, of dressings and accompaniments. Likewise, the planning of food purchasing is typically a female task (de Garine, 1993: 22).

The presence and importance of various kinds of meat not only in the diet, but also in the portrayal of various Mediterranean societies, becomes evident through gender-based differentiation in consumption. Meat has traditionally been associated with men – both symbolically and in fact. According to González Turmo (1995: 221-222), meat has always been considered an indispensable element in a manly diet, and it has always been reserved for men during periods of shortage. The presence of meat had to be ensured at all costs. Likewise, D. Lupton (1996: 104-106) and A. Willets (1997: 112-115) point out that certain foods are regarded as specifically masculine, and they highlight in this respect *red meat.*

A Scarce Food in the Mediterranean

But there are differences between implied ideals and preferences; and it cannot be denied that meat has traditionally been a food that has often been scarce in the Mediterranean, particularly in the 16th and 19th centuries. Yet it is necessary to make some observations on this point.

First of all, meat has been scarce not only in the Mediterranean[10] area, but also all over Europe. It cannot be ignored that when specialists in nutrition refer to a *traditional Mediterranean diet*, they are thinking of food available to the lower strata of the population in particular, to those who had more limited access to economic resources. Historically speaking, for people belonging to these social classes meat has never been abundant. But this is true both of the Mediterranean and the rest of the continent.[11]

Secondly, and closely related to what has been said in the previous point, comes the fact that the limitation of meat consumption has never been voluntary, but always conditioned by shortage. Its cultural value, however, has persisted throughout history[12] and meat has been consumed whenever possible.

Thirdly, and in spite of shortages, meat consumption has been an essential element of the lifestyles, traditions and festivities of diverse Mediterranean societies, in the North as well as in the South, even among the most impoverished classes, which, as González Turmo argues (1995: 222), have always tried to guarantee its consumption at all costs. So much so, that whenever the supply of pork, mutton or goat dwindled, people did not hesitate to resort to more unusual kinds of meat such as that of iguanas, snakes, lizards, donkeys and even cats.

There have always been attempts to ensure meat consumption all year long, through preserving techniques (salting, drying etc.) and a regulation of fresh meat consumption. People took advantage of periods of more relative abundance, such as those coinciding with pig slaughter, and preserved the meat so that it could be consumed all the year long. Sausage making is an outstanding *traditional* practice in the Mediterranean area. On the Northern shores the main ingredient is pork, but on the Southern and Eastern shores mutton and beef are also used.[13]

All that being said, while meat scarcity in the Mediterranean (but also in other areas) has been an objective fact, nevertheless it cannot be denied that this important food has always been present in Mediterranean societies, on a symbolic as well as on a practical level, its consumption being very high and frequent during given historical periods. This is a fact that specialists in nutrition are not willing to acknowledge. It is puzzling that, within these specialists' more or less homogeneous discourse, meat should disappear so arbitrarily, and not only from dietetic recommendations that are, within the scope of their discipline, reasonable, but also from their assumptions about these populations' food history.

TRADITIONAL MEDITERRANEAN DIET

In a recent publication, the sociologist Claude Fischler complained about the fact that when it comes to talking about Mediterranean regime, nutritionists refer, time and again, to anything but strictly nutritional facts. In his view, they keep justifying their recommendations by using discourse that goes beyond nutrition and science (Fischler, 1996: 364).

As Fischler goes on to say, the most recurring argumentation nutritionists resort to is that the Mediterranean food model is *traditional* and *enduring* and has remained unaltered over the last two thousand years (1996: 365). Evidently enough, meat shares no role with other elements in this *unaltered tradition*, despite the fact that it is, as explained above, a food whose presence in the history of Mediterranean societies has been largely documented. Witness this lack of acknowledgment in Ros' words (1996: 341) cited above that define a *traditional Mediterranean diet* as one that includes greens, vegetables, fruit, fish, olive oil, wine and little dairy products or processed foods. Evidently, meat has no part in this supposedly *traditional* diet; and not only meat in the strict sense, but also animal fat. As Stouff argues (1970), it seems that in Provence, during the 14th and 15th centuries, for example, Christians hardly used olive oil as an ingredient in food: they used lard. Fernandez-Martorell (1996) observes that the pig, for the Jew, was an animal they associated with Christians; its meat and lard differentiated old Christians from those who, like the Jews, cooked with olive oil.

Our purpose here is not to question the nutritional advantages of a Mediterranean *diet* as defined by nutritionists. The principles they put forth are more than reasonable and worth taking into account for their beneficial effects on health. What this article criticises is the discourse that has been created around such a diet, a discourse based on a biased perspective which has contributed to the distortion of a food context that in itself is already difficult to apprehend. When one speaks of the Mediterranean *diet*, as mentioned above, one refers to the representation of a traditional diet, unaltered throughout the centuries; and its definition according to this perspective has been given in extremely partial and restrictive terms. In the case of meat it could be said that we are witnessing a sort of witch hunt, which in many respects is not justified.

As previously observed, to use Annie Hubert's words (1998: 157), the most interesting point here is that we are witnessing the portrayal of a scientific model of the Mediterranean. The origins of its creation are in the Anglo-Saxon world, but it is now in the process of being assimilated by the Mediterranean area's representatives themselves. Within this model, and outside the reach of any other medical or nutritional discourse, we must not forget that meat as a basic food is of primary importance.

Translated from the Spanish version by Monica Stacconi.

NOTES

1. The use of italics for this word is intentional. I will refer to it later on in the article.
2. The Mediterranean, like any other space and reality, is a socio-cultural construction, shaped within a specific geographical area. Likewise, to speak about food in the Mediterranean implies a specific socio-cultural construction (Medina, 1996b: 22), related to a whole framework of diverse factors: political, economic and social.
3. "La dieta mediterránea a estudio", in *El Periódico de Aragón*. Zaragoza, Saturday, 4, March, 2000, p.27.
4. In Latin languages *dieta* is a medical term denoting a very specific food regime. See for example the French "diète" in Le Nouveau Petit Robert: "specific food regime, prescribed by a doctor, favouring, limiting or excluding certain foods with a hygienic or therapeutic aim. Regime", Paris, Le Robert, 1994, p.641. According to this concept, currently most French experts use the term "régime méditerraneen", and not "diète méditerranéenne". The same is true in other languages such as Spanish or Catalan. However, it must be taken into account that "diet" comes from the Greek "diaita": "lifestyle".
5. My emphasis.
6. "La dieta mediterránea a estudio" (*ibid*.)
7. My emphasis.
8. As de Garine points out (1993: 13), when summer heat makes its appearance, one can observe that at the butcher's winter pork meat is replaced by fresh lamb; and the presence, on the table, of spitted or fried birds, thrushes and starlings, is the harbinger of autumn and cold weather.
9. The great religions that fought for spiritual hegemony in the Mediterranean put not only the consumption, but also the equitative distribution of meat under the protection of the religious institution of sacrifice (Romero de Solís, 1993: 87).
10. See for example González Turmo (1995), Romero de Solís (1993) or Gast (1996).
11. Silvia Carrasco (1996: 382-383) wonders, in this respect, what would happen if it was found out that the only period in history in which some social group – in a

Mediterranean region like Catalonia, for example – has actually practiced something similar to what we call today Mediterranean diet, were the 1970s. She mentions, to give an example which is close to her experience, what was the habitual food of Catalan lower-middle classes: greens and vegetables, cereals, legumes, roast meat, plenty of sardines and codfish, olive oil, bread, dark chocolate and... "as many eggs as the days of the week".

12. Riera points out (1996) that during the low Middle Age, even the lowest classes held meat to be the best nourishment, a food which helped people to keep healthy and overcome illnesses.
13. See, in this respect, Kanafani-Zahar (1993).

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Consumption of Meat in Czech Countries: Historical and Social Relationships

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ABSTRACT

Controversy about the proportion of animal protein to be included in humans' Recommended Daily Allowance has affected the quantity of meat consumed, as well as the type of meat, and this has varied over the years. This study of meat consumption in the Czech Republic until the end of the last millennium concludes that meat protein must be balanced with other foods to obtain an optimal diet.

INTRODUCTION

Archeological, palynological and other findings give us some evidence of the composition of the prehistoric diet. The consumption of meat per day by a prehistoric hunter-gatherer has been estimated at about 788 gr. of meat, together with 1,463.8 gr. of plants, i.e. 251.1 gr. of protein in all. The ratio of animal to plant proteins has been estimated at 190.7/ 60.4.

More recent estimates were 35% animal and 65% plant protein. In total, the diet is comprised of 33% protein, 46% carbohydrates, and 21% lipids for energy intake (Delluc *et al.*, 1995: 74). The diet also seemed to be more homogeneous during certain periods. Meat represented the major part of dietary intake at certain times of the year, and plant nutrition during other months, depending on the results of hunting or gathering. It is possible to assume that in prehistoric times and given the same geographical, climatic and environmental conditions, the consumption of nutriments, including the consumption of meat, followed a similar pattern.

However, this data is in contrast with present day consumption of meat, or the recommendations of experts, who consider an optimal diet to be one that provides 12% of total energy intake with proteins, up to 30% with lipids, and the rest with carbohydrates (WHO 1985). Nevertheless, the present consumption of proteins in the form of meat in industrially developed countries is usually higher, as is the consumption of fat. In addition, wild animals and venison have a much lower fat content in their meat, which was surely also the case for most animals hunted in prehistoric times.

As regards to periods in human history, we can draw some conclusions mostly from historical descriptions, contemporary novels, poems, pictures etc., which have focused mainly on the aristocracy and higher social strata. There is much less information on the dietary intake of common people – peasants, urban poor, etc.; and this also applies to most parts of the world. Artistic sources for an approach to this theme were explored in academic meetings, such as that concerning "Food representation in literature, film and the other arts: an interdisciplinary and multicultural conference" (San Antonio, Texas Feb.17-19th, 2000), in which attention was drawn to dietary intake, including meat, as reflected in various art forms.

THE SITUATION IN CENTRAL EUROPE

Regarding nutritional habits and preferences in more recent centuries, there is evidence of controversy in medicine on the digestibility of meat, and its impact on health. Traditionally bread and accompanying non-meat products were considered to be the most suitable form of nourishment. This seems to be true for most societies besides those of central Europe

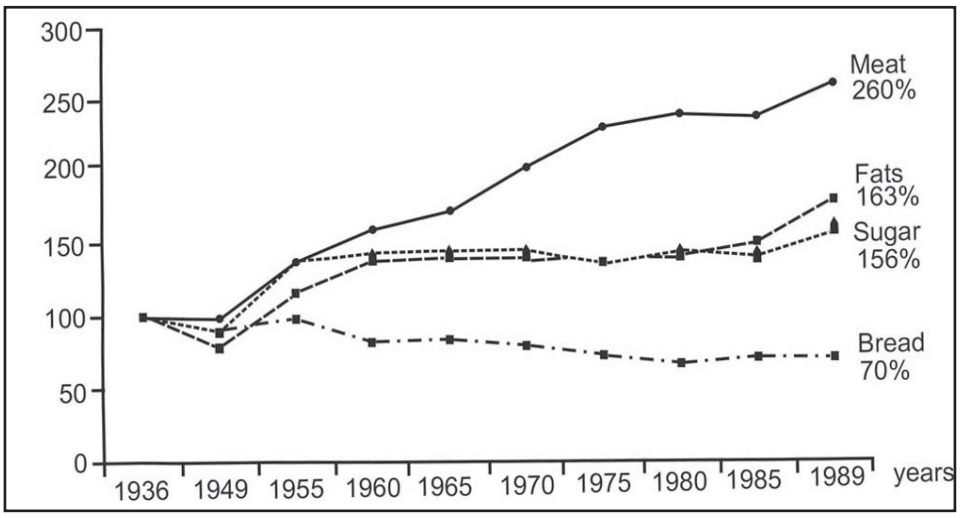
(Knap, 1998). Meat was usually eaten once a week on Sunday (when possible), or on festive occasions, such as religious feasts, weddings, funerals and so on. Naturally there are only rough estimates of what was eaten or how much, including meat.

By the middle of the nineteenth century, meat already represented an appreciable part of the dietary intake. Pork, beef, veal, mutton and duck appeared on the tables of the peoples of Central Europe. This was naturally related to the social and economic situation of the particular group or region, as meat was always a more expensive food than simple bread, dairy or vegetable products. This trend continued until the second half of the nineteenth century, when, according to the belief at that time, there was an awareness that it was desirable to eat more meat for the development of the human organism and to enhance the physical performance of the individual. The demand, especially for beef and pork, both in rural and urban areas increased considerably. Important also were the cultural attitudes that influenced food choice: a greater variability of diet, including meat, began to develop (Knap, 1998). In Czechia, differences appeared among higher social strata in the cities and in more fertile areas of the Bohemian Kingdom, where agriculture was more prosperous than in the poorer mountain regions surrounding Czech countries. In the twentieth century there appeared once again significant relationships with the current political, social and economic situation. The consumption of meat fluctuated considerably, especially during the particularly difficult periods of the First and Second World Wars. The consumption of all items of diet decreased during those times, and that of meat more markedly due to its greater rarity and price. Only in the twenties and thirties was there greater attention focused on diet. This is why we have, for that period, more exact information on the quantities and types of meat consumed in relation to other characteristics of the population, such as lifestyle and the general situation of the country.

Figure 1 shows trends of meat consumption from 1936 to 1989. After a decline during World War II and the short postwar period (1949), it shows that meat consumption increased by up to 260 %. This was paralleled by an increase in fat and sugar consumption. After the war, choices and preferences for different kinds of meat changed: preference for veal decreased, whereas that for beef and pork increased. At the same time, the

consumption of bread decreased. The increase of meat consumption after the war was stimulated not only by its previous scarcity, but also by the idea that much more meat, in the shape of steaks done rare, schnitzels, milaneses, etc., were essential for optimal development of the organism, better growth and increased physical performance.

FIGURE 1
Consumption trends in Czechoslovakia
(now the Czech Republic) in 1936-1989
Values in individual years expressed in % (1936=100%)



SOURCE: Parizkova

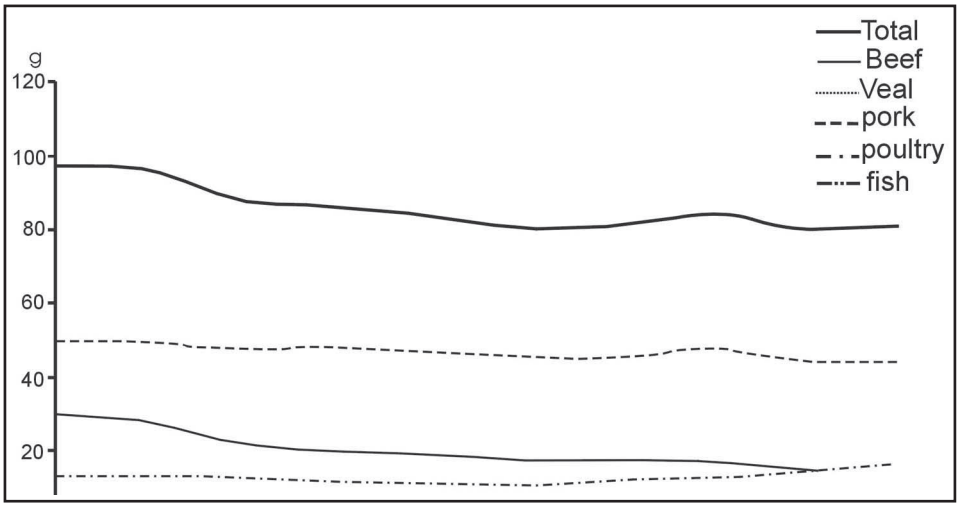
Growth data for children in industrially developed countries shows higher values in body height and larger body dimensions, in comparison to children from developing countries. Further analyses reveal that this was significantly related not only to total energy intake, but more especially to the consumption of adequate protein. During previous periods, it was believed that an increased intake of protein, especially that of animal origin, was best for optimal growth and development. However, a more recent analysis of longitudinal growth and health data correlated with

nutritional analysis of the diet has shown that at the very beginning of life, a consumption of protein exceeding 12% of energy intake can play an important role in a predisposition to obesity later in life (Rolland-Cachera, 1995); this is usually accompanied by other additional co-morbidities. Therefore, the early intake of too much protein in industrially developed countries began to be considered a health risk for future life.

This problem was also analyzed by comparing the recommended dietary allowances (RDA) in different countries, which vary considerably (UN, 1997). Moreover RDA's seem to be related to the economic and social situation, as well as to other characteristics of a particular country. Higher RDA's of protein in Czech children (although the real consumption has usually been even higher – Parizkova, 1996, 2000) used to be accompanied by greater corpulence in the population, higher prevalence of cardiovascular diseases and shorter life expectancy, which were manifest up to the late 1980's (Parizkova and Rolland-Cachera, 1998). On the other hand, there was debate over whether a child could grow satisfactorily without meat: nutritional observations showed it was possible, provided that the necessary protein and essential amino acids are supplied from other sources. A lacto-ovovegetarian diet can supplement these items, and more especially the semi-vegetarian diet which includes some fish and poultry. This should be sufficient for adequate child development.

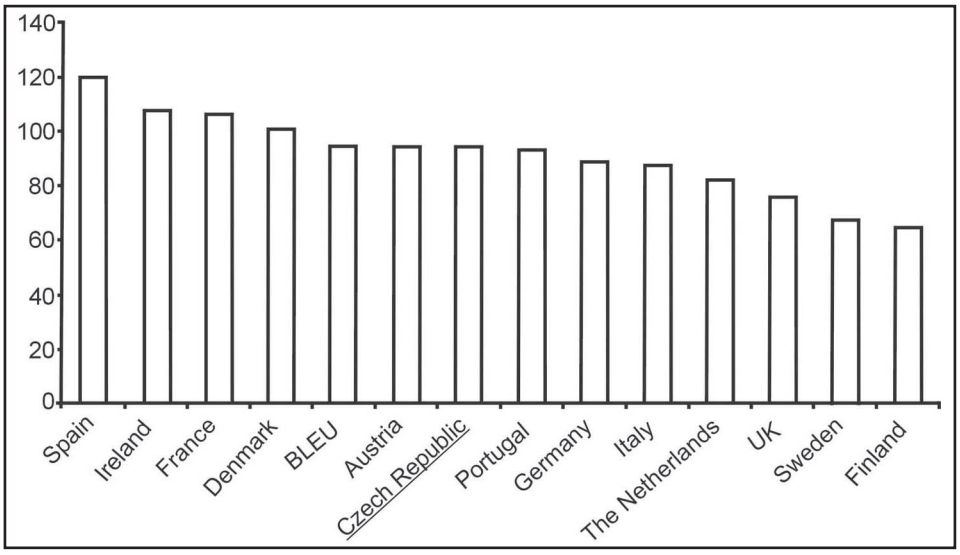
Figure 2 shows the trend of meat consumption during the period following the "velvet revolution" of 1989, which resulted in a number of not only political, but also economic, social, cultural and other changes. The decrease in meat consumption is mainly explained by the decline of beef consumption, and somewhat less by that of pork. Poultry has been consumed at a constant rate. The consumption of fish has remained at a much lower level than in other countries of Western Europe. When comparing the consumption of meat in individual European countries (Figure 3), Czechs are somewhere in the middle when one considers total meat consumption. This also applies to the consumption of pork. As regards to beef, veal and poultry, the Czech Republic has had a relatively lower rate of consumption. Fish is still consumed in very small quantities: in 1997 it was 5.1 kg, and in 1998 4.8 kg. per capita per year. Mutton and goat are consumed very rarely (Stikova, *et al.* 1999).

FIGURE 2
All Meat Consumption in the Cz



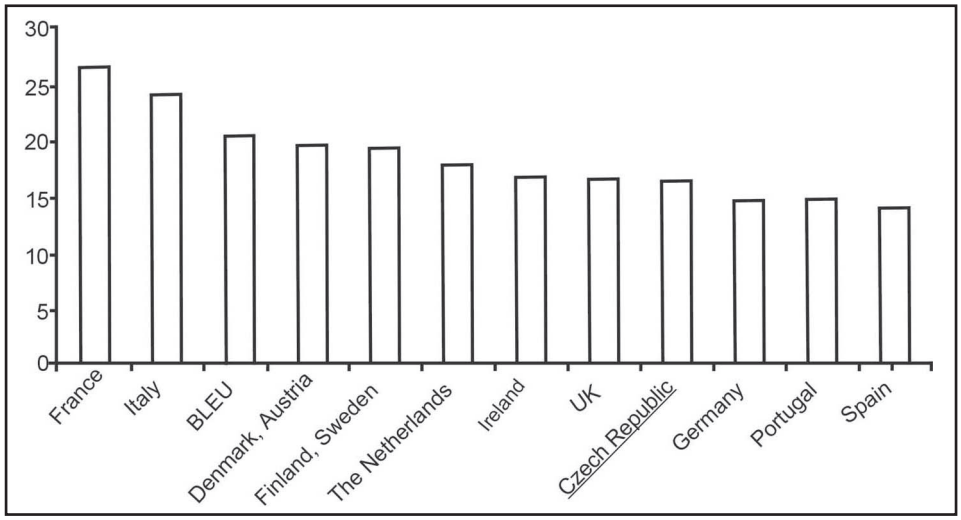
SOURCE: Stikova *et al.*, 1999

FIGURE 3
All meat consumption (kg/capita/year) in European countries in 1997
(BLEU – Belgium-Luxemburg Economic Union)



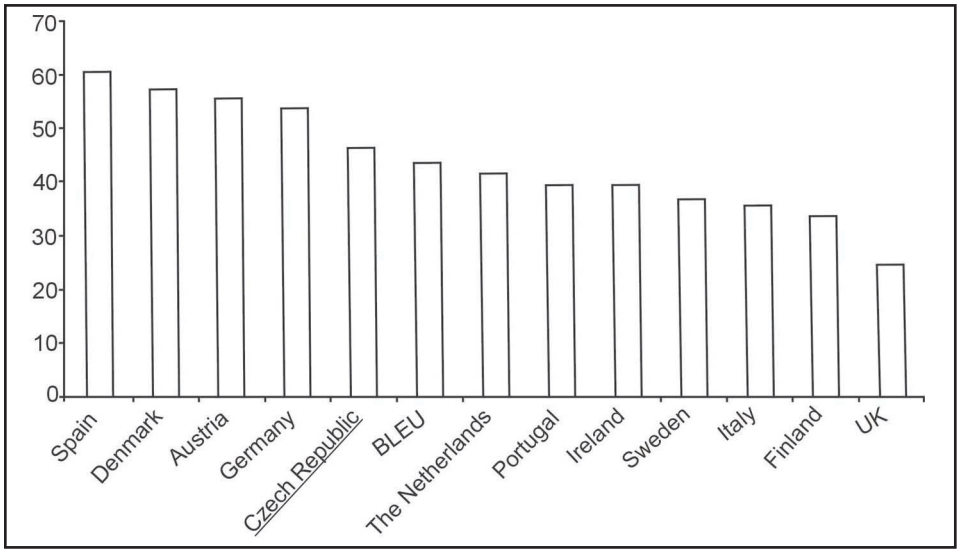
SOURCE: Stikova *et al.*, 1999

FIGURE 4
Beef and veal consumption in Europe (kg/capita/year) in 1997



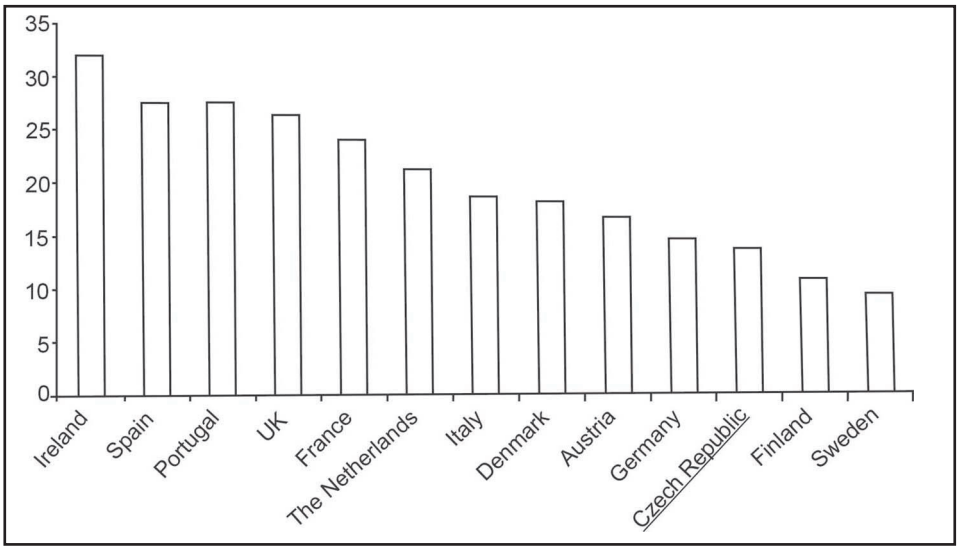
SOURCE: Stikova *et al.*, 1999

FIGURE 5
Pork consumption in Europe (kg/capita/year) in 1997



SOURCE: Stikova *et al.*, 1999

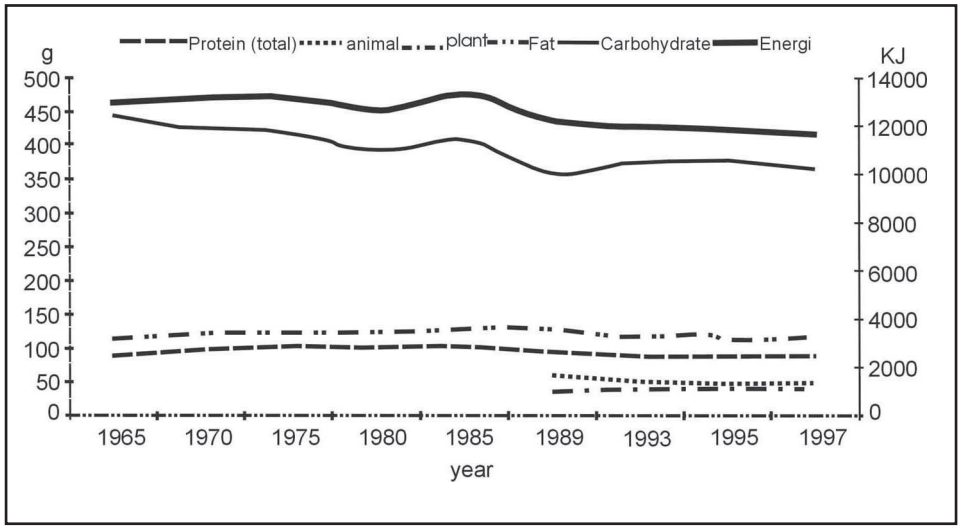
FIGURE 6
Poultry consumption in Europe (kg/capita/year) in 1997



SOURCE: Stikova *et al.*, 1999

A calculation of the intake of individual dietary items during the period between 1965 and 1997 (Stikova *et al.*, 1999) reveals that after the period of increased protein intake, there occurred a decline, which was especially obvious during the 1990's (Fig.7). There are many reasons for this change. First of all, there was more scientific evidence on the need for a carefully judged recommended intake of proteins, which in our country in particular means mostly meat and meat products. In the nineties, energy intake was reduced by some 5% and that of the total amount of protein by 7%. The latter was caused specifically by a reduction of intake of animal protein (16%-17%). The reduction in lipid intake, which in our country is closely related to meat consumption, was around 13%. In spite of this decline, the overall consumption of food has remained higher than the RDA's, particularly so at the end of the eighties and the beginning of nineties. The energy intake has been yet higher than the RDA's by 25%-20%, and that of protein by 24%-18%. This is mainly due to the increased intake of animal protein, by 55%-30% in comparison to the RDA's.

FIGURE 7
Estimation of food composition in the Czech Republic



SOURCE: Stikova *et al.*, 1999

High consumption of animal protein in the form of meat in former Czechoslovakia during the seventies and eighties (Parizkova, 1993) was also caused by additional factors. It was not only due to traditional food preferences and a general trend in higher meat consumption in the countries of the former socialist bloc, but also resulted from economic policy and state subsidies for agricultural production, which favoured meat. However, this meat was not the much appreciated veal or "vitellino", but mostly pork and beef from older animals, full of saturated fats and cholesterol. The RDA's of the World Health Organization adopted in other western countries were here simply characterized as suitable only for developing countries, and this opinion is still sometimes aired today. The author has personal experience of the fact that after the participation of FAO/WHO/UNU the conclusions of the Expert Consultation in Rome (1981) and the publication of the resulting document by WHO in Geneva in 1985, the RDA's were not generally adopted in former Czechoslovakia . One of the main reasons given was "too much of our meat remains in our butcher shops at present..." Meat of undesirable quality was moreover difficult

to export. Therefore it seemed that it was not health, but economic and political reasons that caused an increased production of meat, and this was also reflected in local definitions of RDA's for the Czech population.

After the "velvet revolution" in 1989, together with other changes, growing scientific evidence regarding the excess of meat consumption not only received greater attention at the time, but was also believed in, especially by young people, many of whom became vegetarians. Economic analyses also showed significant differences in the energy cost of meat production as compared to the production of legumes, vegetables and cereals. The agricultural policies in the Czech Republic changed and became more realistic regarding state subsidies for individual agricultural products. It made the production of meat more expensive, thus increasing its price. This was particularly so for beef, the consumption of which decreased most markedly (Figure 2.). The consumption of poultry has increased; understandably so, since its price is lower than beef. However, health campaigns have also played an important role, since the consumption of pork also decreased, despite its lower retail price. (See Figure 2) This decline in meat consumption was for a certain time attributed to the "Klaus effect", i.e. the impact of the economic policies of the former Prime Minister during the period of greatest change in the Czech Republic. This wide-spread popular catch-phrase demonstrates again the impact of the political and economic situation in the country on meat consumption.

However, this decrease in meat consumption may be considered positive from the point of view of general health and life expectancy in the Czech Republic: the level of serum cholesterol in our population has declined, together with the prevalence of cardiovascular disease, and life expectancy is now somewhat higher than before. This trend, together with other factors, parallels the decrease in protein and meat consumption mentioned above, which is now more comparable to Western European levels. A further effort needs to be made to lower meat consumption to a reasonable level, such as that which prevails in those European countries with the best health characteristics: lower prevalence of cardiovascular and metabolic diseases, and longer life expectancy. This would imply that the type of meat is an important factor, i.e. greater consumption of poultry and fish, which are considered optimal for health, performance and an active old age.

It is worth mentioning one more example that demonstrates that a high intake of animal protein, especially meat and meat products can have social and political consequences. Outstanding achievements in sport have been one of the trends of the official policies of former socialist countries as a means to achieve "a peaceful battle for world opinion". All suitable (and unsuitable) means, including the special nutrition of athletes were implemented. There was a period when a very high consumption of meat was recommended, i.e. a protein consumption of 2–3 gr. per kg. of body weight per day, which applied to all sports (not only those demanding massive muscle development, such as wrestlers, weight-lifters or body-builders). In the athletes' Training Centers, in the sixties and seventies, they were fed great quantities of the best meat, sausages, and so on, which mostly resulted in a spontaneous desire for a simpler diet with more carbohydrates. Experimental observations of the groups of athletes of dynamic sports (runners, cyclists, etc.) showed that such a high protein consumption resulted in increased urea, uric acid and ammoniac concentration in the blood (something akin to a "sub-uremic" symptom), which caused greater fatigue, lack of ability to increase the duration and intensity of training, and limited the achievement of higher levels of performance in dynamic sports. When the athletes reduced the intake of protein to 1gr. per kg. of body weight per day, and increased complex carbohydrate intake, they improved their condition significantly, increased the duration of training, and achieved better results in these sports (Parizkova and Novak, 1991). At present this RDA for protein (1-1.5 gr. per kg. of body weight per day) includes meat intake and is considered the best diet, and one that is recommended for those who have a very heavy work load.

This example also shows that exaggerated consumption of protein, which mostly means the consumption of meat, does not provide for the real needs of the human body under present day conditions, and can even be harmful. This is especially relevant to optimal growth without excess fat deposits, to desirable health prognosis, life expectancy and performance. The RDA's for protein in most industrially developed countries already reflect this need. This was not the case until recently, and for other countries apart from the Czech Republic. Recent experiences from former socialist countries can therefore contribute to a more appropriate definition of meat

intake. The consumption of protein, and especially that of meat, should be adapted to what is desirable ¯ not to maximal levels, so as to fall in line with the most recent and significant scientific findings, thus contributing to the promotion of healthy habits.

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On the Absence and Presence of Meat at the Dining Tables of Working-Class Barcelona Families from the Post-War Years to Today

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ABSTRACT

The war-time meat eating and dietary habits of Barcelona's working population, and of surrounding areas, are contrasted with later times when meat and other foods became readily available. Recent years have shown a decrease in meat consumption, possibly under the influence of health trends, food crises or ecological and vegetarian ideology. The survey takes into consideration socio-economic class and rural/urban origins among other factors.

THE SHORTAGE OF MEAT IN THE EARLY POSTWAR YEARS

I remember how hungry we were as children, when my father was imprisoned. In the home the nuns made the broth with a hen bone and four leaves. My sister and I used to bury the bones in the playground together with orange peel and the crusts of stale bread. They were like a treasure to us. When we were hungry,

> well, we were always hungry, we would dig them up, shake the soil from them and eat them. (59 years old woman, assistant analyst)[1]

The childhood of this informant, which was spent in an orphanage for the children of parents reduced to poverty by the civil war or, as in her case, for the children of imprisoned militiamen, is unimaginable today, some fifty years later, for children from the same city, Barcelona. At that time meat had disappeared even from dishes like *escudella* (a thick soup made of meat and vegetables) and stew, which usually contained small pieces of meat to give some substance to the stock. Bones, and especially marrow, were the only miserly reminders that edible animals existed, animals whose meat was all the more sought after, if that was possible, because it was so scarce, and which got lost somewhere in the kitchen of the religious institution. Naturally, meat did not reach the most unfortunate members of society like orphans or war widows of the lower classes. Institutionalized charities at that time had to feed a great many mouths and their dishes had to do without scarce or prohibitively expensive foods.

The autocratic period of the Franco regime lasted until the beginning of the 1950's. It coincided with the most difficult times for postwar Spain. Franco's economic policy, based on self-sufficiency and state intervention in all economic processes (foreign trade, production, product distribution, market prices) (Riquer and Culla,1989: 124-126) caused the levels of production and consumption to drop sharply and the purchasing power and living standard of the population of Barcelona to decline. The overexploitation of Barcelona salary earners caused a major drop in demands for all types of products, especially consumer goods, as working class and middle class families had to spend most of their income in food. The distribution of family budgets in Catalonia before this period provides an idea of the difficult situation most of the population had to go through. The increase in the cost of living in the city of Barcelona during the decade immediately following the civil war was 548%. The increase in the cost of food was 700%. Table 1 shows the difficulties many families had to obtain food. Sometimes, as in 1947, total income (1329) was less than food expenditure (1475).

TABLE 1

Changes in the worker's purchasing power in Catalonia

	Year		
	1936	1947	1950
Rent	50	75	100
Food	200	1475	1316
Clothes	40	200	289
Miscellaneous	64	412	326
Total/month	355	2162	2032
Income	**428**	**1329**	**1595**
Difference	72	-833	-436

SOURCE: Sabadell Chamber of Commerce, from Riquer and Culla (1989: 124)

The post-war period was long and basic foods like bread, flour, meat, oil, sugar, rice, potatoes and pulses were rationed. Meat was the item most often scarce or unavailable. The rationing policy determined a specific type of consumption. Rations were standardized and differed according to age, sex and social class: women were given only 80% of the ration while children under 14 were given 60%. In 1939 this daily ration consisted of the following products:

TABLE 2

Daily rations in 1939

Food	Grams	Food	Grams
Bread	400	Sugar	30
Potatoes	250	Meat	125
Pulses	100	Fatty pork	25
Oil	50	Salted cod	75
Coffee	10	Fresh fish	200

SOURCE: Alburquerque 1981, from Alonso and Conde, 1994

One thing is to establish official minimum levels of consumption, and another one to be able to acquire these foods on a daily basis. Besides the restrictions imposed by rationing there was the problem of these foods *going astray* and not reaching the market place. This forced the population to turn to black marketers and pay as much as ten times the official price. As an example of the difference between the official rations and the actual possibility of consuming these foods, even as late as 1950, the average Spanish family ate only 39% as much meat, 57% as much wheat, half as many pulses, less than half as much sugar and a third as many eggs as in 1935. The following quotation illustrates the restrictions on people's diets and the misery people suffered at the time:

> Those were years of poverty and famine. We ate porridge, capelans (small fish), boiled rice, brown bread. Every day. I wouldn't eat them now, not for anything in the world. Oh, no, I don't miss them. Do you know what it's like to eat the same thing every day, never knowing whether you'll have anything to eat the next? We were very hungry. Do you know what it's like to go hungry? (61 years old salesman)
>
> My parents worked and I started working very young, but with what we took home we couldn't make ends meet. We had little to eat, and many basic necessities like oil, sugar and flour were very expensive. While the black marketers got rich, at home we didn't know where the next meal was coming from. Or rather, we knew we were going to eat the same thing as the day before – garlic soup, sometimes a *guàrdia civil* (salted fish). We were workers and we were poor so we went hungry, but there were some who didn't. Money has always been the solution to everything. (61 years old salesman)

With the exception of the wealthier classes, most of the population found it difficult to obtain food on a regular basis even if they worked extremely hard. The next informant describes the pitiful situation perfectly. His post-war meals were almost vegetarian because his family were poor and working class. The money all the family was earning was not enough to buy even the most basic articles. His memories of eating meat are non-existent since his diet was devoid of products rich in animal protein. At best he remembers eating some sort of fish because, of the long list of officially established rations, the most often consumed animal protein came

from salted fish, especially herring and cod rather than from meat such as poultry, pork, veal or lamb. In the most critical years not even milk or eggs could be guaranteed, and milk was often adulterated. Our informants remember bread rolls made with corn flour and a little wheat and porridge as though they were symbols of poverty. "Lots of potatoes and sweet potatoes and a bit of brown bread and very little meat, fatty pork if anything, or nothing at all", is the abiding memory of the food of the post-war period for this 70 year old woman. Clear in her memory are the most horrendous shortages and, of course, the *coupons*:

> When my children were young and they refused to eat I always said they should live through a war so that they would know what it meant to be hungry. They didn't take any notice, of course. If they didn't want to eat, they didn't, and the plate was left there on the table until I or my husband finished it off. I sincerely believe that they wouldn't have had all that nonsense about "I don't like this" or "I don't like that" if, like us, they had lived through the war. I like everything and I eat everything. We really had it bad. You obtained food by presenting coupons for everything, bread, lentils, everything. The women went to the market very early, before the stalls opened, to wait in the queue. You would find people at five in the morning waiting for the doors to open two or three hours later. People charged in like animals, rushing to get their meat before it ran out. It was the first thing sold out. (70 years old woman, retired)

Many people describe this time as *the years of famine*. Those with the worst memories of this period are the ones who spent it in large cities with few resources. The difference between then and now is not only the lack of variety in the diet but the absence of certain foodstuffs, particularly the *tall*.[2] Although the working classes in pre-war Barcelona were not blessed with a diet rich in meat, many dishes nevertheless included it in some form or other. We must therefore understand the non-consumption or minimal consumption of meat during the war and post-war period as a logical and inevitable consequence of economic and political restrictions, rather than the emergence of a latent vegetarianism. There was in fact an enforced vegetarianism born out of food shortage and restricted access to animal resources, such as happened in several other cultural contexts (Farb and Armelagos, 1985: 46-47).

The nobler cuts of meat only appeared on the tables of the wealthier families. For the poorer members of society offal, head and tail became one of the few meat sources that actually increased during this time of need. I use the word "increased" because they were already present in Catalan cookery books of earlier periods (Montalbán, 1979). A great deal of imagination went into preparing these dishes, but at the end of the post-war period their consumption decreased once more, even among the poorer.[3] Dishes with offal such as Catalan-style tripe, *capipota* (stew made from cow, sheep or pig trotters and head) tongue stew, kidneys in sherry, liver and onions, brain fritters, etc. were part of the cuisine in post-war urban kitchens and, for some time later, a number of these dietary sources, including blood, liver, gelatin, lungs, bone marrow, kidneys, heart, tripe, tongue, trotters and head, were even recommended for children because of their supposed restorative powers.

> Sometimes I manage to persuade her [his wife] to make *capipota* like my mother used to make it, but she doesn't really want to. She doesn't like it. It reminds her of the post-war period. She says "as if there were nothing else..." (60 years old man, retired).
>
> The pediatrician told me to give him liver once a week. And cow's heart or sheep's brains. To alternate, not to give him offal every day, but once a week. No way would he eat it. I tried making it in all kinds of ways – with garlic and parsley, with onions, on the griddle, in fritters. He had a special sense of smell. No sooner had I put it on his plate than he turned his nose up at it. I must say I'm not very keen on it myself. (63 years old housewife)

State intervention led to a black market, speculation and string-pulling (Viñas, 1982: 101-102; Fusi, 1983: 12). The people of Barcelona looked around for all kinds of resources to cover minimum subsistence levels in many different ways. These included joining political parties or trade unions to obtain food or other goods in exchange for doing little jobs. Or bribing civil servants or pro-Franco people to obtain more ration books. One informant remembers how her parents, through members of their family in exile in contact with eastern European countries, were sent products like horse meat and *turrones* (nougat-like sweet). People's social

networks were very important: neighbours, relatives and acquaintances were often the main sources of information and supply. Many city dwellers moved out to rural areas around Barcelona in search of food. This process would shortly be reversed by the economic growth of industrial Barcelona and the increasing level of urbanization.

> During and after the war my father would take his suitcase on Saturdays and go and see the many friends he had in the villages around Barcelona. He'd come back with eggs, rabbit, tomatoes and potatoes. My granny, who was a shop assistant, used to get milk and, in a highly original way, yoghurt. At the time, yoghurt was sold on rations. The shop assistants would make a lot of noise with the spoon as if the container was almost empty, but they always left a little bit at the bottom. At midday all the containers were emptied and the yogurt was shared out between them. Also, as shop assistants were always given a liter of *xiri* (skimmed milk), half of this was taken home and half was exchanged at the baker's for a loaf of bread. And a cousin of mine, who drove an army truck, went around collecting sacks of almonds in their shells and he used to give them to us. We kept them in a box under his bed and after dinner we shared out the almonds, ten per person. Anyone who had a bad one could exchange it. In this way we were able to eat a dessert and all. (70 years old woman, retired)

Such a desire for meat, as had caused a number of social rebellions throughout European history (Harris, 1989: 17-47), was not felt with the same intensity by every inhabitant of Barcelona. Interviewees from rural areas who spent the early post-war years in the country or who owned a plot of land suitable for cultivation or those who from time to time were given food by their relatives have less painful memories, although shortages and monotony in particular were a daily problem:

> I remember that the only consolation we had at first, after arriving here and seeing that there wasn't exactly an abundance of food, was when oil, a few chickens or vegetables arrived from the meadow. As oil lasted longer, we were able to exchange it for other products like bread, a bit of meat or eggs (70 years old housewife).
>
> My father had a little plot of land near *la Modelo* [a prison in Barcelona]. At that time there were no blocks of flats there, just land. I picked lettuces, tomatoes, onions, cabbages and potatoes. But there wasn't much chicken, beef or fish. We had eggs, they were easier to find. People kept chickens on their balconies. My

> mother always used to tell us that in the war the rabbit they put in the rice dishes wasn't rabbit at all but cat. I don't know if it was true but she could never bear to look at them because they reminded her of wartime. (60 years old man, retired)

Routine in daily eating habits was normal even before the war for the urban and rural working classes. Our informants describe their pre-war meals as: lunch, except on festive days, almost invariably of one course, stew made with vegetables, legumes, potatoes and a *tall*, either pork or cod, while dinner was basically soup, vegetables, fish, eggs or a bit of cheese. Dinner was often just a salted fish, tuna or anchovy sandwich (at that time anchovies were very cheap) or cold meats, which were often also eaten at breakfast. Dishes for festive occasions were rounds of beef or fricassees, rice dishes made with rabbit, chicken, fish and cod with ratatouille, cannelloni, stuffed chicken, rabbit with snails, macaroni or meatballs. These were always an optimal resource because they used the little, poor quality meat that was available together with breadcrumbs and eggs, if there were any. These dishes started to regain their place at meal tables as the food supply became more regular and the population obtained more resources. However, ingredients, combinations and food etiquette were to undergo significant changes.

Some people, especially women, were relieved of rampant famine when they went to work in domestic service in the houses of the Barcelona bourgeoisie which, during the new regime, acted pragmatically by making money from its industrial activities:

> Don't think that in my first household they had everything to eat. The war had only just ended and there was nothing to be found anywhere. But they never went hungry, really hungry, and neither did I. But sometimes we ate the same thing day after day and any leftovers were either saved or given to us servants. On numerous occasions I took out a bit of bread or rice and took it home to my family. The second family I worked for was different. They were richer. I started as a cook, well, not exactly, but as a kitchen assistant because I hardly knew how to prepare anything except what I knew from my village, because at eight years old I started to work, looking after children. The little I did know didn't help much either. This household ate different dishes: vegetables like artichokes, a lot of veal. I don't think I'd ever tasted them before. (58 years old woman, domestic assistant)

The upper classes, feeling the pinch of economic hardship and state intervention, used all the means of exchange at their disposal, which included buying and selling coupons, forging ration books to acquire the scarcest goods on the market or outside the market (meat, coffee, oil, bread, butter, coal, petrol, medicine), which made speculation and the black market more profitable. Those who were in possession of the most exchangeable objects or who were more able to acquire favours or better information, or were in a better position to pull strings, as was the case of the bourgeois families, found it less difficult to acquire the scarcest consumer goods such as meat, fresh fish, milk and fresh fruit. The middle classes of Barcelona (members of the liberal professions, small traders, employees) also endured a difficult economic and employment situation that was marked by the insecurity of the times:

> Even my father's brother-in-law who had plenty [meaning money] as he owned a business [textile shop], and fortunately it had always been more or less successful, had a terrible time. My father went to see him to ask for some food and that didn't work either. More than once he came back with nothing. But my father persisted, or rather my mother did because my father felt ashamed to ask for charity even of his sister. They had a less terrible time than we did, shall we say? They knew influential people and managed to get hold of food or medicine (65 years old man, cabinet maker)

Under-nourishment, terrible living conditions and hard work were the main causes of the sharp decrease in the physical defenses of working people. This made them more vulnerable to illnesses, particularly infectious diseases like tuberculosis, scabies, trachoma, typhoid or meningitis.[4] Families used raw eggs whenever they were available, horses' blood or cod liver oil as food supplements. These are still remembered with disgust by the generation of children born during and just after the war:

> They were afraid I'd get tuberculosis or something. There was little to eat and I didn't eat very much. I was quite thin. They made me eat raw eggs and the horses' blood on sale at the chemist's. You made a hole in the shell and sucked it out. They said it was very nutritious. Or a few spoonfuls of cod liver oil as a supplement and off you went. It was horrible but castor oil was even worse. You

> took that for constipation. That really was bad. Do you know what the Falangists did if they caught you in the streets and you told them you weren't one of them? They shaved your head and made you drink castor oil, because it was a laxative. (60 years old man, retired)

The diet of many people in Barcelona showed nutritional shortages at the lower levels of society mainly due to an insufficient intake of calories and nutrients.[5] In less than thirty years, however, the diet of the same population was to reveal forms of malnutrition mainly due to the over-consumption of calories and certain nutrients,[6] including meat and associated saturated fats, as the pattern of consumption (while still modelling itself on the so-called *Mediterranean diet)*, gradually began to approach the *Anglo-Saxon model*, in which the caloric content is primarily obtained from meat, eggs, dairy products, and sugar (Malassis and Padilla, 1980, in Hercberg *et al.*, 1988). One overweight informant tells us sarcastically:

> Fat, me, as a child? You must be joking! I was very thin, as most young girls were, too thin in fact. At home we had just enough money for our food. Now that I can afford to eat, my doctor forbids it. I've got high blood pressure, I'm obese, I've got problems with my feet, and bad circulation. So it's boiled or grilled vegetables for me. Not much red meat and better for me not even to set eyes on lamb. As much chicken as I want, just a little pasta. But I can't have any of the things I do like. (56 years old housewife)

Generally speaking, the population of Barcelona[7] followed certain trends in food consumption that were similar to those of other market economies[8] and, coinciding with these changes in diet, there was an increase in the incidence of a number of pathologies, including obesity, cardiovascular disorders, diabetes, tooth decay and certain types of cancer. In the literature these are described as illnesses of a *society of abundance*. These negative trends must be reversed by increasing the consumption of fibre and complex carbohydrates, and restricting the consumption of foods rich in animal fats. Meat today is not only the first choice food of the Barcelonese as in other industrialized countries, it is also consumed over the recommended amounts. How could this happen in such a short time?

This reversal of the consumption model can be explained as a psychological response to negative memories of deprivation, and from a materialistic point of view as the logical response to prolonged and extreme shortages of protein. Even if both explanations are correct they would only partly explain current preferences, especially considering that the greatest consumers of meat today are young people between 11 and 35 who did not live through the post-war period. This change should be understood, within the context of a wider change that has affected all the industrialised countries, as the result of a collection of different factors linked to the emergence of a *new food order* in which many structural elements of the system have changed.

THE NORMALISATION OF MEAT CONSUMPTION AT THE MEAL TABLES OT THE WORKING CLASSES

At the end of the early post-war period, as the autocratic regime started to open to the outside world and develop plans affecting the economic, labour and social structure of the country, the Barcelonese gradually regained access to essential foods; there was a modest recovery in the health standards of the poorer classes, and pre-war culinary traditions began to make a comeback. However, the new social and economic conditions were to produce substantial changes to the previous dietary model.

Although many authors believe that food culture changes very slowly,[9] and this is true in relation to concrete matters like the persistence of certain central foodstuffs and the way people prepare and think about food, very few aspects of human nutrition can escape the logic of change, substitution or adoption (Fishler, 1990). In Barcelona many things have affected food culture.[10] We have seen the partial recovery of pre-war culinary traditions and the partial and/or absolute abandonment of the products and dishes that characterized *the culture of want* (cornflour, porridge, salted fish, legumes, cod, brown bread, offal). In the last few years, however, the influence of medical, nutritional and even gastronomic discourse, has reintroduced them into the diet as healthy and tasty foods, and not only in the poorer kitchens. Among others it is the case of cod and whole wheat bread:

> You couldn't find white bread, made from flour, or if you did, only very occasionally. And now it's become fashionable, would you believe it? Before, you wouldn't look twice at it because it reminded you of hunger and poverty. The whole wheat bread of today from the baker's is easier to chew, it comes straight from the oven and contains lots of different kinds of cereals. (59 years old woman, assistant analyst)

The most radical change in the diet of working class families is now the importance of the daily presence of meat at the dining table. In Barcelona many factors, *perturbations* or *events* according to Thouvenot (1979) and Fischler (1990), have accelerated consumer trends for certain foods and the way they are eaten. The cuisine has been transformed at a frantic pace, dictated by the demands of large-scale economic cycles and the diverse messages sent out regarding nutrition, health and the body. Rapid urbanization and industrialization,[11] changes in economic structure, transformations of the labour market, increased life standards, more women working outside the home, changes in family structure, migration, new value given to time, have produced specific changes in urban food culture. While the Barcelonese's diet has diversified it has also become more homogeneous and international – some would say "Americanised". Technology has simplified home cooking. Larders are filled both with convenience foods of varying quality that save time and effort, and prestige foods boasting *appelations controlées*.

The following table shows in relation to Spain that a diet based on cereals, legumes, olive oil, potatoes, fruit, seasonal vegetables, eggs and milk has now become a diet in which the consumption of potatoes and legumes has decreased, that of meat has almost doubled and that of dairy products has increased considerably. The amounts in 1997 and 2003 are, in relation to the amount spent on meat consumption, 26.6 and 24 respectively:

TABLE 3

Changes in consumption of food products

	% Spent On Domestic Consumption											
	1958	1964	1968	1975	1981	1987	1991	1992	1993	1994	1995	2003
Bread, pasta, cereals	18.5	15.5	12.7	7.9	10.8	7.5	7.5	8.1	7.7	8.6	9.1	8.0
Potatoes, vegetables	13.1	12.0	11.9	9.9	8.6	8.4	9.9	9.4	9.4	9.4	9.7	10
Fruit	5.3	5.7	6.3	7.1	8.6	9.8	10.3	10.2	8.8	8.8	8.8	11
Meat	**17.6**	**22.6**	**26.2**	**29.6**	**28.7**	**27.9**	**27.7**	**27.9**	**27.6**	**26.1**	**25.5**	**24**
Fish	**8.3**	**8.2**	**7.8**	**8.8**	**10.6**	**10.9**	**12.2**	**12.6**	**12.5**	**13.1**	**12.3**	**14**
Eggs	**6.8**	**6.2**	**5.4**	**4.1**	**2.9**	**2.9**	**2.0**	**1.9**	**1.8**	**1.5**	**1.5**	**1.3**
Milk/cheese	**8.7**	**8.5**	**9.8**	**10.4**	**11.8**	**13.0**	**11.5**	**11.3**	**12.4**	**13.2**	**13.0**	**12.0**
Oils/fats	8.5	9.3	7.6	6.7	4.8	4.8	3.2	3.1	3.3	3.3	3.9	2.5
Sugar/sweets	4.2	4.9	4.4	3.7	5.6	5.6	6.2	6.4	6.1	5.9	5.6	5.3

SOURCE: M.A.P.A. 2000, 2004

TABLE 4

Changes in the domestic consumption of meat

Year	g/person/day
1965	77
1987	157
1995	143
1995/1965	856

SOURCE: M.A.P.A. (1996), *La alimentación en España 1995*.

If the increase in the consumption of meat is an indicator of industrialization,[12] this happened in Barcelona within two decades,[13] because the latest amounts suggest a new trend: the end of increasing meat consumption or its stagnation.[14] The numbers indicate a shift in this respect for recent years:

TABLE 5

Domestic Structure Expenditure On Meat (%)				
1995	1997	1998	1999	2003
25.5	26.6	25.4	24.3	24.1

SOURCE: M.A.P.A. 2000, 2001 and 2004

TABLE 6

	Domestic Consumption Of Meat				
	1995	1997	1998	1999	2000
Million/Kgs	2,037	2,188	2.113	2,087	2,122
Kgs/capita	52.2	55.4	53.4	52.3	53.1

SOURCE: M.A.P.A. 2000, 2001 and 2004

In spite of this initial decline, very fluctuating still, the figures for Spain as a whole are eloquent enough: in less than thirty years the consumption of meat increased by more than 80%. In a relatively short time, the diet of the working classes of Barcelona completely shifted and socioeconomic status was no longer a determinant factor in the consumption of meat. Data provided by MAPA for 2000 indicate that in metropolitan areas and Catalonia – Barcelona is both – between 54.08 and 56.30 kilos of meat were bought per capita, which is above the national average of 53.1. At the same time, and according to the same source, working classes consume more meat per capita (59.69) than higher classes (49.19). Another question is the type of meat consumed by the different classes and it should also be taken into account that the data refers to home consumption. What matters here is that meat consumption increased as living standards increased, this being parallel to economic and industrial growth.[15] This is also suggested by the evolution of family budgets. At the end of the post-war period most of the family income was spent on food, in stark contrast with subsequent trends. At the end of the 1950's, more than 50% of the household income was spent on food but it was considerably different from the previous decade. Thirty years later, the food budget of Spanish families represented 26% of their income. In 1991, the Barcelonese spent 213,808 pesetas on

food (plus drink and cigarettes), representing 27% of their budget, and today it has fallen to 17%. For Catalonia, it indicates a continuous decrease: in 2003, the domestic expense in food and drink was of 20.1%, getting closer to that of other European countries. (M.A.P.A., 1996; I.N.E., 1991/2003)

Within one decade after the war, the town of Barcelona attracted the rural population with its opportunities for employment, salaries and consumerism.[16] Strangely, the image of Barcelona's cuisine described by some of our informants when they arrived in the city, shows two dimensions. While the poorer people of the town were seen by the immigrants as *eaters of all sorts of vegetables*, the elite were perceived as meat eaters. Despite the fact that most of these interlocutors noticed the large amounts of vegetables that the people of modest condition in Barcelona ate, the difference between this and their own place of origin was not so great. They also ate dishes with little meat: *gazpacho* (cold soup made of peppers), *gachas* (a porridge-type mixture made of breadcrumbs), *purrusaldas* (a stew made of leeks, potatoes and cod), *cocidos* (chickpea stews), *potajes* (vegetable stews), *salmorejo* (a *gazpacho*-type soup), *migas* (fried breadcrumbs) and many more. In fact, an analysis of the Barcelona working classes at the end of the 1950's shows that their diet is not so very different from the diet of the immigrant population of the 60's and 70's (Riquer and Culla, 1989).

In this period the dishes that began to appear on the tables of the working classes in Barcelona were a flexible response to the various happenings in the city, which were to lead the popular and normal consumption of meat. Usual dishes before the Civil War – *escudellas*, stewed pulses, sauté vegetables, omelettes, cod with potatoes or ratatouille, roast rabbit or chicken, cannelloni – gradually came back into use but they were reinterpreted, modified and extended, not only because of the greater availability of foodstuffs in general, but, among other things, because of the development of tourism, restaurants, and new dietary and aesthetic norms. Foods that were typically eaten at festivals and demanded a greater variety of meat, gradually began to appear on daily menus of the more modest families. People nowadays still cook differently on working and feast days. Daily food is simpler and quicker to prepare. The many meat dishes include: meatballs with potatoes or vegetables, veal and lamb stews with cuttlefish; rice with rabbit and chicken, fish and shellfish, cod

and cauliflower; soups of pasta, fish, onion and egg, garlic, thyme and meatballs; pasta dishes such as cannelloni, macaroni and spaghetti served with meat or fish and vegetables, casseroled noodles with pork chops, and noodles cooked in a fish stock; vegetables served up boiled or with white cream sauce (broad beans, broccoli, cauliflower, chard, spinach, artichokes, courgettes, leeks); pulses and *escudelles barrejades* (lentil stews, chickpea salads, haricot bean, chickpea and broad bean stews, beef or pork stew, fried green beans or bean omelette); croquettes prepared from meat used to make stock, seafood or fish casserole, rabbit with ratatouille or snails, fricassee, round of beef, sausage with beans, cod with tomato, *esqueixada* (raw cod with olives, tomato and onion), pork, chicken, veal or fish in batter, cakes made from dried fruit and nuts, chicken and veal hamburgers, soused sardines, salted anchovies and anchovies in vinegar, chops, bread with tomato and cold meats, chips, pig trotters, milk, fried eggs, fresh fruit, cream, yoghurt, dried fruit and nuts, cheese and cakes.

These are the foodstuffs and dishes which are most often mentioned and common to all the meals of the Barcelonese. Dishes including salads and cold meats, and boiled, charcoal grilled and fried foods are usually eaten on weekdays in the evening, while roasts and more complex casseroles are reserved for holidays and, in particular, for Sunday lunch, although some tend now to eat out on Sundays or resort to buying take-away dishes. The pressure caused by work or school timetables and other activities, and the greater value placed on leisure time, have led people to prefer quickly prepared grilled or fried meat dishes rather than casseroles and stews, which are more time consuming and require greater effort.

There are differences in the type of meat the different income groups buy. Despite the fact that most of our informants considered that, luckily, they could now buy anything they like, there is clearly a purchasing power limit that determines their tastes for certain articles. It can be said that there is a socially vertical heterogeneity of consumption for numerous products. This is the case for cold meats, meat, fruit, fish and wine. These articles can be found in most households, but their price and typology vary considerably according to the household income. Thus, lamb, goat, veal – particularly such cuts as the fillet or sirloin – duck, capon and Iberian cold meats are less frequent in low income households, which tend

to consume large quantities of chicken and turkey, pork (sausages, black pudding, loin, chops, cold meats), rabbit and veal.

> Yesterday we had *jabugo* ham. Strangely enough, my mother-in-law bought it because she knows we like it and seeing that it was a celebration..., but it's not normal. We usually have it only because *we* buy it. They always buy the cheap stuff. (28 years old woman, accountant)
>
> When the price of lamb suddenly goes up like that, I don't buy it. Why should I pay twice the price if next week it's going to come back down again? I make the most of it when it's cheap, buy more and freeze it. (68 years old housewife)

Alongside this heterogeneous phenomenon *of socially vertical consumption*, we have observed that homogenization of meat consumption was *socially horizontal* in nature, caused by the decrease of local varieties in favour of the standardization of agricultural and livestock production (poultry, pork, bovine) and also caused by the massive influx of tourists from other industrialized nations, leading to the development of restaurants based on international, Spanish, regional, local or ethnic cuisines. Food consumption took on international traits by incorporating new dishes that were supposedly characteristic of other cultures and by the apogee of this trend in an internationalist style of catering, in response to the influx of tourists and new leisure time which allowed the Barcelonese to go more often to restaurants and bars to enjoy their daily or holiday meals.

Establishing an international cuisine means adopting dishes and ingredients mainly from French and Italian cuisines, first introduced via restaurants and later incorporated into domestic kitchens. Examples of dishes consumed both at home and outside are: *osso buco*, meat and vegetables cooked with milk-based creams and butter, cheeses or mustard, Mexican fajitas, pizzas, stuffed pasta, steak tartare, nuggets, meat in batter or breadcrumbs, or pâtés.

The popularization of meat consumption has been progressive and consistent until up to the 1990's. It has reached the point where today the children of the generation whose childhood was deprived of meat believe that a meal is normal only if it contains animal products. In nutritional terms, young individuals (between 14 and 30) consume large quantities of protein,

mainly of animal origin, carbohydrates and simple sugars, animal fats and vegetable fats (margarine and oil). Vegetables, fruit and fish are missing in many cases. The same type of consumption is recorded for some adults.

In terms of consumption we may describe the 14-30 years as a product of the period when meat supply and the ability to acquire food increased. When adolescents are able to choose what they want to eat they usually follow their own personal tastes rather than nutritional criteria.

> What do I know about whether it's good or bad for the health? Well, yes, I do know, but I'm not bothered. I just eat what I like, that's all there is to it, whether it contains fats or it's made of plastic. I like beans in a stock or with sausages or chips. I like beef that's finely minced and fried, and the chicken with almonds that my mum makes and pork in breadcrumbs. Fish, well... Fruit? I like bananas and, in the summer, melon. I don't think I like any vegetables, well except salads, but only lettuce and tomatoes. (16 year old woman, student)

This is why the inventories of domestic groups with young people show products indicating a socially horizontal homogenization of tastes. Some examples are: industrial pastry, sweets, pizzas, cheese and ham toasties, soft drinks, sauces, sliced bread, dairy products and particularly much meat (veal, chicken, pork, cold meats). For lower class youths, especially boys, meat is essential: it is almost always mentioned as a preference and there are few who prefer vegetarian foods. The disgust sometimes mentioned by some girls refers in some cases to ideological questions.[17] Contrasting opinions of meat are offered by a father and a son from the same domestic group. The former, of rural origin, claims:

> You can live easily on what's produced in the fields. You don't need meat to survive. (57 years old man, viticulturist).

The son, on the other hand, believes that meat is essential:

> Meat is of primary importance. I'd eat one steak a day, or two, or three. I enjoy it. Yes, sometimes I eat three steaks until I'm full. (27 years old man, teacher)

The consumption of meat and its derivatives has been encouraged by decreasing prices, new social pressures, the influence of restaurants and the tastes of the younger generation. It is to some extent an answer to health related problems and body image. It might seem a paradox, but many of the numerous types of diet followed at some point by some of our interlocutors, following suggestions from doctors, beauticians or medical literature and adapted to the individual needs in response to pathologies and weight problems are still based, though not exclusively, on animal protein. There appears to be a certain gap between medical advice promoting pre-war popular cuisine as the most suitable model of consumption, and the prescription of any diet.[18]

Such preferences have been fostered by a number of things such as mass production, lower prices, greater purchasing power of the working classes and the influence of restaurants, special diets and school dinners. These last are extremely important because, together with home cooking, they directly shape the food culture of the youngest members of society. If we analyze the contents of monthly menus of state schools in Barcelona we see that most of their dishes are meat-based. We have taken two examples at random for menus planned in February 2000.[19] The first example is a menu for children from one to three years old and the second for children between three and twelve. In the first case, of the menus from 25 days, 14 main courses consisted of chicken, veal or pork, while the others consisted of fish and eggs. In the second case, the proportion is even higher: of the menus from 20 days, 15 contained some item of meat as the main ingredient of the second course. Moreover, some first courses included small amounts of protein (boiled ham, omelette, fried egg, cheese, minced beef, spicy sausage or black pudding).

These plans have been checked by the health department of the Catalan government, so one can deduce an obvious desire to promote the consumption of meat-based foods and animal protein in general. This fact apparently contradicts the recommendations published by the nutrition program (Jiménez *et al.*). Although for over two decades the medical and/or moral discourses of industrialized societies has recommended a balanced, prudent diet of quality, in which the consumption of animal protein and fat is reduced, the conditions of the market, urban lifestyle, the trend of

preferences and the persistence of certain types of medical instruction, still favour for the moment the normalization of meat in every type of kitchen, even the more modest ones, where more often than not meat has been conspicuous for its absence rather than for its abundance.

NOTES

1. This article is based on the contributions of twenty interlocutors chosen from a group that had previously taken part in two research projects on the changes or otherwise in the dietary culture of the people of Barcelona (Gracia, 1998 and 1999). They were chosen on the basis of their socioeconomic position, age, geo-cultural origins and the quality of the data they provided in the in-depth interviews and the stories they told. The historical contextualisation of the period follows the comprehensive study by Riquer and Culla entitled *El Franquisme i la transició democràtica* (1939-1988) in *Història de Catalunya* by Pierre Vilar, vol. VII, Edicions 62, Barcelona.
2. In Catalan, the term *tall* is used for a piece of meat, fish, cheese, etc. that is cut in one whole piece or for a large piece of meat or fish in a meal or in a stew, as opposed to the vegetables or sauce.
3. In fact the consumption of animal offal has continued to fall in Spain in the last few years (M.A.P.A.: 142):

	Purchases For Home And Outside Consumption (Million kilograms)					
	1991/90	1992/91	1993/92	1994/ 93	1995/94	1995/90
Offal	101,2	95,7	81,1	86,8	85,8	58,5

4. For example, in 1944 more than half the deaths by infectious disease in Barcelona were due to tuberculosis (Riquer and Culla, 1989: 126).
5. In 1941, beginning of the post-war period, the consumption of food in Spain was considerably lower than the nutritional levels generally recommended (44.6% for albumin, 61.5% for fat, 66.2% carbohydrates and 66% calories) (Herrero, 1988, in Alonso and Conde, 1994).
6. The industrialized countries also report health problems due to shortages. Although the risk of nutritional deficiency is very rare it is significant for some vitamins (retinol, vitamin C, tocopherol) or minerals (magnesium, zinc). The prevalence of iron-deficiency anemia is 2.2% (*Enquesta Nutricional de Catalunya,* 1992-1993).
7. There are no available statistical studies referring exclusively to changes in Barcelona. We therefore refer to larger areas, *i.e.* Catalonia or Spain. In 2002-2003, 40.2% of calorie and nutrient consumption in Catalonia came from fats, 19.2% from proteins and 38.3% from hydrocarbons. As in other industrialized countries, the percentage from proteins and sweets is high for all the population, while calorie consumption is considered suitable for all age groups except the young, among whom consumption tends to be excessive (*Avaluació de l'Estat Nutricional de la*

població catalana 2002-2003, Barcelona 2004).

8. Malassis (1975: 75-76) says that there are basically four laws: a) when a consumer's income increases, energy consumption expressed in final calories tends to reach a limit, while consumption expressed in initial calories continues to increase. This increase is due to the substitution of calories from vegetables for calories from animal products. b) when a consumer's income increases, expenditure on food in real terms increases in relation to consumption per capita and to the actual price of caloric food. c) the relative value of expenditure on food decreases in relation to the set of other consumer expenditures (Engel's law). d) the structure of nutritional consumption (relative importance of the different food groups) and product category (agricultural and agribusiness) changes.
9. See Febvre (1938), Malassis (1975), Flandrin (1989), Schneider (1988) or Lambert (1997), quoted in Gracia (1998: 28-48).
10. The changes recorded in the food culture of Barcelona take place on different levels. These range from changes in food production and transformation to its supply, storage and preservation, its preparation, distribution and consumption; to changes in the way food knowledge is transmitted and learned; and the changes in the roles and attitudes of suppliers and consumers. For changes or otherwise in the food culture of Barcelona between the 1960's and 1990's, see Gracia (1998).
11. In 1960 the percentage of urban population increased from 56% arriving to 66% in 1970, whereas, in the same year, Barcelona went from 67,4% to 71,8%. At that moment, this urban area registered a much higher economic expansion than the Spanish average. The evolution of the working population between 1960 and 1990 indicates a continuous increase of secondary and tertiary sectors and a significant loss of the primary level:

Working Population of Catalunya in 2000	
Agriculture	2.6%
Industry	26.6 %
Costruction	9.2%
Services	57.9%

SOURCE: Anuari Estadístic de Catalunya/01

12. Thouvenot (1979) points out that the effects of industrialization in the northeast of France at the end of the 19th century coincides with the increased production and sale of meat, and the discreet beginning of popular consumption of beef among the inhabitants of the region.
13. Although Catalonia had already been through its first industrial revolution in the previous century, the process of industrialization was interrupted between 1935 and 1950. The principal push towards modernization took place between 1960 and 1974, to such an extent that in the 1980's the problem of the backwardness or modernity of Spanish industry gradually turned into the problem of the backwardness or modernity of European industry (Nadal, Carreras & Sudrià 1989:289).

14. This trend has been mentioned before by Fiddes (1991: 225) in relation to the British "the upward trend reached a peak in the early twentieth century, after which no major further increase occurred. Wartime fluctuations obscure clear trends, but there are signs that overall demand, far from increasing, has actually begun to decline".
15. This greater diversity in the foods available and those most available coincides with the renovation of the rudimentary structures that Catalan food and agriculture companies, encouraged by their international recognition, the creation of accessible technology and the extension of distribution networks, carried out during this period (Riquer and Culla, 1989). The introduction of technological equipment and increased food productivity were favoured by the 1st Economic and Social Development Plan through the capitalist and Europeanizing surge of the early 1960's. This was updated two decades later when Spain entered the Economic Community.
16. This century, most immigration has been concentrated in the 1920's and 30's and 1950's and 60's with a timid flurry at the end of the 1980's and the beginning of the 1990's. The city became home to people from Murcia, Valencia, Aragon, Andalusia, Extremadura, Castile and Galicia as well as Catalan immigrants from out of Barcelona. More recently, people have arrived from the Maghreb, Africa, the sub-Sahara, Asia (Philippinos, Indians, Pakistanis, Chinese) and Latin America (Nello, 1998).
17. Vegetarian diet is related (but not only) to some movements such as environmentalism and "okupas", among which some people put forward the ethical and environmental ethical aspects as reasons to eat less meat or not to eat it at all. These movements most often concern young people of lower or middle class. However, there have been vegetarians in our society since the seventies, and it coincides with the great increase in meat consumption among lower classes. On the other hand, the successive crisis such as "mad cow", porcine plague and foot and mouth disease do not seem to have much influenced meat consumption. Indeed today there is less consumption of veal and red meats, which have been compensated by other types of meat and fish.
18. For example, the nutritional advice established and given for prevention of cardiovascular disease in specialized centres allow a considerable number of animal products: turkey, chicken, rabbit, fish, tinned tuna, smoked salmon, dairy products, egg white) and, once or twice a week, veal, beef, pork, raw cured ham, game, salted cod, shell fish or tinned sardines. There are recommendations which do not question the presence of meat in the menus, just of the fats contained by some of them.
19. These menus were in fact modified in 2000-2001 as far as beef was concerned. With the "mad cow" crisis, it was stricken out of school menus in most of the public schools of Catalonia, and substituted with fish or other meat sources. Today, the presence of veal and beef has become normal again.

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To Eat or Not to Eat Meat in Urban Catalan Society: Imaginary and Cultural Aspects

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Red meat and meats in general have traditionally occupied an important part in modern Catalan diet. There is now a decline in meat consumption. This article analyses tendencies towards vegetarianism in all its forms and reasons adopted for these food preferences. Through the words of respondents, the author examines a multiplicity of viewpoints concerning animals, meat, health, and so on.

Introduction

Foodways in Catalan society have undergone great changes from the second half of the century onwards (Mataix, 1996: 237). The availability of food, compared to former periods, has been much greater for all members of society, not only in quantity but also in range and type. As in other Western societies, animal food plays an important part in the Catalan diet[1] and red meat is seen symbolically and nutritionally as the most excellent and expressive form of nourishment.

In the early 1990's, 34% of Spanish households' expenses went on animal products (*Dieta alimentaria española*, 1991: 57), showing the importance of meat in Catalonia and Spain. For the nutritionists, the consumption of animal protein is excessive, as is that of sugars and

fats, while the intake of high-fibre food has decreased with the lower consumption of bread, potatoes and legumes (Salas-Salvadó, 1996: 269).

The fact that some individuals in contemporary Catalan society reject totally or partially any animal food is an interesting phenomenon which can be anthropologically analysed by taking into consideration the context in which it developed, in this case, that of the meat eaters. According to Augé (1993: 120):

> Anthropology always deals with at least two contexts: the one it focuses on (village, company) and another, broader one, in which the first is inscribed and where influences and pressures affecting the internal game of local social relationships express themselves (kingdom, state). The anthropologist has to deal with both perspectives: observing the "inside" context and the corresponding frontiers of the outside.

Thus, in our analysis, we have to include not only those who utterly reject any kind of animal food (meat, fish, poultry, eggs, milk…), but also those who, while still eating animal protein, have decreased its consumption. This raises two fundamental questions. First: what drives individuals belonging to industrialized and developed "First World" societies to banish animal products, especially meat, partially or totally, when it is the most valued and desired of foods for the majority of individuals in that given culture and time? And second: Why have individuals who formerly thought meat and other animal products were essential to their nutrition decreased their intake? These two questions will lead us to an analysis of two groups living in urban Catalan society, which have either rejected or lowered their consumption of animal foods.

THE AMBIGUITIES OF LIVING WITHOUT MEAT

There are signs that meat consumption is starting to decline and that there is a constant increase in the number of people who refuse to eat any meat at all. This has been partially hidden by a small increase in the intake of some meat eaters, particularly through eating out, mainly at fast food restaurants (Fiddes, 1991: 225).

As in former periods, there are today persons who decide to convert to a meatless diet. These individuals are commonly known as vegetarians. It is however necessary to define the term "vegetarian" because, as happens with meat eaters, not every vegetarian eats the same kind of foods. The *International Vegetarian Union* (IVU) defines a vegetarian as the person whose diet consists of cereals, legumes, vegetables, nuts and dried fruit, fruit and other vegetable products with or without dairy products or eggs, and which excludes animal flesh. Other definitions add the characteristic of "natural" to the food taken by vegetarians.

A meatless diet (with or without milk and eggs) based on the great variety of natural non-processed foods is the basic pattern commonly accepted as vegetarian (Sussman 1993: 17). If one includes dairy produce and/or eggs in the diet, we can distinguish lacto-vegetarians, ovo-vegetarians and lacto-ovo-vegetarians. In some cases, some vegetarians even include fish every now and then and still consider themselves as vegetarians.[2] If we look at the way vegetarians eat their food, we find those who only absorb raw products, fruitarians who only eat fruit, vegetarians who do not eat eggs or dairy products (Sussman, 1993: 12) and vegans, who do not absorb any animal product whatsoever.[3]

For many vegetarians, the term "meat" not only includes beef, veal, pork or lamb but, based on the definitions just mentioned, it also applies to fish, seafood or poultry. Often the way vegetarian associations speak of themselves and the way nutritional science considers them, differ from the beliefs and every day practices of the adepts. If we take the two previous definitions, an individual who considers himself a vegetarian and does not eat any kind of meat, but who eats fish would not fall, strictly speaking, in the category of vegetarianism. It appears necessary to detail and broaden these definitions. For some, a key word should be included when dealing with vegetarianism, that of "diversity" (Krizmanic 1992: 79), because of the impossibility of limiting individuals to a given stereotype.[4]

The reasons[5] for excluding meat from one's diet can vary, but most vegetarians would think of health and respect for animal life as most important. Although ecological and environmental issues, as well as a fairer distribution of the planet's food resources are part of their discourse, these have less influence than health and respect to animals. They are seen rather

as complementary reasons or as consequences of the main reasons for choosing this kind of diet. And finally there are simple reasons of personal likes and dislikes or physiological tolerance.

The health motive appears strong. Both the "carnivorous" who abandoned meat and those born in families where one or both parents were vegetarians (second generation vegetarians) think that vegetarianism is healthier than a diet that includes meat.

> I started it thinking it was a health issue and did it to feel better. I focused on health. At first I saw it as a way to cure my husband. I was at his side when he had his asthma attacks. It looked like he was dying and it is very hard for a person to be choking. So, for me, vegetarianism was my salvation, a way to regain health. Since then, I have learned that vegetarianism is something more profound [...] I would not stand eating something toxic like meat anymore. (Woman aged 54)

Arguments in favour of vegetarianism for health are mainly based on the rejection of additives in animal feed and those added to meat when processed. Additives range from hormones, antibiotics used by veterinarians, vaccines, the components of fodder, to preservative, colorant, and substances added to meat. These are supposed to make the product more appealing to the taste of today's meat eaters, while vegetarians claim that it makes these foods toxic.

Another factor that makes vegetarians think meat is toxic is the belief that eating the flesh from dead animals amounts to eating corpses, and absorbing it they would also absorb the negative vibrations and energy the animal would have left behind when it died. The red colour of blood and flesh, the way in which the animal is killed and the tension one supposes to be reflected in the animals muscles would also be assimilated when eating that piece of flesh, amounting to a physiological intake of the violence surrounding the process of obtaining meat.

If I eat something bloody, like meat, which is dead, in putrefaction, it's not the same as eating something light like a salad, a piece of fruit. We are what we eat. When I used to eat meat, I was more aggressive, very violent.

Now I'm quieter. I understand more why people do the things they do." (Woman aged 54).

> Animals are conscious. Not eating them makes no death vibrations enter our bodies. Every time we have killed, as part of the human race, we are assimilating the pain of the rabbit, of the pig [...]. (Man aged 62)
>
> Although everything is alive on this planet, it's rather bestial to kill in order to eat. Before becoming vegetarian I did not feel like that. …I became receptive to what I had never considered before. (Woman aged 31)

For those who became vegetarian for their health, its improvement or the curing of a specific pathology was not the only reason. It is also seen as a means of strengthening the body to resist or fight disease, as a kind of preventive medicine.

> Vegetarianism is like a constant flow. It is not like when a doctor prescribes you an antibiotic or a painkiller and half an hour later you have no pain. Through vegetarianism and herbs, little by little, you cure your pains [...] Vegetarianism means a different kind of life, a way of feeling and thinking, a preserver of your health. It is like building a wall in front of illnesses. If there appears an illness, your body is better prepared if you have more defences. (Woman aged 39)

Individuals who give priority to respect towards animal life when choosing vegetarianism consider that the base of their conviction lies in the idea that animals are living beings as humans are and, because of that, they should not be food for humans and receive ill treatments in their rearing and killing.

> Maybe it is because of my vegetarian conviction [...] Apart from the suffering of animals, which may be the most important point, man rules over the whole of nature. Man uses his "superiority", his intellect or whatever it is to manipulate nature at his own will. I find this an aberration. This is what reinforces my position as a vegetarian. (Man aged 27)

Some vegetarians question their duality towards animals by asking themselves the following questions: For many saving the whales from uncontrolled hunting or seals from indiscriminate slaughter is important. Why do we not apply the same criteria to save cows or chickens? How is it possible that in a society like ours where the number of household pets is so high there are still some who, even owning pets, still eat meat from other animals?

Meat eaters also ask vegetarians the same kind of questions. For instance, they wonder how vegetarians can eat fish, accusing them of being inconsistent. But for vegetarians, this fact has different meanings, depending on the motivations which led them to vegetarianism. Those who converted because of respect of animal life consider that all animals are equal and that they cannot eat flesh of any kind.[6] Those who adopted this diet for health or taste preferences, sometimes eat some kind of animal flesh, generally, fish,[7] which they do not consider as "meat", and which does not present the same degree of "toxicity". From a meat eater's point of view, however, fish can be considered part of the vegetarian diet (Willets, 1997: 116).

Respect for animal life can also have implications on the consumption of dairy products and eggs. Vegetarians debate whether it is reasonable to eat these foods, because in doing so they contribute in some way to the maintenance of the meat-processing industry and the continuation of the mistreatment of animals. At the same time, many of these vegetarians think they are not yet ready to abandon eggs and dairy produce. For others, the inclusion of these products in their diet makes perfect sense and does not raise any dilemma in relation to their respect towards animals.

> Thinking about respect, when you milk a cow you are not killing the cow. With caviar, it's not the same. They pick the sturgeon, cut it open and take the roe by caesarean. Then, they throw the fish away. For me, this is barbarous. It is like performing a caesarean on a woman in order to eat the child. (Woman aged 54)

A fact often repeated among vegetarians coming from a meat eating background is that they rejected meat during their childhood and adolescence. It is a latent memory in most individuals who remember how badly they felt when eating meat, poultry or fish and the consequences it had on their organism, since most of them suffered from anaemia and other nutritional

diseases. Most of them are of the opinion that if they had known vegetarianism at the time, they would not have suffered from digestive problems.

> When I was little and I ate meat, I had stomach ache and sometimes I vomited. So, my mother stopped feeding me meat. She gave me poultry and fish instead, although I had many dizzy spells [...]; before becoming a vegetarian, I was anaemic. (Woman aged 26)

> I don't miss eating meat, I don't want to. Maybe because I have never really liked it very much. My parents told me that when I was a child they had a hard time making me eat it. I've never liked fish either. My father had a meat and poultry shop. (Woman aged 53)

As I have previously pointed out, ecological and environmental reasons as well as those dealing with a better worldwide distribution of food do not appear to have much weight in urban Catalan society at the moment to incite individuals to adopt vegetarianism. However, both issues appear in the discourse of vegetarians, adding them as arguments in favour of their chosen diet. In that sense they say that they do not contribute as others do to the deterioration of the environment and, if vegetarianism were predominant, food production costs would be reduced, facilitating better worldwide accessibility.

The rise in meat consumption (especially beef) instead of vegetable foods requires an increased use of land space (Singer, 1984: 48-49).

> If everyone were vegetarian... Amongst a hundred motives, there's an environmental reason. So many people who are worried about environment and famines could put things right by having a healthy diet lacking nothing and which would solve several problems. (Man aged 40).

LIVING WITH LESS MEAT

Humans who eat animal flesh and products, have also changed their eating habits in respect to the quantity and frequency of meat eating, in some cases because of given nutritional events in their lives.

> In fact, eating meat, I mean, seriously, only from 50 years ago onwards... Nowadays we do not eat so much meat. People are educated differently and they do not have the need. We started eating only chickpeas. Then, we ate chickpeas with some meat. And now we eat meat with a few chickpeas... Why don't we eat so much beef now? Because during these last years people have had beef of bad quality. The same happens with poultry. (Man aged 53)

For the consumer, contemporary information on nutritional issues, mainly through the media (press, radio, books, TV) is wider and faster than in the past.[8] News related to beef, chicken and dioxin, porcine disease, certain industrial cured meats and other similar news items, often broadcast at meal times, affect directly the perception consumers have of the food reaching their table, creating anxiety. They might then ask the butcher about the origin of the meat in his shop.[9] If they are content with the answer and trust the butcher, they will continue eating meat. They might also stop eating beef and poultry for awhile, introducing the dilemma of what to eat instead. Other questions may arise related to managing a balanced diet: "If I don't eat meat, will I get sick? What foods can replace meat proteins?" (Fernández *et al*., 1995: 146[10]) The general belief, reinforced by some nutritional advice is that, willy-nilly, a healthy body and mind require lots of meat (Fiddes, 1991: 226). Although meat is only one within the huge range of protein rich foods, its main distinction lies in that it is the most expensive (Singer, 1992: 189).

> WHO (World Health Organisation) says we need one gram per kilo of weight and now they claim it is actually less. If I weigh 60 kilos, with 60 grams of proteins I have enough. Thus, if you eat a few nuts, cereal, some legumes, lentils with rice and a bit more, you have the necessary proteins. An excess of proteins can make you sick. The body cannot assimilate them and they are stocked." (Woman aged 54).

In the majority of cases, when the echoes of news related to meat are no longer news, meat consumers stop worrying about food. Taste, tradition and habits formed during childhood prevail and meat is once more on the plate. In some other cases, the uncertainty caused by this type of news leads the consumer to rely on organic beef, lamb or chicken, commercialised in

Catalonia for some years now in specialty shops,[11] although some of those establishments, heavily committed to health and environment refuse to sell any flesh whatsoever.

> We have not accepted organic meat, unlike other shops who don't believe as much as we do in environmental ideals. We don't sell it. I cannot do it as I think it would be going against environmental awareness. (Shop owner, woman aged 53)

Twenty years ago, customers of that type of shop were vegetarians, adepts of naturopathy and a few meat eaters looking for specialties unavailable in pharmacies. Today it includes all the non-vegetarians who want organic produce to complete their shopping list and those who are worried about their health "conversion" to organic foods. Organic meat has some advantages and some drawbacks. You cannot buy it in supermarkets or butcher's shops. You have to go to the specialty "organic foods" shops where they sell food (organic pastry, rice, legumes, fruit, vegetables and meat) as well as books and magazines on "natural" diets and alternative medicine, clothes made with natural fibres, candles, incense and cosmetic products both for personal hygiene and for the household.[12] Meat is not displayed because it is usually bought to order and wrapped up and the customer is given it as if it were a forbidden transaction, something illegal, instead of a regular food purchase.

Price is the main factor slowing down the market development of organic meat and other products.

> Depending on what you buy, a vegetarian diet can be very expensive. For example, I like wholemeal cookies with sesame seed but they are very expensive. If they were cheaper, maybe more people would buy whole grain products... (Woman aged 51)

> The price can vary: if we talk of tinned food and honey, there is not much difference between organic or not, but if we talk of the price of vegetables in certain seasons, it is alarming. For instance, our customers buy artichokes for 500 pesetas a kilo, whereas in the market they cost 200 pesetas. That's a huge difference! Every organic artichoke plant produces six times less artichokes than a "normal" one. (Shop owner, woman aged 53)

> People who come to the shop are not very interested in saving. They come in knowing that our products are more expensive than those of supermarkets. And the last thing they would ask is the price. (Shop owner, man aged 37)

Organic beef, according to farmers and retailers, is obtained from animals reared free in grass fields, where the cows feed their calves up to seven months. Animals are given no hormones or vaccines and are treated with homeopathy.[13] Organic poultry[14] is obtained by rearing free range chickens, feeding them grain and treating them, if needed, with homeopathy. Some regular meat eaters who have tasted organic meat think that its taste and texture are different from that of regular meat.

> My wife is a vegetarian, but I eat all kinds of food. I like beef rare. One day, she bought me organic beef to taste. There are differences indeed... when you cook it, the meat doesn't shrink, it is tastier and you don't find nerves. So, now and then, I buy some steaks and I freeze them to eat them when I like, although I have to cook them myself, because she finds them disgusting. (Man aged 43)
> At home, we eat organic meat.... It could be said that everything we eat is organic... On holidays, I buy non-organic food and my children say it has a weird taste... (Woman aged 45)

Non-vegetarians, besides being influenced by the media on the meat they eat, receive through the same channels different kinds of information on the treatment of animals and laboratory research in medical, pharmaceutical and cosmetic industries that influence their opinion, attitude and eating habits. This letter from a reader to a Catalan newspaper is a clear example of how their attitude towards animals has changed, as well as the perception urban people have of them, if we compare this with the traditional one:

> The case of cloned pigs created to replace organs for humans, is very sad. Is it logical that if there are no donors we have to do that? Is it logical that researchers use it as an excuse? [...] Why do we torment living animals? [...] Besides, scientists are the first who know that it is very likely that if we should obtain an animal organ more or less like ours, there would be a great danger of new illnesses arising [...] So, animal suffering in this case is pointless. (*El Periodico de Cataluña*, 26th of March, 2000)

The "fear" that the consumer expresses after the recent "food crises" leads him to wonder about the treatment of animals reared for human consumption, the use of animals for medical and other biological research and so on… It influences the opinion consumers will express about which is the healthier food and which is not. Although Catalans say that vegetables, white fish, rice and honey are the healthiest, followed by beef and legumes, and they say that pork, wine, butter, sugar, eggs and vegetable oils are the least healthy,[15] vegetables do not have the same "social or symbolic value" as meat and they are not eaten in the same proportion

> We live in an increasingly hypochondriac society, where everyday people are more and more obsessed with preserving health and protecting themselves from the number of real or fictional contamination sources [...] And we do that because we live haunted by the almost hysterical fear of sickness, dirt and corporal disorder. (Delgado, 1991: 93)

MEETING POINT: MEAT EATERS AND NON-MEAT EATERS

In urban Catalan society, vegetarians are a minority but the meeting points of the two groups are many and frequent: in the family, at work, at leisure time... A vegetarian often belongs to a family where most members eat meat as do his colleagues, classmates and friends. What are their reactions towards vegetarians and vegetarianism? What do vegetarians think of non-vegetarians?

For those who eat meat regularly, the fact that some individuals reject it is akin to an insult or, as Eder (1996) points out, a contradiction in the meat eaters' culture. But vegetarianism can be seen as a kind of "pacific personal revolution" (Ossipow, 1997) brought about through changing eating habits.

Vegetarians, ecologists and other members of the new forms of the so called "urban religiosity" usually have animals at home as a part of their pious obligations. They serve to build the fraudulent illusion of returning to nature. Many of them are so alienated as to try to make their cats and dogs vegetarian and they even announce meatless diets for pets (Delgado, 1991: 156).

What one does not eat and why that is felt to be inedible is also an interesting question. Ignoring the concomitance can make us unable to understand some eating habits and, in consequence, consider them dietetically and/or economically irrational by the mere fact that we do not understand them (Contreras, 1993: 44).

Knowledge about vegetarianism in our society has changed, in comparison to previous decades; so has the demand for food, requiring products as "natural" as possible.[16] Today information on alternative diets (i.e. vegetarianism, macrobiotics) and healing (naturopathy, acupuncture) is widespread and easy to get. Restaurants have heard the demands of many consumers, vegetarians and non-vegetarians, for vegetable dishes. In Barcelona now there are restaurants offering a vegetarian menu or dishes without animal products, health magazines publish vegetarian advice and if we add to this the increasing number of "organic products" shops, it is no wonder that vegetarianism has become "trendy".

Amongst vegetarians, the traditional high value given to meat, and particularly red meat, has been replaced by a challenging situation (Beardsworth & Keil, 1993). Not only have they stopped eating meat, they have also ceased to think of the importance of meat-based meals (Sussman, 1993). In general, and from their minority position, they can act differently in their interaction with meat eaters. The "fundamentalists" who proselytise get negative reactions from meat eaters. Less strict vegetarians follow the live-and-let-live policy and get fewer negative reactions. Their attitude is based on tolerance towards all eating options, but they respond if criticised.

> I understand meat eaters as well. Eating meat is not bad, it is bad for me. Everyone chooses their eating option. (Man aged 27)
>
> Everyone lives his own way; everyone is perfect within his world. We are all different and I do not think one is better or worse for eating differently [...]. (Woman aged 26)
>
> Some vegetarians who don't want to kill animals can buy a detergent, pour it down the WC and kill lots of fishes. Can you assume it all at once? No, but it can help one to be more tolerant. This is the key. Yes, I got rid of the violence of not eating animal meat, but I have 40,000 killings on my conscience. So it makes no sense that I criticise meat eaters for killing animals when I have not cleared my mind about it. (Man aged 40)

The attitude of vegetarians towards meat eaters not only responds to the fact that they consume meat but, on many occasions, it also affects other aspects of their diet such as the kind of food they eat and the way they cook it. It makes them reflect on their own type of diet, needs and lifestyles.

> When I go to the supermarket I am scared by what people fill their trolleys with. It is rubbish. Prepared food is rubbish. These products are not natural. You don't eat when you eat them. I think all products have energy and, the more manufactured they are, the less energy they have [...] I am scared of cold meats cut and wrapped up in plastic with the nitrates they contain to keep them preserved. (Woman aged 31)

> Nowadays, even vegetarians eat badly. But meat eaters eat worse. I think it is modern life. People work for many hours, they don't feel like cooking, they have little time and young people don't know how to cook. (Woman aged 53)

In some cases, vegetarians considered that diversity in the diet is related to the degree of evolution of individuals, based on the belief that in the future what will prevail is the more evolved, i.e. vegetarianism.

> I think people are doing what they must from an evolutionary point of view. If a person eats meat, it is because he has to eat meat. For me there is a mechanism to understand. I see the image of what I was before. It enhances my understanding [...] I have started with food and other people with other things. (Man aged 40)

In other cases, diet is not the central point of differentiation between vegetarians and meat eaters: other characteristics appear that have nothing to do with eating.

> Meat eaters are totally respectable. I see attitudes towards life I do not like at all in some vegetarians. Meat eaters instead... I don't know why I say meat-eaters. I've never liked the term. I think meat has nothing to do with what a human being is. (Woman aged 31)

Conclusions

In their relationship with animals, many vegetarians do not accept an "otherness" of animals. They perceive them as equal beings to humans. Thus, in the vegetarian representations of life several ideas on diet can be distinguished: eating vegetable foods is akin to the search for closer contact with nature; the rejection of meat is a way to avoid intermediaries between them and nature; if meat means death for animals and disease for humans, vegetables (fruit, legume, cereal, green legumes) mean life. And, last but not least, food is thought of as a preventive or curing medicine.

Vegetarianism and meat eating are not antithetical. They are two ways of eating which the great majority in Catalan society can choose from. Most meat eaters seem to have decreased their meat intake and many of those who see themselves as vegetarians seem to include in their diets some kind of animal flesh. Therefore, the limits between the two types of diet are not as clear as they might seem, they appear blurred.

Obviously meat has different meanings for the two groups. Meat eaters find meat fundamental for their diet and without it they could not maintain their health. For vegetarians eating meat is, amongst other things, unhealthy. To meat eaters it is not meat itself but the consumption of intensively reared animals that will shortly lead to a reduction of meat in the diet. This opens a wide field of research for disciplines such as nutrition, anthropology, history, medicine and others to better understand the development, implementation and evolution of these two trends of dietary behaviour: eating or not eating meat.

Notes

1. The "Departamento de Agricultura, Ganadería y Pesca de la Generalitat de Catalunya" points out in the 1996 report "El consum alimentari a Catalunya" [Food consumption in Catalonia] that "I*n Catalonia there is a high intake of fruits and vegetables (a fourth higher than the average of the European Economic Community (EEC)), meat, fish and olive oil (30% more than the Community), low intake of cereal, potatoes (30% less than the EEC), and legumes, moderate intake of milk and an acceptable one of dairy produce.*" (p.6) However, the "*Índex de consum Caixa de Catalunya. Informe trimestral sobre el consum privat a Espanya: Anàlisi, tendències i previsions*" [The Index of Consumption Caixa de Catalunya. Quarterly Report about private food intake

in Spain: Analysis, Tendencies and Predictions] (December 1996) shows that meat is the main item of expense, although it has lost its importance in the total. Besides, 1998 data showed that one out of four pesetas used to buy food (25.5%) were spent on meat, whereas 30 years ago it represented 17.6% of the total. Dairy produce was 13%, 4% more than in 1958. Money spent on fish had also increased, from 7% to 12.3%. On the other hand, bread, pastry and cereal registered a fall from 18.5% to 9.1%, and potatoes and vegetables from 13.1% to 9.7% (Dympanel, *El consumidor al filo del siglo XXI*).

2. Later on in this document, together with the reasons for rejecting animal flesh and animal life as perceived by vegetarians, this point will be explained in further detail.
3. This type of vegetarian avoids leather clothes and shoes... and even cosmetics and medicines which have been tested on animals before their sale.
4. Other authors associate vegetarians with the decrease or elimination of alcohol, tobacco and caffeine from their diets (White & Frank, 1994: 465), or with increased attention towards their health and a high economic and cultural status (Bourre, 1992: 161).
5. It is true that some individuals do not eat meat for religious reasons (for example, Seventh Day Adventists, Hare Krishna). They have been excluded from this study for two reasons. First, we think a vegetarian for religious reasons has not chosen vegetarianism, but a religion requiring a certain type of diet. Second, and due to its importance, we think vegetarianism for religious reasons should be studied in a separate investigation.
6. Some people begin a vegetarian diet by gradually eliminating red meat first, then white meat and then seafood and fish. This process can take a longer or shorter time, depending on the individual.
7. Generally, eating fish is related to eating out, in a restaurant or invited to a friend's or relative's house.
8. Nowadays, a naturopath from Navarra presents a half hour program, called "La botica de Txumari" [Txumari's pharmacy], Mondays to Fridays on "Antena 3" (private TV), giving advice and information about traditional remedies and which ingredients you can find at the grocer's. Previously, and for a year, he presented a program of similar characteristics, "La botica de la abuela" [Grandma's pharmacy] on "Televisión Española" (state TV). In the press, as an example, "el Periódico" has a weekly section dedicated to nutrition, health and ecology, that gives information about what to eat to prevent some illnesses and to practise a correct and balanced diet. Some of its headlines are: "Taking calcium is essential to prevent osteoporosis" (23rd of November, 1997). "Soy combines nutrition and antidote. Legume helps your cholesterol go down" (21st of November, 1999). "Here comes the biological coffee" (23rd of January, 2000). "Vitamin C acts as a protection in the body. The antioxidant effect of the substance makes it essential" (6th of February, 2000). "The calçot, lots of fibre, no fats" (13th of February, 2000). [The *calçot i*s a kind of onion that is usually eaten in Catalonia. It is so important in the Catalan cooking culture that it has its feasts, the well-known *calçotades*, and competitions around the calçot.] "Vitamin E against arteriosclerosis" (12th of March, 2000).

9. When the media spread the news about "vacas locas" (BSE) some butchers placed signs that certified the origin of the beef they sold in their shops. Thus, in the windowpanes of butcher shops in Barcelona one could see for instance "Galician beef" or "Girona beef". The strategy most sellers used with the chicken problem was to decrease its price.
10. "Approximately 31.5% of the proteins taken by Spaniards come from meat".
11. In 1998, there were in Spain 200 shops selling exclusively organic products and 40 of them were in Catalonia. Besides, Catalonia is the community where more organic products are sold, representing 50% of the total production (Asociación Vida Sana).
12. Sometimes there is also a full meals service, as it is the case of "Comme-Bio", whose brochure states that: "*Comme-Bio is not only a restaurant, a cafe, a self-service; it is not only a ready-to-eat food shop, a patisserie, an organic fruit and vegetable shop; it is not only a perfume store, an environmental product display, a centre of information, a meeting point; it is the sum of all this*".
13. The Catalan firm "Carn de Vedella Ecològica Ecoviand de Bruguerolas" edits a brochure giving information about the kind of meat sold: "Calves are born in freedom and they stay with their mother at least seven months. Once weaned, they are fed organic products and they grow in the open air, not in stables. It is forbidden to use chemicals for their growth (hormones), liquid retention (clembuterol) and animal flour. Though not probable, because of their rearing, if there is an illness, it is treated by homeopathy and other natural techniques. Treatment, transport and killing are done carefully with strict control. The local quartering and canning plants are registered in the CCPAE [CCPAE stands for Consejo Catalán de la Producción Agraria Biológica (Catalan Counsel of Organic Agrarian Production), that regulates production, distribution and selling of organic products in Catalonia], to guarantee the consumer the origin of the meat".
14. The Catalan firm "Aviram del Céllecs" also edits a brochure about the organic chicken it sells: "The chicken of Céllecs is a chosen fowl, different from the normal one in taste, flavour and texture, acquired only by a long and patient traditional rearing. Their main food (wheat, barley, soy...) comes from plants grown without chemical product or synthetic substances. Their growth is slow and harmonious and they have the opportunity to do all the exercise they want in a broad open space. To keep sanitary control, we give to our fowl a preventive program. So, from the first day, we strengthen immunity resistance against the possible health drawbacks. All the products to this end are elaborated by naturopaths to avoid residues in the meat. The rearing of our animals has recourse to the laws of CCPAE".
15. *Llibre Blanc: Avaluació de l'estat nutricional de la població catalana. Avaluació dels hàbits alimentaris, el consum d'aliments, energia i nutrients, i de l'estat nutricional mitjançant indicadors bioquímics i antropomètrics*. Barcelona, Departament de Sanitat i Seguretat Social, Generalitat de Catalunya, 1996. [White Book: Evaluation of the nutritional state of Catalans. Evaluation of food habits, food intake, energy and nutrients and the nutritional state by biochemical and anthropometrical indicators].

16. Beardsworth & Keil (1993: 233) point out the existence of parallelisms between commercial strategies and the interest of some consumers in the Green Movement ideology. Thus, manufacturers and sellers have answered with "green" products, often sold at high price and advertised using "green" ideology and terminology.

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Eating Happy Pigs

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ABSTRACT

Although Denmark is a country with high levels of meat consumption, especially pork, a revolution in the production and marketing of meat products was triggered off by scandalous revelations, further exacerbated by media reporting. The new "green" revolution reached political dimensions and became the focus of marketing campaigns. This article questions the basis of the ideology underlying the movement.

INTRODUCTION

Danes are among the highest consumers of meat in Europe, yet they are also among the first to blame the production methods of industrial farming. Under a climate of suspicion the Danish traditional agricultural model is being questioned as to its breeding conditions, and this has created a major increase in the demand for organic products, whose success can be dated back to a famous scandal which shook public opinion in 1995 regarding

the use of antibiotics in pork. The particularly watchful and anxious public attitude could be explained by the way all the media presented the news, appealing more to emotion than reason. The campaigns against industrial breeding have been led by Danish animal protection associations, the media and various institutions, who have all been vital protagonists in the development and coverage of "green" production systems.

This "green" trend is also due to the ability of its key actors (farmers, butchers, cooks) to control their image and play along with the media in a totally innovative trend in a country where cooperative action is deeply anchored in mentalities. It is said that "green" agriculture has reconciled the Danes and their farmers, uniting them in a unanimous quest. More officially, this has led the whole society into a process of "becoming green", in a strong drive to express a specific Danish identity for fear of cultural dissolution within the European Community.

WHAT IS GOOD TO EAT?

In the early nineties, a change of attitude was perceived over what Danish people agreed to eat. As a main export country, Danes used to be satisfied with what was left after export of valuable foods such as bacon and butter, but a totally new and increasing demand of the population for better quality meat appeared. It expressed the success of organic breeding and its "green products", designing new criteria of choices for meat. What we are actually witnessing is a new critical attitude towards agriculture, and more particularly towards the meat it can market.

It is a peculiar phenomenon, at odds with the tradition of gratefulness to the farmers who made possible the current well-being of Danish society and who have to face this present national reassessment of an agricultural system which has long been a matter of national pride.

The media played an important role in promoting this new environmentalist trend.

The increased demand for meat in Denmark has made it an ordinary, standardised food, more than 90% of which is sold in supermarkets, pre-packed in plastic wrap. The most common product is ready-to-eat minced

meat of any kind, often sold as meat-balls, sometimes already seasoned, with preference given to pork (1/3 of sales). It is part of the very basic foods of Danish cuisine, together with potatoes and rye bread. Vegetable consumption is fairly low: they have a symbolic rather than a necessary function, in part because although they are perceived as healthy they are also seen as "rabbit food", unsatisfactory for humans.[1]

The organic trend

In the mid-nineties, the organic food movement suddenly appeared and was compared to a "tidal wave". Foreign observers can confirm the rapid success of organic agriculture and its steady growth ever since, especially in comparison with other countries like France, where the organically cultivated coverage has not increased as rapidly.

Traditionally limited to specialised shops, organic products can now be found in any supermarket, where between 70% and 80% of the production is sold. Rather than Danes' genuine willingness to spend more money or to commit themselves to environmentalism, marketing conditions, increased availability of organic foods and their sudden financial and commercial accessibility[2] has contributed to this massive ecological trend, which has surprised the whole agribusiness with its suddenness and scale. Thus organic foods, and more particularly organic animal products, are still considered scarce. In Copenhagen, the sight of empty organic food stands in supermarkets is common. Some grocers have even developed a system of ordering in advance and reservation for organic milk in order to "share it equally among all customers".[3]

One of the characteristics of this Danish organic food movement is the central focus on animal products. Technically we are beyond strictly defined organic agriculture and entering what is commonly named "green products" and "green agriculture". These terms underlie an interest in animal welfare and the conditions of animal produce farming which in Denmark can definitely be dated back to a scandal in 1995. It occurred following a report from the UK that disclosed the consequences of systematic use of antibiotics in the production of pork. Not only was it causing in the animals a disease resistant to treatment, but residues of antibiotics were present in the meat

and thus ingested by man. "With this use of antibiotics man runs the risk that antibiotic traces can be found in the chops he eats or the milk he drinks" (*Politiken*, November 20th, 1994).[4] Thus a direct link was made between intensive breeding with increased use of medicinal products, and man consuming the meat. The problem had already been raised in 1979 with a poster campaign which actually announced: "Danish pork is healthy, it contains penicillin", needless to say, the billboards were removed and the campaign forbidden.[5] This episode created a "biological scare" and definitely promoted organic foods, at least in the conscience and imagination of consumers, as healthy and quality products not treated chemically. Certain political parties that were focusing on the subject and bringing it into political discussion took a position in favour of organic agriculture.

Risk and safety

It is a central theme in a welfare state such as Denmark, though the gap between feelings of fear and safety is a narrow one: "one that is positive and the other negative end up by rejoining one another" (Delumeau, 1978). This food scandal appeared in a climate of catastrophe concerning food and risks,[6] actively transmitted and maintained by the newspapers.[7] It created a psychosis that can be observed in the newly developed hygienic behaviour within the "family kitchen". The predominant concern at all levels of Danish society is about how food is produced. The wish for a better "up stream" control of the food chain seems to have found its expression in the unanimous success of organic foods in Denmark today. In that respect the ecologist movement appears as an extension of hygiene concerns. As Corbin mentions: "Without a good knowledge of the history of distaste and purification in past centuries, we would be unable to explain the importance assumed today by the ecological dream". (1986: 270)

The meat of well-being

Organic food requirements are first of all for a "pure" meat, free of all substances which could harm the eater, as the only option for health-conscious people.[8] Organic milk "not toxic in the udder" (*NNF-arbejderen*, 10, 94:

40), and organic cheese "made from nitrate-free milk" are requirements in continuing the production of the first meat with a quality label in Denmark: that of the Antonius pig, certified as being bred "without hormones or antibiotics". Organic agriculture is described in a text aimed at French readers as "an experiment of a non-poisonous agriculture". Organic foods are pure, and it is the name used by certain labels (*den rene vare*).

One of the seven "green butchers" who set up and controls a short meat circuit, mainly pork, insists not on the specific and very constraining organic quality of animal food but rather on its "natural" aspect – that is, rearing it without using animal food supplements: "their well-being is more important than that they are fed organic carrots". The meat takes on the taste of what the animal eats, or rather, what it does not eat. More generally it tastes the same way as the animal has lived and been treated: "It's not that difficult: the better it lives while growing, the better the meat!" adds this "green butcher". This idea is defended by other brands of meat with slogans such as "the animal with a good life will be better", "the healthy animal gives a healthy meat", "a happy animal tastes better", "the happy pig" (*Den glade gris*) or "the meat of well-being" (*velfaerdskoed*). The wish for better breeding conditions actually aims at insuring animal happiness for a better meat.

"Most of us wish for a chicken with a happy life, in short, a chicken that we can enjoy with a good taste in the mouth". In choosing meat, the important thing is to avoid the after-taste left by meat produced by intensive breeding. The concept of "bad conscience", extensively used to motivate the consumer to buy the more expensive "alternative" products,[9] recalls an ethic of sin and guilt; as mentioned by St. Hugh-Jones (1996), "it presents the added advantage of underlining the existence of a wide margin of individual freedom, in particular concerning food preferences and behaviour towards animals". Bad conscience is as much on the side of "traditional" breeders as on the consumers who would not buy "organic". Debates, speeches and slogans, reinforced by the media, tend to develop guilt in the consumer "who would not be ready to pay more so that the animals could have better living conditions". This play on guilt, the strength and weight of this look of society that stigmatises deviant consumption, plays a part in the conversion and education of Danes to organic produce and animal well-being.[10] "A pork

roast must be savoured in all good conscience", stresses the Director of the Danish Animal Protection Society (APS) (*Dyrenes beskyttelse*).

"Popular pressure must insure change, even if it costs more" was a militant saying back in 1979 (Riijs Bosjen). The campaigns carried out by Danish APS", within the media or through various other institutions, have had a major part in the reorganisation of animal breeding and materialising "green breeding" in this country. Chickens, the symbols of industrial agriculture in Denmark,[11] were the target of the Danish APS's numerous campaigns for several years, both in Denmark and within the European Community, aimed at institutions and professionals (Schools of Agriculture, veterinary clinics, engineers, etc.) in order to forbid battery-raised hens.[12] There were also protests against battery-raised chickens, such as the one giving "the recipe for the chicken you ate yesterday", describing in detail all the conditions of industrial breeding. The Danish APS has thus obliged the largest chicken breeding firm to offer a compromise by establishing a new "standard chicken", the "scrapping chicken" raised according to "a plan of ethical action".[13] Meat labels have thus become associated with animal welfare organisations, whose "recommended by…" labels have become a sign of quality. These organisations have thus had a central role, that of the new directors of Faith, for the production of this "legitimate" meat (*ordentlig*), partly occupying the place of a mythical figure in Denmark: that of the veterinary surgeon.

All the parameters brought forward in the definition of "animal well-being" making "good" meat possible are a direct response to consumer criticism voiced through militant animal welfare associations. One of the criteria is the space available to the animal. Each half inch "won" for pig "boxes" is systematically heralded, as is access to grazing space for dairy cows. Straw is back to insure animal comfort. The respect for animal nature, or the "real" animal to quote F. Poplin – such as is expressed in the campaigns – is linked to the insistence on body integrity (campaigns to forbid tail cropping in pigs, tooth filing, castration and the removal of horns). Transport of pigs and slaughtering conditions are also mentioned. From the extreme dependence of the animal on man in industrial production, contemporary criticism demands respect towards wealth-producing animals at the foremost of ethical considerations.

The "green" movement claims to be an animal liberator. To convert to organic production is to give back freedom to animals, to break their chains: "We have liberated our pigs" or "We have let our pigs loose" is a common slogan. In contrast with the French, Danish organic husbandry charts integrate *de facto* ethical aspects. The brand *Okokod* presents organic husbandry first of all as "the respect for a correct and appropriate animal life". Since the revised rules for organic animal husbandry in 1988, the ethical requirement has gained strength, and to such an extent that animal welfare societies sometimes judge it too constraining. The leaflets of the Danish Agricultural Council (*Landbrugsraaddet*) aimed at schools have to stress the fact that "there is not necessarily a link between ecology, environment and animal well-being". The predominant notion of welfare in animal breeding on actual organic quality can also be explained by the key role of this concept (*velfaerd*) in Denmark. The welfare state for all is to be extended to animals. This trend is the radical expression of domestication in which J. P. Digard sees the "raison d'être" in the "image it feeds back on power over life and over beings". (1990: 215) Related to the principle of authority in Danish society, the nature of this change in that rapport has insured the massive success of organic animal welfare husbandry. As A. G. Haudricourt (1962) mentioned, choices in matters of domestication depend on societal choices. Animals catalyse and justify the whole political system, illustrating the idea that "domestication is the archetype of other types of subordination". (Thomas, 1985: 55) "Recognising rights to individuals who have none is a testimony of our real humanity", is a repeated expression. Animals, children, the handicapped and the elderly are examples of this practice. Good living conditions return us to the welfare state, Danish style, without human or animal exploitation, linked to the egalitarian ideal ever present in this society. The purity of "zero residue" of organic meat goes side-by-side with the product's moral purity. This moral principle reintroduced in the exchange is founding a new social solidarity as expressed by B. Kaloara. (1991: 156)

GREEN TALK

This "green" success can also be explained by the capability of its various actors (breeders, butchers, cooks) to manage their image and play with the media. This completely new approach in a country deeply marked by cooperative associations, made it possible to claim that organic agriculture has reconciled the population with its farmers. Communication is important if you are to succeed as an organic farmer. The organic farm of Brinkholm south of Seeland organises barbecues so that customers can appreciate the taste of the organic meat of the pigs they breed. On the collective exploitation of Svanholm, there is a special group in charge of public relations and the organisation of visits to the farm. This is in harmony with the image of transparency and the reassuring idea of an ancestral, family idea of farm production. Green products are accompanied by didactic information. Quality is not only visible, it is readable, imaginable, one of its aspects being the fact that it has a "history". The consumer does not just buy meat: he also buys the image of an animal, the story of its life, the description of what it ate, and even sometimes an account of the Danish environment it grew up in. This ideal of transparency is helped by modern techniques of video, newspaper articles and so on, as well as the almost continuous opportunity to visit the organic farms. The various actors can boast of control of the whole food chain "we follow our animals from field to table" (*fra jord til bord*). "Green butchers" and the other actors are new guarantees, and the label *Okokod* insists on the fact that "one of the main aims of organic breeders is to guarantee the respect for animal behaviour and natural needs". In order to personalize the product (meat, cheese, eggs), the photo of the breeder, or his name, or the picture of a "typical" farmer, is shown next to it, and sometimes even two or three words about his commitment. In a society disconnected from its production process, organic or "green" production allows the consumer to place himself in a chain that extends from the fields to the supermarket.[14] As an urban phenomenon, the green movement is supposed to wake up "the inner farmer" hidden in each Dane (*Weekendavisen*, Ocotber 25th, 1995) and apparently reduces the distance between farmers and the rest of society.

Words play an important part in this movement. Organic farmers have shown great mastery of speech and situations, as well as marketing techniques

often unknown to the traditional agricultural world. Some of the ones I visited belong to a very international "milieu". They know how to take advantage of very wide networks, and sometimes even organize summer camps for youths from all over the world. The personality of some of those farmers also explains their success. Sven Nybo Rasmussen is very effective with the media. A former university lecturer, he has convincing information and knows how to speak in public. He gives conferences on agro-biology and is always present at official events on the subject (IFOAM '95). He knows how to play on his former profession: "From his medical studies and practice, he knows that these products are cancerous and he is certain that it has an effect on fertility: more and more people have trouble having children, and it can also be observed with animals" (*Adresseavisen Kalovig*, July 5th, 1995). As for the media, his commitment takes on a new direction, breaking with idealism when it is useful for the promotion of his products.

There is something really new in these communication strategies operated by the organic movement, and it is also a way to re-conquer one's own national market. These farmers are in fact the first to pay attention to Danish consumers: they know how to listen to them and how to speak to them. They fulfil a provider function which had been lost. What had been asked of farmers in the great Danish export agriculture was not to feed the Danes, but to bring in money. The importance given to exports introduced an early de-localisation of the food system, and a strict separation of products for export and those for home consumption. It is in this link between nature and territory, sharpened by the current trend towards "local heritage" in Europe, which is difficult to satisfy in Denmark, that the organic movement intervenes.

The wish is to see in the organic trend the breakthrough (*Samvirke*, August 1996) of a discriminating, intelligent, committed, responsible, powerful consumer militating for his convictions by buying organic. The political force of the consumer is linked in Denmark to the "street parliament", who by boycott forced companies of battery-produced eggs to a complete reorganisation, a demand which caught the agricultural world totally unaware.

For the Scandinavian who often has "a militant soul" according to M. Gravier (1981: 228), organic agriculture has become the expression of all utopias. Events around organic production have blossomed like many small

insurrectional occasions: loudspeakers, speakers haranguing the crowd, as in the small organic market held in spring and summer on *Blagardsplads* in the northern part of Copenhagen. Militancy is often at the bottom of a choice for organic produce, and the high prices sometimes lead to reorganising the diet. Under it all, there is the dream that this so-called political consumer should be able to impose his views everywhere, that "ecological thought will expand" ("*Den oko tanke breeder sig*", *Politiken*, September 11th, 1996). "In these past years the political consumer is visible in all industrialized countries, but nowhere as massively as in Denmark. The Danish consumer will be the forthcoming model for other countries' (*Berlingske*, 25/06/95). Organic agriculture appears to be a goal for society: "After years of idealism and individual action, organic agriculture has won a central place" (*Berlingske*, August 1st, 1996).

THE "GREEN" COUNTRY: A PROJECT FOR SOCIETY?

This shared belief has been relayed at a more official level in a process of a "green u-turn", conferring identity to a society fearing a fading existence in the middle of Europe. Ecological thought is considered to be "historical". It is presented as a new challenge, in the same line as the great reforms of the past century, and in harmony with the idea that the strength and success of Danish agriculture resides in the fact that it was able to overcome constraints: "Agriculture is now confronted with something as breathtaking as when we started sending our bacon to England" (the Minister for Agriculture H. Dam Kristensen, Press, 119, 1995). An additional reason for the ecological success is that the expression of the quality of organic produce is shared at government level. "We must come out of our hole, the possibilities are immense" says the same minister. Denmark is conscious of the fact that it inspires confidence and trust in matters of environment and ecology and has made it "a matter of labelling, while other countries do not pay much attention to environmental issues" (*Politiken*, April 10th, 1996). This image of a green and cautionary Denmark has been promoted by the various European media, which systematically praise the so-called dynamism of Northern European countries (Germany, Denmark, etc.) in these matters. The fact that Denmark specialises and advertises itself as

a "green" country is not new (*cf. Réalités danoises*, 1977). Considering the equation "ecology=quality" some have a further vision beyond the contemporary implication of the state in financial aid to re-conversion[15] and see in organic agriculture a possible opening for a long-term Danish specialization in this type of produce.[16] Danish agriculture is in fact trying to find new exterior outlets. Since the alignment of European countries to the same set of norms for hygiene and quality, it fears the loss of its status as the "country of quality", the main selling argument on which its success in exports depends. "To better manage the environment is also to ensure a decisive advantage over competitors, in a context where security, silence, the absence of pollution and organic quality of the products acquire economic value", says J. Theys (*Kaloara*, 1991: 131). An interview with the agriculture minister H. Dam Kristensen confirms this point of view (*op. cit.*):

> — Danish requirements in matters of organic production, attention to environment and animal welfare go together with enormous export potential.
> — You mean to say that we can be Number 1 in the world for organic agriculture? That producing organic goods can bring in wealth?
> — Yes, it is not a fashion: it is a new spirit of the times. It is not in vain that World Wide managed to mobilize people against French nuclear trials. People are worried.

"Here, environmentalists are not there for philosophical reasons, but for reasons of interest", concludes a French report (Chambres d" Agriculture, 852, 02/97).

If one should not neglect the fact that in Scandinavian countries "events which in other parts would be considered as limited can acquire a disproportionate importance for their causes" (Boyer, 1993: 498), organic agriculture and more generally the "green" movement appear to channel the preoccupations of a whole population. As G. Heller demonstrated how Switzerland could adhere to the notion of "a country of cleanliness", Denmark seems to adhere to that of "a green country" in a process of a whole society turning "green" (Micoud, 1997). In fear of melting away in the midst of Europe, this refocusing on animal welfare meat allows the country to situate itself within a Europe of "cuisines and cooking heritage" further

south.[17] "Consuming clean produce means installing a social classification between those who have the code for good behaviour and those who reject it through irresponsibility or refusal." (Kaloara, 1991: 156)

NOTES

1. Actually, Danish nutritionists consider that the diet of the Danes is unbalanced, not because of too much meat, but because of too little vegetables and fruit.
2. Accessibility is a key concept in the Danish egalitarian ideology. It has been made possible by the introduction of discount organic foods through one of the supermarket chains which militates in favour of environmental conservation, as the latest issue of social militant action and better consumer health.
3. Against the fear of seeing unsatisfied customers turn back to "traditional products", scarcity is an argument used to motivate militant action: through the media all the actors insist on the fact that keeping on buying organic is the only way to prevent its disappearance.
4. Similarly, the announcement that imported soy products (among them soy milk) could contain toxic aflatoxin reinforced the success of organic milk.
5. At the same time Denmark was noted for its tolerance, being the first country to liberalize pornography.
6. Danish favourite foods are assimilated to or compared to funeral symbols (graves, coffins) in the images used by the media.
7. These are in direct link with Danish society and give essentially emotional information. They are widely read, right from early morning at breakfast. A whole tacit daily knowledge is thus built upon their information. We can see in this what R. Boyer calls "their pedagogical mania, a permanent preoccupation, from the great educative systems to the detailed explanatory notes on tins" (1993: 488); and their will to be "informed" ("they would not tolerate not being informed").
8. The success of the organic movement is based on the idea of particularly healthy foods (Grunert and Kristensen, 1990; GFK Denmark). For products not considered as potentially dangerous such as detergents, toilet paper etc., low price items are still preferred (*Helse*/11: 96); the same is true for products judged as "bad" by their very nature such as beer, or products felt to be intrinsically "good" such as vegetables.
9. "The consumer must decide how he wants the animals to live"; green butchers admit to selling their meat at high prices but "at least, for that price, the consumer can enjoy a chicken with a clear conscience, since the chicken had a good life, all 55 days of it".
10. Child education, similarly, is learning laws promoting responsibility. This substitution to the principle of authority via a very strong interiorisation of norms is what the sociologist H. Dahl (1998: 11) calls "the hidden power somewhere in the anti-authoritarian façade". These are "the notions of obligation and duty, consciousness of which rarely escapes a Scandinavian", and they represent what R. Boyer (1993)

calls "the quality and authenticity of his civic sense, his sense of responsibility, his respect of duty".

11. Veal was the first animal to be the object of the Danish Animal Protection Association campaigns. It is possible that the old Danish distaste for this young meat led to this fact, and to the disappearance of this meat. The prohibition of battery raised veal in Denmark is overcome by exports to The Netherlands.
12. After a campaign in 1994, certain supermarket chains decided to stigmatise these eggs with special labels, while others simply put an end to their sale. The year 1995 saw some spectacular bankruptcies of conventional egg producers suffering from overproduction. This type of intensive production will be forbidden in the European Community in 2011.
13. More space to "move the wings, take dust baths and search in the straw" for 10 chickens per square metre instead of 24, which corresponds to French labelled chickens. Other improvements include "the possibility of resting eight hours, meaning, the light is switched off", and a longer life time – which raises other problems of course.
14. And to the participation of the consumer itself: one has to remember to shake one's jug of non-homogenized milk.
15. As an actor in the debate about the environmental quality of foods, the government has negotiated agreements between organic milk producers and classic producers, and found means to harmonize the price of organic milk with that of the general rates for dairy produce.
16. Denmark was one of the first countries to adopt legislation on organic produce in 1987 (article No.4 of 7/01/88, law No. 363)
17. At the same time as ensuring mastery of an economically profitable technology, as A. Comolet foresaw: "In this new game, we can bet that the Northern European States, and, in first place, Germany, will maintain the pressure, via the European Community organisations, in order to set up their supremacy in the production of organic products and technology under the cover of protection of the environment" (Comolet, 1991: 47)

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The Consequences of Laws Regulating Lizard Consumption: The Case of *Fardacho**

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Abstract

Environmental protection laws applied globally in European Community countries have overshadowed country practices of capture and consumption of the fardacho lizard in certain parts of Spain. However, mechanised farming, with its technical and social consequences, has had a stronger effect on the hunting and consumption of the reptile. This article comments on changes in generational tendencies towards consumption.

Introduction

When Spain joined the European Economic Community in 1986 it incurred the incorporation of European regulations on fauna and flora protection.

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This, together with the social movement in favour of nature conservation, led to the passing of Decree 4/1989 of March 27th relating to the conservation of the wild natural environment, flora and fauna. This law was meant to prevent the exhaustion of natural resources, the extinction of animal and vegetable species, and the degradation of natural environments.

The Heading of the Decree No. IV reads as follows: "To kill, upset and disturb wild animals intentionally is forbidden (...) as is also capturing them alive and collecting their eggs or young (...)".

The National Catalogue of Endangered Species includes a list of animals protected by this law; the State leaves local governments free to create similar catalogues for their own territories. Although *fardacho*,[2] this paper's main topic, is not included as a "wild animal" either in the National or in the Local Catalogue of Endangered Species, it is protected by the above mentioned law.

Within the Aragonese Autonomous Community (Spain), this law affects the inhabitants of areas where this reptile has been a traditional food. Peñalba[3] being among such areas, we analyse here the role played by *fardacho* in the local food culture over recent years. Also examined are the reasons for a decreasing number of specimens populating the area and factors causing this lizard to lose its role as human food.

As to this last objective, the initial hypothesis is that, in spite of what is largely believed, the consumption of *fardacho* in Peñalba did not come to an end because of the above-mentioned decree; it was rather the result of changes in the food culture of the inhabitants of the village.

FARDACHO AS FOOD FOR HUMANS

Fardachos can be found practically all over the Iberian Peninsula, in the Southern half of France, the North-East of Italy and North of Africa (Arnold and Burton, 1978; Mateo, 1997; Salvador, 1998). Although they can be found in the pre-Pyrenean valleys, *fardachos* are more numerous in lower lands. They inhabit regions characterised by heavy rainfall as well as dry areas. Within their territory they find shelter in shrubs and bushes, near cultivated patches and paths, in stony and rocky areas, roadsides, rabbit warrens or self-made hide-outs.

Habitual prey of a number of carnivorous animals and a predator itself, the *fardacho* plays an important role within the ecosystem. Its colour is mainly green with blue spots called "ocelos", along its sides. Although it can reach up to 80 centimetres in length, it is usually smaller and its life span in its natural environment is about eleven years, whereas in captivity this lizard may live up to seventeen years. Its yearly fertility span lasts from April to June and the female, depending on her size, lays a number of eggs varying between 5 and 22. They hatch in the summer.

The animal is diurnal and active during the central hours of the day until sunset. Although its main activities take place on the ground, the *fardacho* is a good climber of rocks and trees. It mainly feeds on insects, other lizards, worms, the young of birds and rabbits, and fruit.[4]

In articles dealing with this animal, one of the seldom described characteristics of the *fardacho* is its function as human food. The people of Peñalba are among those who, over the years, have used *fardacho* as food. The elderly mention that they have always eaten this lizard and that the practice was discontinued in the late 70's and early 80's.[5]

The locals hunted the animal, but hunting was not submitted to rules: capture was accidental, disorganised, and unplanned. Farmers and shepherds hunted *fardacho* when they came across it while they were working in the fields. Since, traditionally, these occupations were the prerogative of men, *fardacho* hunting was gender specific. However, if women happened to see one during their daily chores, they did all they could to catch it.

Yet, hunting did not always depend on chance. Men and women admit that they occasionally left their working activities in order to "go and get it": they intentionally removed stones, bushes, etc., in order to find the reptiles. Furthermore, some shepherds could rely on "*fardacho*-dogs", particularly skilled in locating the animal.

Usually the hunt took place when *fardachos* came out of hibernation (depending on the temperature, they hibernate between October and February), since still "stunned", it was easier to trap them. It was a day hunt since the lizards ceased to be active at sunset.

Once the *fardacho* had been spotted, there were various ways of catching it. Shepherds confirm that in this area it was never hunted with guns. Traps

were used sometimes; according to an informant, they were placed in spots where ants were abundant, since *fardachos* like these insects. The most common method though, was to run after the lizard until it was cornered (sometimes this was not necessary because people threw stones at it during the chase and could succeed in hurting or even killing the animal). Once it was trapped, the bottom of a knife or a stick was introduced into the animal's mouth (the bravest used their thumbs for this purpose). The *fardacho* bit it instinctively and did not let go, which allowed time to hit the animal on the head and kill it.

Once caught it was never sold. It was common to eat it out in the fields on the very day of its capture. Occasionally it was brought to the village to share with the family, sometimes it was presented as a gift to friends or important persons in order to return or ensure a favour.

In the outdoors *fardacho* was cooked and eaten by men, who were the ones who usually worked in the fields and did the hunting. When a shepherd or farmer caught a *fardacho*, he usually shared it with his fellow workers.[6] This was a happy event for the diners, since the occasional consumption of the reptile satisfied their need for variety in their routine diet. It functioned as an element of cohesion of the group, because it united shepherds and farmers alike and reinforced their pride in being active country folk. Furthermore, the cooking methods of grilling and roasting, endowed the diners, all men, with meaningful cultural notions. As M. Montanari argues (1993: 35), anthropologists have taught us that the image of food roasting on fire, right on the flame, corresponds to cultural notions which are very different from what is suggested by boiling water in a pan: fire conveys notions of violence, bellicosity, impetuousness and a "wilder" interaction with nature. I. González Turmo (1995: 221) also points out that men's food practices are more closely related to the country, to nature and, of course, to fire.

Anybody could cook *fardacho* since no special skill was required for it. First the lizard's innards had to be removed; special attention was paid to the removal, with a knife, of the animal's kidneys, because their ingestion "was bad for one's health". It was believed that those who ate them suffered from urinary dysfunctions. Once gutted, the *fardacho* was placed on the grill. It was cooked whole, sometimes its tail was missing, as the animal could lose it as a ploy to escape predators. Curiously, this was one of the

most appreciated parts of the animal because "there were hardly any bones in it and it was much tenderer". The barbs on the neck were also much appreciated, and for this reason the head was never thrown out.

The lizard was not skinned before grilling, otherwise "the meat would burn"; the skin was removed after grilling and occasional remaining bits were spat out as it was eaten, seasoned with salt and oil.

According to those who used to eat it this way, no other seasoning was needed since *fardacho* was very tasty in itself. It was usually a mid-morning meal *(almuerzo)* together with fried eggs and/or for lunch as an appetiser before the main course consisting of a *calderada* (game or lamb stew with potatoes).

Sometimes the *fardacho* was not eaten in the fields but taken home and shared with family or friends. It was not necessarily consumed by the one who had caught it, but eaten in turns, by each member of the community of shepherds and farmers. It was thus shared as a "gift" and the rivalry and envy associated with the hunt were eliminated.

At home it was also eaten as an appetiser on the very day of its capture or, at the latest, on the following day, and it was never preserved. Once the *fardacho* entered the domestic area, the women were the ones who decided how to prepare it. They skinned and gutted it, chopped it and fried it in a pan with oil and garlic.[7] According to a shepherd of this area, the fact that women complained about the effort required for preparing it (skinning and gutting was considered by them a tiresome activity) was one of the main reasons for the sporadic consumption of *fardacho* at home.

Gender differences were manifest not only in the cooking methods, but also in the general appreciation of the animal. Whereas men regarded it as a very tasty food, women did not consider it very appetising (although some women claim they like it a lot). As J. González Turmo argues (1995: 221), the importance of meat in men's meals is undeniable; it was an essential food in their non-daily meals. Meat had to be part of the meal at all costs. Cost here does not just refer to economic value, but to scarcity or to overcoming the revulsion to uncommon meat, rejected by most people. This is the case of lizards, snakes, tortoises, donkeys and even cats, which men have eaten to women's disgust and horror. Women, in general, show a strong aversion to the ingestion of such animals.

In fact, the consumption of *fardacho* in the area of Peñalba was part of the culture defined by the inhabitants as "eating all". Shepherds assured us that, in the country, any animal is "good to eat". A list of "peculiar" animals consumed by them, includes hedgehogs, rats and especially a wide variety of birds: esparbel (*Cernícalo primilla*), little owls, hoopoes, stone curlews and many more. As a shepherd says quoting a proverb, "All birds that fly, one can fry".[8] All these "peculiar" animals were hunted and eaten with beans, lard and wine by the men during their long stays in the fields.

About the Decreasing Number of *Fardachos*

The decrease in the number of *fardacho* specimens in Peñalba is not due to food practices of the inhabitants, but to the modernisation of agriculture technology in the 60's, and to agricultural policies on the 80's.

In the 1960's the mechanisation of agriculture was completed. Threshers, harvesters, baling machines, etc., were already part of the landscape. One of the main changes brought in by mechanisation was the replacement of mules by tractors.[9] As a consequence, the rural landscape was modified: fields became wider; smallholdings were unified; stones were removed from the ground (a practice not included in former ploughing techniques). All this had repercussions on the loss of hide-outs for fardachos. Furthermore, in the early 70's the use of pesticides was extended, which led to the disappearance of insects, the fardachos' main food source. As a consequence, it became much harder for these reptiles to survive.

In the 1980's, the unification of land plots, the transformation of dry lands into irrigated fields and the repopulation of hillsides altered the countryside and brought a decrease in the areas of stubble and thus in the number of *fardachos*. During this and the following decade, the local government decided to concentrate the number of smallholdings, making the plots fewer and bigger. Apart from obvious economic consequences, this concentration resulted in the destruction of ditches, hedgerows etc. Besides, as J. Bada (1999: 205) points out, public intervention on the territory was accompanied in the allotted plots by the owners' own performance. The logic of economy ended up prevailing over everything else. Private owners strived hard to level their fields and remove large stones which were left on

the edges in big piles. They broke up irrigation ditches and furrows; ponds were filled, banks and old huts were destroyed.

Such material facts were, of course, accompanied by others of the order of representations and beliefs. In the oral tradition, the relationship between reptiles and humans in the area of Peñalba has always been one of love/hate.[10] As to the *fardacho*, it was loved as food and hated for other reasons. It was for example, accused of eating partridge eggs and, in this area, whatever is responsible for the decrease in the number of partridges has to be eliminated. Gamekeepers were in charge of "cleansing" and elimination.

As a result of material and non-material factors, the number of *fardachos* diminished in the area of Peñalba. However, nowadays, both inhabitants and local administrations agree that this reptile is not in danger of extinction. They say that although *fardachos* have decreased and disappeared locally, they are still common in large parts of the Iberian Peninsula. Furthermore, in the area of Peñalba, it is believed that *fardachos* will be seen running around again, due to their high degree of adaptability and to the fact that the countryside has stabilised. In fact, some people assure us that they can already be seen in the neighbourhood.

EATING *FARDACHO*, AND THE LAW

As far as the legal protection of *fardachos* goes, it is worth considering how the people concerned interpret it, and to what extent the law has influenced consumption. As to the first, Peñalba's inhabitants are ignorant of any regulations concerning the protection of *fardachos*; they don't know which law protects these reptiles, or when it became operative. Only through the media did they become aware that this animal could no longer be hunted and eaten. When someone heard the news it travelled by word of mouth to the other locals.[11] What's more, people from this area are not interested in knowing the origin of such prohibition. The simple fact of knowing that there is a law against it is enough for them to protest against the regulation.

They maintain that the law should not affect the country folk, who have traditionally lived with *fardachos*. They are against the penalisation of *fardacho* consumption (which is, as we have seen, sporadic) since they stress the fact that this practice is not responsible for the extinction of the animal

or of flora and fauna in general. In this sense, these people feel abused since they have been blamed for something they think they have not done. Besides (although we shall see later that *fardachos* are not eaten any longer), they complain about the law because it prevents them from re-establishing this practice in case they wished to. This law, they add, might just punish the hunt and not the consumption. Metaphorically, this is summarised by a shepherd who says: "If a child buys a gun, it is the shop one must punish, not the child". In other words, once the animal is dead, throwing it away would be nonsense. Most Peñalbans aged 60-65, and those others curious about food, insist that they would not hesitate to eat a *fardacho* again.

What is unanimously disapproved of, on the other hand, is the possible commercialisation of *fardacho*, were it the case that this reptile was not protected. People agree on the consumption being illegal, since, if "it were not forbidden, there would surely be some restaurant in the Diagonal,[12] selling it and making big profits". In short, and paradoxically, they are grateful for this law because it is an efficient means of prevention against the commercialisation of *fardachos*, which, in their opinion, cannot be sold.

As to the second of the above raised questions, it is evident that the fear of incurring economic sanctions[13] represses *fardacho* hunting. There are, however, other and more important reasons which motivated the disappearance of this animal from the Peñalbans' food world.

Establishing when this practice was discontinued is as difficult as spotting its origin. The locals say that towards the end of the 70's, and at the beginning of the 80's, *fardachos* ceased to be seen in the country due to the above-mentioned factors, which resulted in the elimination of *fardacho* from their food habits. At any rate, it was in 1989 that the law was published in the Government Official Gazette, and by this date *fardacho* was a symbol of bygone times. It can thus be said that the effect of this law on *fardacho* consumption in the rural environment had no consequences on Peñalban food culture.

As mentioned before, habitat modifications, as a consequence of mechanisation, began to threaten the *fardacho*'s survival. Yet, this does not explain, during this period, the waning interest in hunting and consuming *fardacho*. It could actually be related to the changes undergone by the lifestyle of Peñalba's inhabitants, as a consequence of culture's inherent

evolution through time, and of mechanisation. For example, one of the reasons motivating the drop in hunting activities was that walking in the country was associated with *fardacho* capture, and this ceased to make sense with the appearance of tractors.

Furthermore, a generalised use of machines allowed a wider scope of action, gaining larger areas of productive soil, which brought about more work and a loss of motivation as far as *fardacho* hunting was concerned. As an informant stresses: "You are busy doing all sorts of chores and have no time to waste in order to catch it (...) It is a matter of productivity". During this period the concept of benefit changed. The pace of country life started to be marked by haste, and collective meals disappeared. The satisfactory economic outcomes of the 60's, resulting from mechanisation, were also the consequence of abundant rainfall in the area of Peñalba. More time was consequently devoted to ploughing at the expense of *fardacho* hunting.

Another point worth mentioning is that machines mediated the relationship with nature. In other words, the relationship between human beings and nature was not closely intimate any longer, neither physically nor symbolically; consequently, the role played by *fardachos*, roasted on fire, as a synonym of cultural notions of violence, impetuousness etc., (see Montanari above), lost importance.

All the material innovations which affected farming and ploughing were accompanied by changes in the organisation of rural society, lifestyle and socio-cultural values. From the middle 60's on, in the area of Peñalba, family organisation, inheritance, estate administration, socialisation between relatives and between neighbours, underwent important changes (Bada, 1999: 61). These were not the only transformations: women gained access to education and joined the labour force in the cities; rural life lost its prestige in favour of city attractions; the agricultural sector suffered from heavy economic losses; upward social mobility became a reality; modern ideals of autonomy, freedom, etc., made their appearance (Bada, 1999: 69).

No doubt, all this affected food culture in general and the representations concerning meat in particular. In other words, as A. Millán (1998: 139) points out, society and culture vary in time and space: thus, the image of animals and their interaction with humans also becomes modified.

In the case of *fardachos*, due to socio-cultural changes in the area of Peñalba, a displacement occurred in their food status as well as a change in their symbolic meaning. The representations around the object-*fardacho* were modified. If in the past it was highly appreciated as food for humans, today the reasons which motivated the appreciation are missing and interest in its capture has faded away. As a Peñalba shepherd argues, "Now I wouldn't move an inch to catch it". Other inhabitants of this area affirm that, "If there were more *fardachos* nowadays, they wouldn't be eaten anyway". The point is that people could not be bothered to catch a *fardacho* given the fact that the tractor, among other things, has caused farmers to prefer to eat a sandwich while comfortably listening to the radio and enjoying air conditioning. Furthermore, both farmers and shepherds usually eat at home and consequently collective meals in the fields, during which *fardachos* played an important role, have lost importance. This, together with the scarcity of *fardachos* and the good economic boom of the 60's, were the main reasons why Peñalba inhabitants discontinued the consumption of such reptiles.

However, as anticipated above, people aged 60-65, who participated in the culture of "eating all", and even younger people who are closely related to country life, in spite of not being interested in *fardacho* hunting, assure us that they would consume this "picturesque" food if there was a chance to do so.[14] Of course, it would be consumed in secret, between friends, not in public, and the name of the person responsible for the capture would certainly not be revealed.

The new generation however would never eat *fardacho*. The "culture of eating all", confined to the countryside, has been transformed into "what is good for your health". Shepherds say derogatively that people nowadays take yoghurts, smoked salmon and Coca Cola to the countryside. For such modern consumers, the consumption of *fardacho* has fallen into disrepute and even causes revulsion. As one of them says, "eating *fardacho* today would be disgusting". Young people in fact, abhor the very idea of eating such an animal. Time has indeed changed what was culturally appetising. This moral and social feeling, (Miller, 1998: 22) among other reasons, comes from the process of humanisation of the animal,[15] a factor which has largely contributed to modify the subjective position of humans

in relation to animals. According to A. Millán (1998: 148), today we witness a process of upward socio-animal mobility (humanisation). This can be observed in post-industrial countries: the qualities of animals are emphasised, their rights are stated and defended by associations, the number of protected species increases, the processes previous to their consumption are uncovered, etc.

For this reason, young people cannot be bothered to catch a fardacho, since "people eat better"; although it is good, it is second-rate "meat", and there is no need to consume "strange" animals, belonging to the past. If in former times "anything went" as far as food was concerned, nowadays there is a lot to choose from, and, given the possibility of choosing, people prefer game (rabbit, venison, hare) or meat on sale at the butcher's (pork, veal, etc.). *Fardacho* represents a generational boundary, between the culture of the old, the "eating all", and that of the young and modern times.

CONCLUSIONS

The *fardacho* and its food status in the past is a recurrent topic in Peñalba. It often arises during tea or coffee time chats, and people always talk about it positively. Its taste is praised and it brings to memory a number of pleasant situations experienced by the diners, usually men, who participated in its consumption.

Its prohibition is in part responsible for such appreciation. From being a food practice abandoned long before the coming into force of the law, after the social and cultural changes in the area, something recalled only sporadically, it has turned into a modern topic. People discuss law regulations and express their opinions in favour of or against the law itself. On the one hand, they complain about not being able to re-install a food habit in case they wished to do so, and on the other, they are happy that other people, who do not belong to their countryside and might have commercial interests in *fardachos*, are also forbidden to hunt it.

This demonstrates that legal protection of flora and fauna also alters food culture. In our times the process of humanisation of animals (see Millán, 1998) allows the law to give priority to the protection of vegetal and animal species over human food practices. The question arises as to how it might

be possible to reconcile the protection of wild species and human cultural practices, especially when, at present, as in the case of *fardachos*, the reasons which justified the legislation, namely the danger of extinction, are no longer relevant. However, even though the law left the door open for the revival of *fardacho* consumption, modern food tendencies will aid its extinction. But who knows whether in the future, the interest in the revival of such practice might arise among the young inhabitants of Peñalba, especially if we consider that values such as tradition and nature are again fashionable and there is a tendency to re-establish dishes which have long been abandoned.

Translated from the Spanish version by Monica Stacconi.

NOTES

1. Its scientific name is *lacerta lepida*. Its common name *lagarto ocelado*. It is also called *gardacho* and/or *fardacho*, depending on the geographical area. In this paper the last of these terms has been adopted, as it is the name used by people from Peñalba. According to J. Corominas and J. A. Pascual (1980), the term *fardacho* stems from a combination of the Arabic *hardun* "lizard" with the pre-Islamic Valencian of Byzantine origin *sarvacho*. The first document recording fardacho as a provincial word dates from 1817 although one of its derivations, fardachina ('little lizard'), already appeared twice in an Aragonese Inventory of 1374.
2. Peñalba is in the province of Huesca in the Monegros area. According to the 1996 Municipal Census it has 817 inhabitants of which 409 are women and 408 men. Agriculture, cattle and haulage companies are the main sources of income.
3. Further information on the characteristics of the *Lacerta lepida* can be found in A. Salvador (1998) and J.A. Mateo (1997).
4. On the history of lizard consumption some references can been found in J. M. Corbier (1999) and B. Rosenberger (1999). According to the former, there were lizards among the Roman remains found in the Egyptian desert, not far from the Red Sea. According to the latter, there is also evidence that this animal was consumed by nomadic shepherds during the pre-Islamic era. C. A. Gálvez, R. Morales and J. Castañeda (1999) point out that lizard consumption was characteristic of American natives.
5. Collective meals in the country were rather common. Farmers and shepherds sometimes spent a long time away from home and took large provisions of lard, beans etc. with them. Their diet was complemented by any animal which could be hunted. As already said, they gathered together daily, in order to share the food.
6. About the ways of hunting and consuming *fardacho* there are, obviously, cultural differences. In a recipe book published by the Caja de Ahorros de Navarra (V. M. Sarobe, 1995), which has been, by the way, condemned for its list of "unusual"

recipes including protected species, it can be seen that the *gardacho* (so called in Navarra), is much appreciated by people of any social status. It is killed with a gun if it climbs a tree, otherwise it is caught with bare hands, thrown up in the air and stabbed to death in the back of its head once it falls on the ground. It is skinned and gutted, then grilled and dressed with salt and oil. Some like to rub its meat with garlic before roasting it. It is also fried in oil with chopped garlic. In some parts of Navarra, *gardacho*, once chopped, is added to white beans or stewed with tomatoes and potatoes, or with peppers in tomato sauce.

7. The literal translation of the Spanish proverb "*ave que vuela a la cazuela*" would be "all birds that fly end up into the pan".
8. The literal translation of the Spanish proverb "ave que vuela a la cazuela" would be "all birds that fly end up into the pan".
9. The first metal/iron-wheeled tractors made their appearance in the area of Peñalba in the 1940's. Later in the 50's, the first tyres appeared. However, it was in the 1960's that mechanisation became a general phenomenon.
10. The most hated reptiles are snakes. This is reflected in the stories orally transmitted from one generation to another. There is, for example, a story about a baby who, despite breastfeeding, did not grow bigger. Later on it was found out that a snake hypnotised the mother, replaced the baby and fed on the maternal milk. In order to prevent the baby from crying, the snake put its tail into his mouth. Once the trick was discovered, the snake was killed.
11. As usually happens with rumours, that on the prohibition on fardacho consumption has been probably distorted. In Peñalba, for example, it is said that somebody in Madrid was fined 500,000 pesetas for hunting a fardacho. Somebody else claimed that the fine amounted to 1 million pesetas. Be that as it may, everybody is now aware that fardacho hunting may cost a lot of money.
12. A famous street in the city of Barcelona.
13. The heading of the VI decree 4/1989 of 27th March on the preservation of natural environment and wild flora and fauna, includes a description of offences and sanctions. These range from 10,000 to 50,000,000 pesetas.
14. See Note 12.
15. On this process of animal humanisation see A. Millán (1998).

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Tjakangka Malu Ngalkuntjikitja: Celebrating the Kangaroo According to the Law

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ABSTRACT

The hunting, killing, cooking and sharing of kangaroo among aboriginal people of the Great Victorian Desert is described. Complex rituals related to kinship and initiation status dictate people's rights and obligations. The law that rules their lives is rooted in the songs and tales that incorporate their mythology and world view. Animal flesh is thus ritually converted to human flesh.

INTRODUCTION

The data presented here was gathered during my fieldwork among the Aboriginal population of the Great Victoria Desert of Australia in 1997 and 1998. This population, known as the Pitjantjatjara and Yankuntjatjara is also called A<u>n</u>angu to unite them under a common name. Their languages

have been given a written form mainly through the work of Ron Trudinger (1936) and more recently of Cliff Goddard (1996).

Some years ago Richard Gould (1967) published a paper on cooking techniques of kangaroo meat among the Ngatatjara inhabitants of the Warburton Ranges, nearly 1000 kilometres away from the Everard Ranges in South Australia where I carried out my research; so naturally there are notable differences between his findings and mine on this same topic. During field work I was invited on many occasions to take an active part in hunting parties of the Mimili community, in north western South Australia. For my informants, I was a classificatory brother, nephew or grandson and sometimes even father and, thanks to these privileged relations, these men and women taught me some crucial rules of their way of life.

If the residents of the community sometimes use different terms to indicate the objects which surround them, these linguistic differences express the diversity of their origins depending on their membership of the Pitjantjatjara or the Yankuntjatjara group. These two groups belong to the vast community of the Aborigines of the Great Victoria desert, dispersed over almost the whole south-western quarter of Australia. Their cultures are very closely related and codified by cycles of songs (*Tjukurpa*) constituting their mythologies. These songs tell of the actions of ancestral creatures having existed under animal, or human forms; or even under atmospheric phenomena like winds. Rules of life and rituals are very carefully detailed and esoterically illustrated in these songs, and are sometimes directly established by mythical heroes or told as secondary elements of the main story.

Very few adult Australian Aborigines know the totality of these songs. Rather, each one of them has memorised some verses of several songs. However they all know the right attitudes which should be observed, as well as the specific techniques and methods established by their civilization. These are taught, and the knowledge is given to the men and women who underwent initiation ceremonies. These rituals in which in the course of their life they take part as initiates, are occasions to control and acquire new knowledge in order to fulfil one's human condition. It is the custom as a whole, and more generally the culture which warrant this condition. The custom is a Law by all possible reckoning, observing it confers authority (*tjukaruru nyinapai*, "this who remains in the right way"), and breaking it

can lead to the most extreme sanctions. It is also a law to be compared with western scientific laws: it expresses constant ratios which allow the living creatures and the natural phenomena to exist and reproduce. Consequently not following the law endangers not only Man, but also the world as a whole. To live accordingly to the custom, *tjakangka*, gives the keys of existence to all the aborigines of the Pitjantjatjara culture. The possession of such "keys" confers particular status, allotting rights and obligations.

Hunting

In the past, the mode of subsistence was based on hunting and gathering, characteristic of their semi-nomadic life. The paths followed by the Aborigines when they travel through their desert realm are based on those of mythical heroes who, during their wanderings, dug water holes and modelled the geographical terrain. Thus, each Aborigine, by memorizing the myths and remembering them, can stay alive in the critical living conditions of the desert. Staying alive as a human being is only possible if the rules of that particular way of existence, that of mankind, are followed, and mankind is conceived as a whole made up of several human "patterns" named "ways" by the Pitjantjatjara and Yankunitjatjara . To survive in the desert the men have to become *Kukaputju***,** prolific hunters, opposed to *Tjami* or poor hunters. Hunting is essential to the men, as this activity can provide meat for the hunter's whole family. Before being considered as food or because it is a food, meat represents first of all a type of good which can be exchanged between persons or between groups. Exchange is the core of the whole Pitjantjatjara and Yankunitjatjara society's structure. Thus, bringing meat to the family after a successful hunting party ensures that they would have something to exchange with another family and as a consequence maintain their "place" in society. This particular role of meat is the reason why the main purpose of hunting is not just catching a kangaroo. In Pitjantjatjara there is no specific word meaning "to hunt", a man just says that he is going for meat "*Kukaku ananyi*". But hunting has its own rituals, prohibitions and obligations, for the important element is to treat the kangaroo according to the Law in order to stay in full agreement

and harmony with the logic of the world from which the hunters have killed one of the beings.

The manner of killing an animal has its importance: for example in order to kill a small varan lizard, the hunter must hit it on the nape of the neck and break it with a single blow; if using a rifle he has to shoot it in the head which is no larger than a tennis ball.

In the past, big game was hunted with spears (*Kulata, Kantji*...) and dogs (*Papa*).Today, hunters use modern techniques, relying on rifles and motor vehicles. Sometimes even motorcycles are used to chase kangaroos through the bush in order to strike them down.

Hunting seasons are always preceded by ceremonies in order to "give birth" to the game. The Songs explain why it is unwise to kill a Kangaroo (*Malu*) during the rainy season, since at that period it feeds on grasses (*ukiri*) which make it thin. On the other hand it is the time to look for another kind of kangaroo, the *Euro*, locally known as *Kanyala,* which grows fat thanks to these same grasses.

Before starting a hunt custom requires one to consult a *Ngankaṟi*, or *medicine man* in order to find out if the hunt will be good and if it is worth the while going on it. During the hunt "magic" rituals can be performed in order to increase the good luck of the hunters or the bad luck of the game. For example, one can strike the tracks left by an animal with a stick and leave it on the tracks to weaken (*Ngarakanṯuni)* the prey. Once the animal is dead, every gesture around its body is important: a kangaroo was shot down during a hunting party, we were out in the bush and had shoved it in the boot of the four wheel drive, but unfortunately the animal was not completely dead and was still stirring. As I was insisting for someone to put an end to its agony, one of my "step-brothers" (*marutju*) explained to me that if such an act were perpetrated, the old men of the community (*tjilpi*) could make us undergo reprisals as only one shot must be fired to kill an animal according to the Pitjantjatjara and Yankunitjatjara law. And incidentally, let me stress here the fact that those who make a mistake or break the law are under the threat of being reduced to "meat" status, that is to be cooked like a kangaroo. The preparation and all the gestures surrounding dead game are of the highest significance for the Aborigines.

What follows is the example of the preparation of a kangaroo or, in other words, of the law attached to that animal and taught to the initiates.

PRELIMINARIES AND PREPARATIONS

When a kangaroo is killed, the offal is immediately removed before the hunters are allowed to carry and cook it. But before that, a four inch incision is performed on the animal's belly (*wila alanyi* = to open the belly), incision through which the hunter checks if the animal can be consumed by looking for fat inside the abdomen. The Aborigines refuse to eat the meat of a kangaroo with no fat, which they call "a skinny one", *nyurka*, and the hunters will leave this type of game to the dogs. Fat, *ngatinpa*, is normally found in abundance in the groin, abdomen and around the kidneys. Having checked the presence of fat, the hunter can then proceed to remove the offal. He then takes grass (*pilki***)** to fill the emptied belly and closes the slit by maintaining the two edges together with a small stick (*Tipiny: Tipinytjunanyi* = to insert the *tipiny*). The stick is then twisted so that the interior membranes of the skin intertwine in a kind of knot which looks like a protuberant navel.

The entrails are of two types: the large bowel, *murunpa*, and the intestines themselves called *tjuni*. Once these are withdrawn from the animal, the hunter leaves the kangaroo on the ground and in the same spot he proceeds with the scraping out of the entrails: standing up and turning on his left, holding the intestines, he presses them in his hand so the contents can drop onto a bed of branches previously set on the ground. A mass of undigested grass and excrements falls and intestinal worms (*ar̲arinpa*) are generally present. Custom strictly forbids to touch these worms or the excrement, and during my investigation, pointing to these worms to know how they were called, one of my *Kamur̲u* (classificatory mother's brother) told me sternly "*Wanti, pampuntjia... milmilpa*" ("Stop, don't touch it, it is sacred"). These worms are sometimes likened to small poisonous snakes such as *Katjanpa* and *Kuyi*.

The group of hunters must then proceed somewhere close to a water hole or "rock hole" (*Tjukula*) to cut up the kangaroo and cook it. To carry the animal, the hunter must tie its limbs by dislocating the hind legs in order to bring them forward towards the front ones. He starts by putting a hand on

the kangaroo's throat and, one after the other pulls back the hind legs until the articulation breaks (*Karulytjinganyi*). He then dislocates the forefeet, twisting them with several circular motions (*Ulutjunanyi*). The dislocation of the four members is to be associated with the incision of the belly. The Anangu people (i.e. the Pitjantjatjara and Yankunitjatjara) consider that the body has five "souls": one under the solar plexus, two under each knee, two in each elbow (Berndt & Harvey Johnston, 1942: 207). These rituals are performed to release the souls of the animal. The hunter then binds the legs together (*Karpini*) with a small length of the gut. If the animal is large, a wooden stick is punched through the end of its tail (*nginti wipu*) to attach it to the limbs already bound together. He then carries the kangaroo on the nape of his neck and shoulders (*Nguntipali*) while passing his own head between its legs. Today, if the use of vehicles saves the hunters from carrying the animal, the limbs of the animal are dislocated anyway even if they are no longer bound together. The hunters move then towards the nearest rock hole.

Once there, they dig (*Tjararpunganyi*) what will become the oven (*Takul-takulpa / tjarar-tjararpa*). Traditionally, the hunters carried sticks or kinds of wooden plates with which to dig the hole. While waiting for the digging to be completed, one of the hunters leaves his companions to seek fire wood. Meanwhile the animal is placed on the fork of a nearby tree, (*Tjarapakutjara*) to preserve it of any profanation by insects or other animals.

The hunter who went for fire wood (*Waru*) collects mainly whole dry trunks which he brings back where the kangaroo is being prepared. Once the wood is piled up, he holds the trunks at one end and strikes them violently on the ground to expel the sand they might contain and breaks them in small pieces. When the hole reaches one meter in length, forty centimetres in width and thirty or forty centimetres in depth, one of the men collects the small pieces of wood and builds at the bottom of the hole (*Kurultjunanyi*) a little pile, *kurulpa,* in the shape of a tent facing the wind and under which straw will be placed. Today, a lighter or matches are used to light the fire. I once saw a clever means of producing embers by creating a short-circuit with a battery: having found a piece of wire one of the men rolled it up around a piece of wood with forked ends, leaving free the two extremities The whole device looked like some kind of a plug. The two

"stems" were put on the poles of the battery and they waited until the wire reddened with heat and used it to light the fire.

Traditionally, the Pitjantjatjara hunters used the spear thrower (*Miru*) to make fire. The men put one of the dry trunks on the ground and one of them stood on it while two others seized a spear thrower by its two extremities, set it between the feet of the man on the trunk and started a sawing motion with all their might. When the wood of the trunk started to warm up, one of the hunters placed on it dried straw of spinifex (*Tjampi*), which grows in round solid and massive tufts. He kept adding grass until it became a consumed mass. Then taking dried kangaroo dung ground into powder, he spread it on the smoking straw. Meanwhile, another man took some straw which he slipped under the ashes and standing up, back to the wind, holding fanwise in his hands the smoking straw, he swung it from left to right, helping it to catch fire properly. He then set it under the little pile of wood into the "oven" hole. The reason for that ritual is that it is strictly forbidden to blow on fire. To place the smoking straw under the wood, the man had to kneel facing to the *kurulpa* (the pile of wood) by drawing aside his legs folded as flat as possible on the ground to make a wind break of his body. Then, when all the straw started to smoke, he moved aside to let the wind (*Walpa*) blow. Fire should not be produced by anything other than dead wood, most generally wood from a tree called *mulga* in Australia, but the varieties of which have tens of different names given by the people of Mimili. There is a very deep association between this particular wood and fire. The two have the same name, *wa<u>r</u>u*, whereas wood used for other purposes is called *pu<u>n</u>u*. An Aborigine will feel offended if a fire is lit in his presence using plastic fuel or other unusual materials, and even if these materials are thrown in a fire already lit.

While the fire is being lit, the last preparations are carried out. The game will be cooked by the elder brother (*Ku<u>t</u>a*) or the mother's brother (*Kamu<u>r</u>u*) of the one who killed the animal. He skins the hind legs up to the heel, and dislocates the articulation. When the fire produces large flames (*Kurkalpa*), taking the animal by the legs he throws it on its back in the fire in order to burn the pelt (*Wita<u>n</u>i*). Once burned, he catches the left hind leg to turn the animal on its right side, then on its left (*U<u>n</u>mi*). Once the pelt is entirely burned, one of the hunters takes the animal off the fire and lets the

burning wood turn to embers. The cook inserts a stick between the tendon and the bone of the legs. He slides the stick until it reaches the knee, near a point called *Mu<u>n</u>ngu*. In the past, more often than nowadays, the hunters preserved the tendons which were dried and rolled up into a ball to be used as ties for various purposes. Once the tendons (*Marpanpa, pulku*) removed, the cook breaks the feet off and puts them aside to later break the bones (*tarka*) to suck the marrow (*Nyuntjunpa*).

COOKING AND CARVING

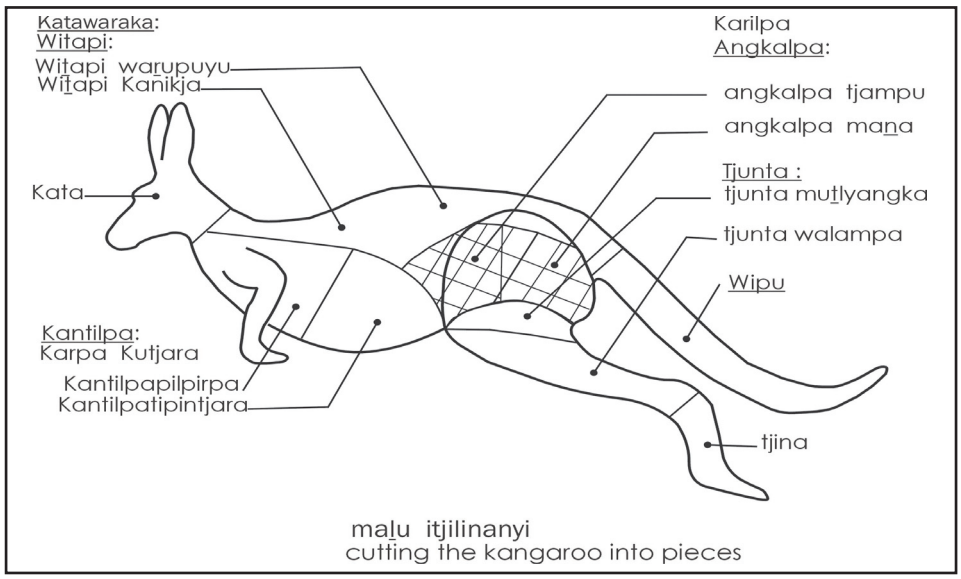
When the wood has finished burning, one of the hunters carefully draws aside the last blazing pieces to collect the embers with a stick called *Warika*. The kangaroo must not cook over fire but under embers. The only contact tolerated with fire is for the burning of the pelt so it will not catch fire later. Having drawn the embers aside, the man places the kangaroo in the hole and covers it with the embers using the same *Warika* stick. The only visible thing is a mini smoking inferno with four sticks pointing to the sky: the animal's limbs. This slow cooking technique is called *Malykunyarinyi*.

The innards, including heart and lungs which had been kept high on a branch are placed in hot ashes (*ipa or Kulku)* for quick cooking. After ten minutes, the hunter's mother's brother (*Kamu<u>r</u>u)* or one of his elder brothers (*Ku<u>t</u>a*) takes them smoking out of the ashes. Having made a small litter of branches, he lays them out and separates them in small pieces which he distributes to the young. If among them there are men of same kinship statute, i.e. brothers, those help themselves to a portion of intestine, which having been rather roughly emptied have a very strong taste. To finish emptying them, one has to tear the piece and press it between the fingers to cool and finish cleaning it. One never blows on food when it is hot: it is seized and gently tapped with the fingers. The sharing of the intestines is the occasion to gather around the food and start discussions. The topics discussed are of a broadly political nature: one discusses then subjects relevant to the community and everyone checks alliances by revealing details of events one has lived through, as do all the other male members of the community. This time of sharing is a privileged moment in which the only men taking part are those having reached a social status linked to

their initiation level. These discussions can last from forty-five minutes to an hour, after which the cook rises and, seizing the *Warika* stick, pushes back the embers now turned into coal in order to release the kangaroo. Lifting it by the legs he carries it on a rock or a bed of branches in order to start the carving. Today a knife replaces the flint splinter used to slice the skin and flesh of animals as well as those of men during their ceremonies. Several steps are involved in carving the kangaroo. It is not sliced directly into the flesh, the skin is cut by notching rapidly, leaving little scars; then it is properly carved following the lines formed by the scars.

For example, to separate the legs (*Tjunta*) from the carcass, the cook operates as follows: two notches are made, one at the back of the thigh and ending at the hip, another at the top of the coccyx, and another along the fold between thigh and pelvis. There is fat at that particular spot, which is of a great value for the Pitjantjatjara. Then the cook operates several cuts in the skin under the thigh of the animal in order to finally remove the leg while slicing deeply into the flesh.

Initially the cook will cut the animal in two (*Parilymananyi)* by separating the higher part of the trunk (*Katawaraka or Kultu*) from its lower part (*Karilpa*). At this time the children and women, if they are present, or the youngest of the men, rush upon the fat (*ngatinpa*) and



malu itjilinanyi
cutting the kangaroo into pieces

coagulated blood which has become a sort of jelly filled with nutritional energy. Each of the two sections is divided in four parts. One is called *Katawaraka* and includes the head (*Kata*) and the nape of the neck, the back which goes from the nape of the neck to the coccyx (*Witapi*) and finally the chest and ribs representing the part called *Kantilypa*.
The breast piece is split into two (*Karpapunganyi or Walytjarpunganyi*) and each of these two parts (*Karpa* = side) can also be divided in two. The part with the forefoot is called *Kantilypa pilpirtjara* (*pilpirpa* indicating the chest above the diaphragm). The other part including the incision for the withdrawal of the offal is called *Kantilypa tipinytjara* from the name *tipin* given to the stick used to close the incision (see above). In this higher part (*Katawaraka*), the back itself can be divided into two pieces: *Witapi Kanytja*, the higher half from the back and the neck to the middle of the backbone, and *Witapi Warupuyu* which includes the lower half of the back with the section of the tail. *Kanytja* means "beard" and refers to the fur at the higher part of the back; *Warupuyu* means "the smoke from the fire" and refers to the only part of the flesh which was directly in contact with the fire after the tail had been removed before cooking. The head is not divided. The lower half (*karilpa*) includes the pelvis (*angkalpa*), the tail (*wipu*) and the hind legs (*tjunta or wiluru*).

The two legs can be divided into two pieces: *multilyangka or wintjilyiwata*, i.e. the fleshy part going from hip to knee (*multi* meaning knee) and *walanypa* i.e. the tibia with the flesh from the back muscle of the thigh to the back of the knee.

The trunk or *angkalpa* can also be divided in two pieces, the lower part, towards the tail, is called *angkalpa mana* because it includes the buttocks of the animal (*mana*). The higher part of the belly, less fleshy, is named *angkalpa tjampu*. Finally the tail is only exceptionally cut in two and most of the time remains whole. All these pieces (*itjilyi*) are placed on a bed of branches before being shared.

SHARING (INTJANI)

The hunter himself will not take any valuable part of the kangaroo he killed. The cook will give him the heart and the liver which, if of high

symbolical value, have only a very little nutritional value. If at the time of the sharing the number of hunters is small, the hunter can be given the head. However, there is little flesh on this piece and nothing of use. The hunter is not the owner of the animal he killed, although he was the one who had the right to kill it. Normally the one who first spots the animal will have the right to shoot it. And the cook will be determined *de facto* according to his kinship relation with the killer of the kangaroo. He must be a man who has passed through a number of initiation stages and has taken part in numerous ceremonies. He will be either the elder brother (*kuta*) of the shooter or a mother's brother (*kamuṟu*), who can be, on some occasions, the father of the shooter's wife (*waputju*). Although any relation between them is prohibited in that particular case, the kangaroo may have been carried to him by the hunter's brothers in order for him to proceed with the cooking.

During the sharing the paramount rule is to expose the pieces on a bed of branches to offer them to each person attending the occasion. The indigenous groups of the Australian desert, to which the Pitjantjatjara and Yankunytjatjara of the Mimili community belong, are founded on social relations organized around the status of each person, recognized according to the relationship and status linked to the ceremonial cycles. Everyone will act according to his status without having to mention his particular position; since it is an obligation, without exception, every Aborigine recognises the right status of all the people he meets. As a consequence, every adult shows respect to everyone he encounters, particularly away from home, for fear of making a mistake. Thus according to their social and kinship status, the members of the hunting party will take pieces of the meat. These pieces (*itjili*) being exposed in front of the hunter's relatives, the first to take their share will be the allies. The father and classificatory fathers (*waputju*) of the wife and their spouses (*umaṟi*) and the wife's mother's brothers (*kamuṟu*), one of them being the cook, take the pieces they want. The brothers of the wife (*maṟutju*) follow. And finally, the hunter's brothers help themselves to the remaining parts according to their age, starting with the eldest. The hunter is then authorized to take the remaining pieces unless his children are present in which case these help themselves. Although there is no really specific part of the cooked kangaroo allotted to each, it is easy to understand that the *waputju* and the *kamuṟu* will more often take

angkalpa ma<u>n</u>a and *tjunta* if they are present at the sharing, as these are the meatiest parts. If the hunters are far away in the bush and are cooking for themselves, they may eat the *ankalpa ma<u>n</u>a* while carving the animal. The *ma<u>r</u>utju* of the hunter, his brother in law, will choose more readily *karpa*, if the other pieces have already been taken by the *kamu<u>r</u>u*; the brothers generally take *witapi and wipu*. Generally, the group of hunters is composed of four men and as the animal is mostly divided in nine pieces, each person, excepting the hunter, will have two or three of them. For a higher number of hunters, eleven pieces in all are to be distributed.

If the hunters start to eat some meat during the sharing, they will quickly stop after a couple of bites by ritually saying "*taldu*", "(I am) full", meaning they are satisfied that they have been able to eat and able to bring back food to their family. This "*taldu*" is extremely gratifying for the one who killed the animal.

Generally, when the hunter returns to his own hearth, the first ones to help themselves are his children who take the piece that their father holds out to them. As soon as they have had their share, around each fire (each hearth), the observer can witness the strange ritual of food redistribution as Elkin (1936) has commented in Oceania.

According to a custom called *ngarpartji-ngapartji***,** meaning something like "tit for tat", during his initiation to manhood a man commits himself to become the provider of food for another man in exchange of his sister or daughter, so she can then become the mother of his children. Having children is very important for a man; it enables him to take an active part in the social and cultural exchange network. The exchanges between the two men are then codified according to a system of obligations and prohibitions. Thus, a man will give part of the meat which he brings back to his hearth to his *waputju* (wife's father) which will surely divide it with his wife or who will give it to one of his sons (*ma<u>r</u>utju* of the hunter). But, as any relation is generally prohibited between a man and its initiator/provider of wives (*waputju*), he cannot personally give his meat portion to his wife's father. In the same way, a man cannot either sit down close to his wife's mother, nor meet and pass her on his way. If this case arises, he must deliberately change direction. Thus, it is in fact his wife who will be an intermediary with his parents-in-law, illustrating the complexity of the subtle network of social links of the aboriginal cultures.

Indeed, as a reciprocal exchange network, any wife has as an obligation to give a part of the meat which she has been given or that she obtained in hunting small game, to her parents-in-law. Their relations are partly prohibited. Partly indeed, for most of the time the woman does not have any intermediary means to communicate with her husband's parents. Those intermediaries are logically the husband and the children who bring to her parents-in-law their part of the wife's tribute. Thus, when a husband gives a piece of meat to his wife, she will make him divide it in two pieces, if it has not already been divided, and will take one of them to her parents. A father generally gives his children the meat he receives, but then he is also free to carry the food left to another appropriate person or to take it for his direct consumption. This system of reciprocal exchange ensures even distribution of food within each family.

A man therefore has interest in having several girls who become wives, as they represent providers of goods and food. From his "richness" a more or less significant group of people will benefit, depending on the number of sons-in-law he has. When anyone eats game meat with the Pitjantjatjara, it is formally forbidden to consume any other unspecified food, such as vegetables, bread or salt for example. If drinking water is permitted, no vegetable food (*may*) is allowed to accompany the meat (*chukka*). This vegetable food consists of several small berries and a kind of bread, formerly prepared using seeds of graminaceae, collected by the women. This is of paramount importance for the diet of the people of Mimili and to their ceremonial life, as many of the rituals are connected with this vegetable food, its gathering and preparation. The technique of preparation is very elaborate and represents a unique *savoir-faire* of the *yankunitjatjara* women, and this gives them undeniable prestige among the populations of the area. The system of distribution as it functions for the meat, also applies to vegetable food, but without the same prohibitions.

Thus, a man's parents can give meat to their son, but his wife will not take her share of it. If the husband has received such a quantity that he has some left over after having given their share to his parents-in-law, the woman could help herself to some, it being understood that in fact she partakes of her father's share. On the other hand, a wife will eat vegetable

food that her husband's parents have sent him. In the same way, a man will not eat meat which has been given to his wife by her parents, but will eat the vegetable food they have sent her. Interestingly a woman will only accept vegetable food from her daughter if it has not been cooked. In this case only, she can prepare, cook and eat it, proclaiming her womanhood in showing she fully remembers and still possesses the woman's knowledge taught her during her own initiation.

The meal and preparation of food thus constitute a whole ceremony, the complexity of which reflects that of the social relationships of aboriginal cultures from this part of Australia. The relationships human beings share together are sometimes obvious to observe. But in this case, through the preparation of the kangaroo and the way its meat is shared, actions which literally bind the whole society in a commitment, a particular relationship is drawn between the animal and the human being. This relationship is a ritualisation of the transformation of the living creature's flesh into edible meat (*kukaringanyi* = to turn into meat). As there is no term to discriminate the "animal" from the "human", there is thus recognition of an existential equality between all creatures. What can appear scandalous, the putting to death and consumption of a live being, is then compensated by a ritual complexity which joins together the quasi-totality of the community in collusion in murder. Indeed each aborigine, by his statute, will play a role in the transformation of the *maḻu* (the kangaroo) flesh into meat. All the members of a community being in some way accessories to that transformation, justifying the death: everyone is responsible. Consequently nobody can formulate any reproach and even more important, no sensation of guilt can be enshrined in their minds, because the whole society needs physically to master this kind of death to enable the feeding of its members. That is why the disharmony caused by the killing of a living creature may be balanced by rituals and profane ceremonies in order not to let this necessity be scandalous and as such, a reason for oblivion. Indeed what would be the sense of a society and culture which requires humans to ritually increase the number of creatures by performing painful ceremonies, and yet which would not pay any attention to the killing of those same creatures? Such a society would make no sense. As the ceremonies for insuring plentiful game and its killing take place in hidden spots away in

the bush and are only performed by authorized persons, what better mark of social and cultural significance can be given to such acts? The law thus has an assuaging aspect by the training it presupposes. It requires members of society to undergo several stages of initiation. Those stages place the initiate in a role which enables him to achieve certain actions within a framework defined by custom. It thus alleviates the spirit and mind, while presenting the killing of a live being as the realization of a ritual obligation, whose nebulous origin releases one from any possible moral taint. It is surprising that the word used to indicate the action to nourish oneself, to eat, is the verb *ngalkunyi*, also used to express the idea of celebration, in particular applied to the festivities of Christmas in those populations aware of Christianity through the work of missionaries. Thus *tjakangka malu ngalkuntjikitja* confers an aura of celebration on the consumption of kangaroo flesh. Its sharing can be analysed through economic aspects, but it is also based on elements from the imagination of aboriginal cultures, as yet not deteriorated by current transformations of their way of life.

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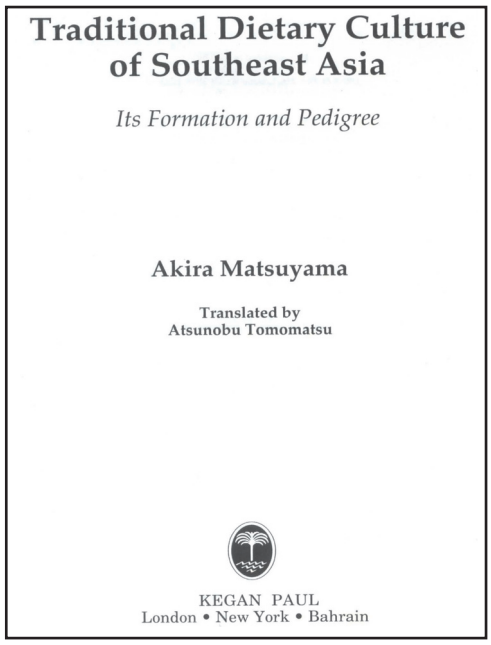
RESEÑAS

Traditional Dietary Culture of South East Asia*

Akira Mutsuyama



Professor Matsuyama's work on dietary cultures of Southeast Asia represents certainly the work of a lifetime. Its purpose is very ambitious: to present and analyze food habits in this vast and complex area of the world, from prehistoric times to the present.

The volume starts with an extremely detailed description of the past and present geographical aspects of the area, and the history of its population as he could gather from the available data. We follow thus the

* Akira Mutsuyuma, *Traditional Dietary Culture of Southeast Asia. Its Formation and Pedigree*, Translated by Atsunobu Tomomatsu, Kegan Paul, London - New York - Bahrain, 2003.

different waves of human occupation of these territories, their languages and their various moves.

Only then we start on the very subject of dietary culture: the available foods. Most of the data for the very early period concern the continent and come from the works of Chester Gorman at Spirit Cave site in Thailand and William Solheim in sites further south realized in the nineteen sixties and seventies. It is interesting to note that already in Palaeolithic times, the food patterns in Southeast Asia seem to be established: the continent on the one hand, and the islands on the other hand, following more or less Wallace's line: tubers in the south and east of the islands, cereals in other parts. Pigs, dogs, chickens, bovines are present, as well as rice (possibly cultivated, cf. C. Gorman's work), taro, sago, yams, and of course the ever-present fish. We discern the birth of that fish and rice culture of later times.

Slowly the author brings us to discover newer plants and agricultural techniques, setting the roots of what this sub-continent is today.

Entering historical times, for the period preceding the arrival of Europeans, we observe the influence of the two great neighbours: India and China. Foods and various production techniques coming from one and the other were adopted and integrated into local cultures to give birth to the specific profile of food production and consumption in this area. Indian culture was introduced through the Hindu kingdoms, in the islands (Borubudur, Sriwijaya in Java for example) Kampuchea or Sukhothai in what is now Cambodia and Thailand. Chinese migrations on the other hand, penetrating into the area, also brought new foods (possibly soy and fermentation techniques for food preservation). Common traits begin to appear: the making of alcoholic beverages with the sweet sap of palms, juice of sugar cane or grains like millet or rice; sugar making with the same sweet saps or cane. Drying fish and fermenting some for fish pastes or sauces: *naam plaa* and *nuoc mam* on Thailand and Vietnam are today the most famous, but such fish sauces and pastes exist practically under the same form in southern China and the islands.

Rice becomes extensively cultivated; irrigation is established wherever possible so that the ancient dry rice of upland production is replaced by low land inundated fields. Around the 10th century rice becomes a staple in most low land areas and in terraced hills on the continent. It occurs

somewhat later, around the 14th century, for the islands. The eastern islands retain their staples: yams, taro and sago as well as other roots.

Spices are present in the food: the native ones – ginger, galingale, nutmeg, cloves, pepper, cinnamon. They are trading goods, and travel as far as the Roman Empire, and later to Venice through Indian then Arab traders and sailboats. Indeed, the trade routes in pre European times did much to generalize the food patterns of the various populations through exchanges of plants and techniques.

This particular part of the book is based on a few manuscripts on lontar (palm leaves) and copper plates, and also on the very rich iconography from all the *bas reliefs* and sculptures of Borubudur and Angkor Wat. Practically all the representations of foods are analyzed. It is evident that the only bases for data were through these two major sites. We have little concerning anything else outside of the early writings of the Chinese, which are recorded extensively in the last part of these chapters.

The European occupation period is then considered and the evolution of food production and consumption, most particularly in Indonesia and the colonized areas of the continent. The major changes in food ways concern the introduction of American plants into the daily diet: capsicum (hot peppers), tomatoes, pineapple, sweet potato, cassava, maize, potatoes, and other fruits and vegetables considerably changed the tastes. They acquired the pungency of contemporary cuisines of Southeast Asia. While the very eastern parts – *i.e.* New Guinea, some of the Lesser Sundas – retain the very basic diet of tubers and sago, pigs for meat, and fish. While Islamisation was completed in the Malay Peninsula and western Indonesia as well as in some parts of the Philippines, it marked the disappearance of pigs, and more discreetly of alcoholic beverages.

Extensive agriculture developed further with tea, coffee and cane plantations, and the even more extensive rice production.

Finally, the last part concerns what was contemporary in the late sixties and early seventies, in post colonial times. The author describes for every ethnic group recorded what is known of their diet, from Hill Tribes of the Continent to the most remote population of forgotten islands. The descriptions are very basic, noting the staple, if any, and food production techniques. Lastly he concerns himself with the production of all the

possible types of alcoholic beverages, from all the possible sources: palm, sugar cane, fruit juice, cereals, and then for traditional sugar making with mostly the same types of juices. These chapters are particularly interesting in that he has noted all the various micro organisms present in various types of starters for fermentation, throughout the whole area. It is precious work for biochemists interested in traditional techniques of food production.

Finally, let me add that for every major part of the book, there are tables giving the vernacular and scientific names (whenever possible) of all the foods mentioned, or present at the times he describes. A very useful ethnolinguistic work.

But it is also necessary now to be critical on many points of this enormous amount of work. First, the great difficulty one has in reading it: the translation into English from Japanese is painstaking, heavy, and often incomprehensible (example: half blooded children, for children from mixed unions). Certain phrases are downright wrong: the Paleolithic would be "A time without language" (!) (p.53). You can't say that to a prehistorian, and I am not sure the author meant precisely that. One is constantly rewording some sentences to make them understandable.

At the very beginning, the concept of "tradition" and "traditional" is questionable; the author links it to the "aboriginal". In contemporary anthropology, this doesn't make sense. Tradition is not immobility and repeated ancient patterns; it is their reinterpretation, and absorption into constantly changing cultures and populations. The process is dynamic, not static. Even if a specific pattern was established in prehistoric times, it evolves and is transformed, breaking up into several sub-patterns. How do we know for example that some "tribes" today have the same or a comparable diet to the one of populations around 10000-6000 B.C.?

When the author mentions that the ancient practice of cannibalism has disappeared in the area, he forgets that up to the early XXth century it was still present in New Guinea, and possibly in some Lesser Sunda Islands (I have met in 1960, in Timor, an old Atoni warrior who told of his own father having eaten an enemy).

If the spread of wet rice cultivation is masterfully analyzed, and the description of native edible plants of all sorts very complete for the periods

between the Neolithic and let's say the first Hindu Kingdoms, the following period, that is the historical one up to the arrival of Europeans, is based mainly on two sites: Angkor and Borubudur. It is certainly a rich source of information based on a few writings, stone *bas relief*s and carvings, but it presents only a small part of the picture. And we come to another questionable point: the author mentions the possibility of maize having arrived independently to Asia, through the Pacific, in ancient times... as for the sweet potato (this theory was at the origin of the famous Kon Tiki crossing of the Pacific by Thor Heiderdal). The reason is that on some stone carvings a plant resembles ears of maize…There is much to be said against such interpretations: the sculptors can stylize the things they are representing, and we are never quite sure what they actually depicted. More over, no European traveller or later colonizer ever mentioned maize as a plant cultivated in the area; indeed, they are the ones who brought it to South East Asia. Such questions should be treated with great prudence.

The largest part of what was intended to be the history of dietary cultures is devoted to making alcoholic drinks: wines, beer, later distilled spirits. This is extremely interesting in itself, but it gives a sort of unbalance to the book. We know more about this type of drink than about the actual foods eaten daily and how they were cooked. It is true however that this type of production is present in the whole of South East Asia and represents a common heritage as for rice and fish in the continent and part of the islands, and tubers out west.

The author also mentions that non sticky rice became the staple everywhere, at the expansion of wet rice cultivation, but he forgets that it has always been and still is the staple for the Lao and the Northern Thai.

The period of post colonial times ends by the exhaustive description of the various ethnic groups" diets. The data is often not correct or lacking precision. And the descriptions only show the immense variety of patterns and foods in the area, demonstrating differences rather than unity in the basic cultures. These are only a few of the numerous criticisms we can make on the very lengthy and detailed description of data from various sources.

It is today inconceivable that one person would undertake such an encyclopaedic type of work. Scientific data is too numerous, too specialized,

making it impossible to collect everything in one single personal work. This nevertheless extremely interesting and useful book is probably one of the last of its type, an heritage of the 19th century scientists, endlessly collecting information, in a rather indiscriminate manner (they could hardly do otherwise) and interpreting it to produce the work of a life tame, such as Frazer did when writing *The Golden Bow.*

In any case, it is the only work of its kind on Southeast Asia, and as such it is very useful and full of information, even if the reading is hard.

Book Review by Annie Hubert

Histoire de la Cuisine et des Cuisiniers.*

Jean Pierre Poulain et Edmond Neirinck

This book is the 5th edition of the work published in 1988, which received the Award of the Académie Nationale de Cuisine the same year. This new edition, enriched and entirely rethought, is aimed at both professionals in the field of cuisine and a general public amateur of gastronomy. It is prefaced by the French chef Joel Robuchon.

The major characteristic of the work is the complementary approach by authors who combine disciplines: J.P. Poulain is an anthropo-sociologist,

* Jean Pierre Poulain et Edmond Neirinck, *Histoire de la Cuisine et des Cuisiniers. Techniques culinaires et pratiques de table, en France, du Moyen Age à nos jours*, Éditions LT Jacques Lanore, Paris, France, déc. 2004, 175p.

professor in the sociology department and director of the Centre d'Etude du Tourisme et des Industries de l'Accueil at the university of Toulouse le Mirail. Edmond Neirinck has led a carrier as a professor of cuisine and professional training for teachers in hotel management schools; he is a member of the Académie Culinaire as well as of several juries for cuisine competitions.

It is well known that human beings feed not only on foods but also on symbols and myths: this is why culinary practices and table manners are so rich to study human cultures. The book offers a precise initiation in the history of French gastronomy, exploring the evolutions of culinary styles and service rules which have been in use among the aristocracy, thus influencing durably world gastronomy. While the authors develop the biography of famous chefs and authors of recipe books, they also explore the role of critics, gastronomes and writers who acted as codifiers of food manners and tastes. The major interest of the book lies in the way each event is linked to the socio cultural history of the country, for behind practices stand imaginary, symbolic or mythic aspects which give meaning to people's choices and actions.

Opening with the beginnings of prehistoric cooking and early food transformation techniques, the book then shows how food and drink were codified in Ancient Greek and Roman times, which influenced later European modes. The publication of the 1st culinary book in the XIVth century marks the beginning of the history of gastronomy. The Renaissance, with overseas explorations as well as the rise of scientific approach, saw the introduction of new ingredients on European tables. Through the questioning of the development of Grande Cuisine, the authors explain the emergence of civility by the transformation of society in social classes with manners and prescriptions. For example, the use of spices as power markers is well demonstrated. The transformation of tastes and preferences into extreme refinement accompanied the subsequent evolution towards individualisation, leading to new precautions regarding animal sacrifice and the elaboration of techniques and tools. Refinement also meant the sophistication of culinary preparations such as sauces, stocks, roux, reduction, gravies, mousse. In the XVIIIth century context of reason, science and experimentation, several chefs considered Cuisine not only as an art but as alchemy. Correspondences were sought between food and

health: good food producing better human beings; the same rules applying to social status and even the political status of France.

Along with the French Revolution, the development of catering and restaurants is related to the change in society: bourgeoisie over aristocracy, the latter remaining the reference. Such a change called for the transformation of service modes and was accompanied by the development of cooking (coal then gas stoves) and preservation techniques (appertisation, refrigeration...). High society appetite for luxury hotels in fashionable European resorts resulted in the rise of the catering industry. XXth century tourism created new demands, to which the blooming of guides as well as gastronomic literature and criticism answered, ensuring French influence on the international level.

The book also studies the way innovation functions and explains the workings of Nouvelle cuisine and current trends, including the position of well known French chefs today, while discussing the reasons why French cuisine is not in the world limelight anymore – there it can be observed that the authors take an ethnocentric position concerning current political world events. They conclude with a dense chapter of sociological considerations on current food modernity, food industry and the difficulty for eaters to adopt new references.

This easy reading book, displaying a rich iconography, presents the reader with a very interesting approach, mobilizing pluridisciplinary scientific knowledge, of both the history and current debates in gastronomy. It is a useful pedagogic working tool.

Book Review by Isabelle Téchoueyres

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    — María A. Carbia, *México en la cocina de Marichú*, 3a. ed., México, Época, 1969, pp. 72-75.

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— Luis Vázquez León, "El Leviatán Arqueológico. Antropología de una tradición científica en México", tesis doctoral, Guadalajara, CIESAS/UdeG, 1995.

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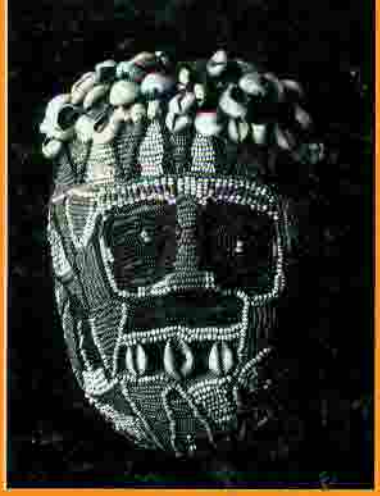

Meat, in all human cultures, has been and still is a sensitive subject. Highly valued or prohibited, symbolically always very powerful, it has often been at the core of all food lore.

There are all sorts of animal foods. Possibilities range from insects and reptiles to fish, fowl and all other warm blooded animals. Every human society, culturally, has selected and established the animals it considers edible, and this may vary from snails to beef, bugs to fish, rabbit to reindeer. It is not inconceivable that humankind at some point or other has tasted all living creatures.

From a nutritional point of view, animal flesh is not absolutely essential to the human diet. Proteins of animal origin can be absorbed through milk and milk products, as well as eggs. Thus we have several cultures, such as Buddhists and Hindu groups, who, for philosophical or religious reasons, have abstained from the flesh of animals and maintained an excellent level of health. But groups abstaining from all animal products whatsoever have been few and far between. In the post-Pythagorean Western world, these have never established structured societies, and even today, if such groups develop they are small and not really representative; and the very exacting effort they have to make to achieve a diet that provides all necessary types of protein, relegate them rather to the sphere of philosophical or religious peculiarities.

However, one of the most important topics discussed and researched by food anthropologists and primatologists has been the original condition of humanoids: were they vegetarian or meat eaters? It is indeed a major topic still today, possibly because it carries strong philosophical interpretations of the "true" nature of Man. And this remains so even if the general consensus is that our ancestors were, like most primates, occasional meat eaters.

This book is an attempt to understand some aspects of the complicated relationship between Man and Meat.

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