

FOOD HABITS, THEIR DETERMINANTS AND THEIR MALLEABILITY

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From a nutritional point of view the chemical compositions of the amounts of the foods and drinks individuals ingest within, say, 24 hours are the really relevant aspects of people's food habits and food preferences. But when dietary prevention of disease is the aim, the need for valid knowledge as to the proper nature of food habits, of their determinants, and of their malleability becomes acute.

Two prerequisites have to be met when research will yield valid knowledge. One is the formulation of adequate hypotheses and the other sound measurement. But such abstract phenomena as "food habits", "determinants of food habits" and "malleability of food habits" cannot be measured directly: they have no substance nor cubic capacity, can therefore not be weighed in grams nor measured in centimeters. Abstractions can only be measured after appropriate conceptualisation and correct operationalisation of these concepts has taken place (1). Because both are really an underdeveloped area in food habits research this paper will deal from a sociological perspective with these aspects, adding some hypothesis on the effect of quality of knowledge and of social relationships on the malleability of food habits and a few notes on research techniques.

#### 1. THE GAINS OF AN OPERATIONAL DEFINITION

The primary difficulty in investigating food habits springs from the common tendency of defining this abstract concept (foods is a collective noun, habits are activities) at the same time descriptively and as comprehensible as possible. Even Thouvenot (2) did not escape this pitfall when he included in his otherwise laudable attempt at an operational definition a list of well-known elements from descriptive definitions. His definition runs namely as follows: "...we have defined food habits as more or less conscious behaviour, collective in most cases and always repetitive, which lead people to consume such and such a food or such and such a dish with a frequency varying in certain cases according to the time of the year, socio-economic environments, incomes and standards of living, regions, ethnic groups and eras" (p. 44). However, by lifting from Thouvenot's definition its operational kernel one gets the concise one: "Food habits are more or less conscious behaviour, collective in most cases and always repetitive, which lead people to consume such and such a food, or such and such a dish, or such and such a drink with a certain frequency".

The merits of this definition are evident. For it compels one first to

specify the term "certain frequency" before collecting data in order to prove quantitatively that a certain individual or aggregate of individuals (e.g. the young, the old, the urbanites, the agrarians, the well-to-do, the poor, etc.) either displays a well-defined food habit or does not. The question of regional and national differences, too, can now be investigated. It opens also the opportunity to investigate the impact of the degree of consciousness of behaviour on the consumption of specific foods. The same applies to food-preparing behaviour.

Still more speaks in favour of this operational definition. For in cases where nutritionists know scientifically how much or how little of a particular nutrient a specific, biologically defined, category of people (e.g. infants, adolescents, (pregnant) women, the aged) should ingest, say, once a day in order to prevent disease and they would be able to procure a list of edibles containing that nutrient, food habits research would be able a) to answer the question which item(s) of that list are part and parcel of the food repertoire of the category under scrutiny, b) to estimate the frequency with which that item/these items is/are consumed, and c) to decide if their aggregated frequencies cover a string of days, weeks or months or leaves (considerable) gaps. And those and similar data are needed when dietary prevention of disease, is taken seriously. And last but perhaps not least: a valid application of the proposed definition in descriptive, epidemiological research may well be instrumental in the discovery of a still unknown causal relationship between the frequencies in which certain foods are eaten and the development of a food intake related disease.

## 2. REAL VS. PSEUDO DETERMINANTS OF FOOD HABITS

Being able to describe differences in food habits is of course not synonymous with establishing the determinants of these habits. Just as it is no prove that age, social class, sex, income or other objective characteristic of individuals in themselves determine food habits because data from descriptive food consumption surveys revealed that there are differences in the average energy and/or nutrient intake of age groups, social classes, males and females, et cetera. As long as no other data are available we know no more than that at the aggregate level one and the other correlate. But analytic studies are needed, before we can conclude that age or social class or sex per se determine the food habits of individuals. And indeed, it seems unlikely, that that will ever be proven. For even such seemingly objective variables as age, sex and

income are primarily abstract terms. One has only to point out that the industrialized world has the last decades known many shifts in the age-limits for compulsory education, voting rights and compulsory retirement and we will have to admit that we are indeed talking about social concepts and not about biological categories when discussing the food intake and/or habits of age groups. The social character of the other factors of which it is established that they correlate with food intake is still easier to demonstrate.

All those factors should, at least for the present, be put into the category of pseudo-determinants of food intake and of food habits. At the same time an effort has to be made to locate the real determinants of those habits and therefore on that intake. It will, however, not be an easy task. Firstly, because of the intrinsic character of habits, food habits included. Secondly, because food habits are at one and the same time rooted in many segments of Culture and in the social institution Household.

### 3. THE INTRINSIC CHARACTER OF FOOD HABITS

Food habits are as all other behaviour patterns acquired by frequent repetition or physiologic exposure so that they have nearly or completely become involuntary. That makes it very difficult for an individual to recount his habitual food intake.

He will moreover have difficulty in accounting for his habits because people always need two reasons when initiating a behaviour for the first time says Bodenstedt (3). One is an "in-order-to" motive, the other a "because" one. The "in-order-to" reason is the original one that fades into the background when a specific behaviour is so frequently repeated that it has become a habit. Nevertheless it plays its role. All habitual food behaviour is therefore ambiguous. And that makes that an individual, when asked for the reason of a food habit is really unable to give one and only one reason. Furtheron we will see that it is even very unlikely that he has only two reasons for a certain food habit because of their cultural roots and their intertwinement with the household. But when asked he will in all likelihood produce the reason that comes first to his mind. So it has to be assumed that it is an obvious one and in social intercourse often used, because the others will reside in the background of his consciousness.

#### 4. CULTURE AND FOOD HABITS

In sociology and cultural anthropology the abstract term "culture" refers to all behaviour traits, food habits included, that distinguishes man from other living species. These traits are among others inventing norms, codes of etiquette, tools and symbols (4,5), looking for orderliness, unambiguity, purity and perfection (6), seeking to understand his physical and his social world, looking for knowledge (7), and transmitting his acquired knowledge and skills horizontally (to his contemporaries) as well as vertically (to the next generation).

Within sociology and cultural anthropology a distinction is made between a Culture of the Great Tradition and a Culture of the Little Tradition. The first term is set aside for consciously articulated norms, codes, symbols, knowledge, skills and artifacts laid down in books of learning. The term "Culture of the Little Tradition" on the other hand encompasses all that is not consciously articulated nor laid down in learned books and what is transmitted informally. When seen as the two ends of a continuum the concept of the two cultures is an efficient tool in investigations in cultures, because it can accommodate every case in which cultural elements of the Great Tradition have penetrated a culture of the Little Tradition and the other way around.

Much of man's capacity for creating culture has always centered on his prime concern: food. For humans die from starvation when fasting too long, risk their lives when eating the wrong foods and they are aware, in Jean Soler's words (8), that the food they ingest will become assimilated into their being, will become themselves.

His preoccupation with food makes it feasible to delineate the concept "Culture of Eating" (figure 1). After valid investigations it may well be possible also to pose the different specimina somewhere on a line between the Culture of Eating of the Great Tradition on the one end and the Culture of Eating of the Little Tradition on the other.

The different traits of a Culture of Eating have a bearing upon each other. The taxonomy of plants and animals depends simultaneously on man's knowledge of the way his body functions and of the effect the ingestion of different foods and drinks will have on his being. That taxonomy will also hinge on his ability to invent tools and recipes in order to turn raw material of vegetable or animal origin into digestable foods and drinks. That taxonomy will at the same time depend on the norms of perfection and orderliness he applies to the serving orders of foods. And last but not least will his taxonomy depend upon the rules

of food etiquette he invented so that the proper distances between people in different social positions are observed, proper respect is mutually displayed and the social significance of specific points in time demonstrated.

The interdependence between the single traits of a Culture of Eating is made visible in figure 1 by depicting them as segments of a circle: in the central point every segment touches upon all the others.

Since in the middle of the 19th century the sciences became more and more prestigious, scholarly interest in the Culture of Eating became more and more fragmented. With the help of newly discovered scientific methods and techniques scientists sought to discover new facts in the field of dietetics. And when they succeeded, they would formulate scientific rules for food preparation and scientific norms for serving foods and drinks (9) and try to disseminate those through schools of domestic economy and through the health care delivery system for mother and child.

Made their scholarly interest in science and their professional pre-occupation with promoting health by improved food habits scientists refrain from investigating the rationale behind actually practiced techniques of food preparation and rules for serving foods and drinks? Or made disdain for domestic and mainly female activities them neglectful? Or is Roland Barthes (10) perhaps right in supposing that for scholars the subject of food connotes triviality and guild, so that they turn to safer topics for inquiry? How that may be, the fact remains, that the Culture of Eating as such escaped scholarly interest. Only fragments became consciously articulated. Much never appeared in books of learning and was therefore never transmitted in institutions of learning. So when investigating the Culture of Eating and trying to pose the different specimens on the continuum between the Culture of Eating of the Great Tradition and that of the Little Tradition it can be hypothesized that most will find a place near the latter. On the other hand a comparative study of actual Cultures of Eating and related food intake may at least throw some light on the determining effect of assimilated elements of the Culture of Eating of the Great Tradition on actual food intake. Another kind of study will perhaps give an answer to the question what the assimilation of such elements does for the malleability of existing food habits.

# CULTURE OF EATING

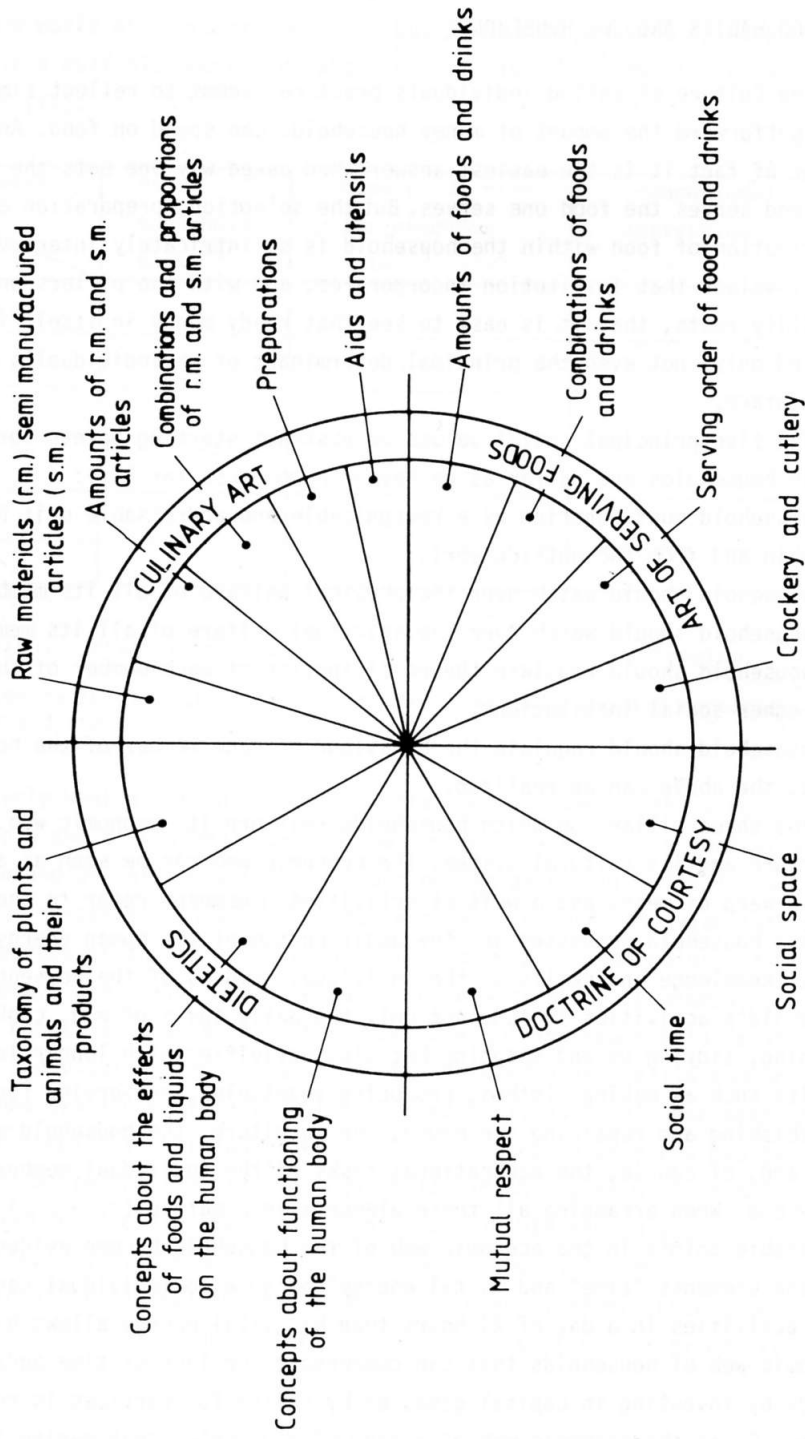


FIGURE 1. Model of the Culture of Eating

## 5. FOOD HABITS AND THE HOUSEHOLD

The Culture of Eating individuals practice, seems to reflect simply and straightforward the amount of money households can spend on food. And as a matter of fact it is the easiest answer when asked why one eats the food one eats and serves the food one serves. But the selection, preparation and distribution of food within the household is so intricately interwoven with the social values that institution incorporates, and with the pillars on which its viability rests, that it is easy to see that ready money in itself is not the one and only, not even the principal determinant of an individual's regular food intake.

The five principal social values or abstract starting points for behaviour within households are as far as we have discovered so far (11):

- a household must function as a recognizable and addressable unit both from within and from the outside world;
- a household should watch over the physical welfare of all its members;
- a household should watch over the spiritual welfare of all its members;
- a household should regulate the participation of each member of the household in other social institutions;
- a household should regulate the behaviour of each member of the household so that the above can be realized.

The three pillars on which households rest are its economic web, its social structure and its cultural system. The economic web can be seen as a fabric with a warp of means and a weft of activities. The means refer to the capital goods a household possesses and the addition sum of the human energy, time, money, knowledge and skills of the individual members of the household. The household's activities include not only the daily tasks of e.g. cooking, cleaning, tidying up and shopping but also activities with longer lasting results such as making clothes, producing vegetables, preserving foods, refurbishing and repairing the house, the furniture, the household appliances etc. and, of course, the occupational tasks of the individual members of the household. When arranging all these elements in a matrix (figure 2) the most vulnerable points in the economic web of the household become evident: these are the elements "time" and "vital energy" because no individual can squeeze more activities in a day of 24 hours than his vital energy allows him. The economic web of households that can compensate for lack of time and/or vital energy by investing in capital goods or by paying for services is relatively strong. So is the economic web of a kind of household, that manifests itself



to the outside world as a proper household but functions practically as a nucleus within a multiple household, whose nuclei live all under their own, separate roof (12).<sup>o)</sup>

warp \ weft	daily household tasks *)	home production for stock or sale **)	occupational activities
capital assets			
time			
vital energy			
money			
knowledge			
skill			

\*) e.g. cooking, serving foods, drinks and meals, tidying up, shopping

\*\*) e.g. making cloth(es), producing vegetables, refurbishing and repairing the house and its contents

Comparatively weak is on the other hand the economic web of the single-person household and of households, where one or two adults have to look after young children and/or infirm persons, who are not an asset but a liability to the household's resources "time" and "vital energy". Insofar the viability of a household depends on the strength of its economic web and the points "time" and "vital energy" are really weak, it makes sense when such a household sticks to its habits as long as possible because acquiring new habits implies spending time and vital energy on mastering new knowledge and skills and on training the new skills so often that they become truly habitual. Wariness on the part of households is perhaps especially to be expected when new habits relate to food: mastering and training new skills in this area will in all probability include spoiling certain amounts of valuable ingredients.

The foregoing discussion on the economic web of households makes it clear, that the sum total of capital assets, time, vital energy, money, knowledge and skills a household actually can muster is connected with the quality of its

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<sup>o)</sup> a "dispersed household" seems a suitable term for such a multiple household

social structure and its cultural system. As the workings of these relationships have still to be conceptualized we will not discuss that relationship now, but describe how the social structure of households may have a direct impact on the food habits of individuals.

The term "social structure of households" refers to the observable fact, that the interactions between the individual members of a household are not at random and unpredictable but follow a certain pattern so that one can speak of a network of structured relationships. In that metaphor stands a knot for a person and a line for the relationship that exists between two persons, so that the sum total of lines represents the social positions of the individual members of a household.

The social structure of a household can be highly hierarchical or deeply democratic (figure 3) or anywhere between these two extremes.

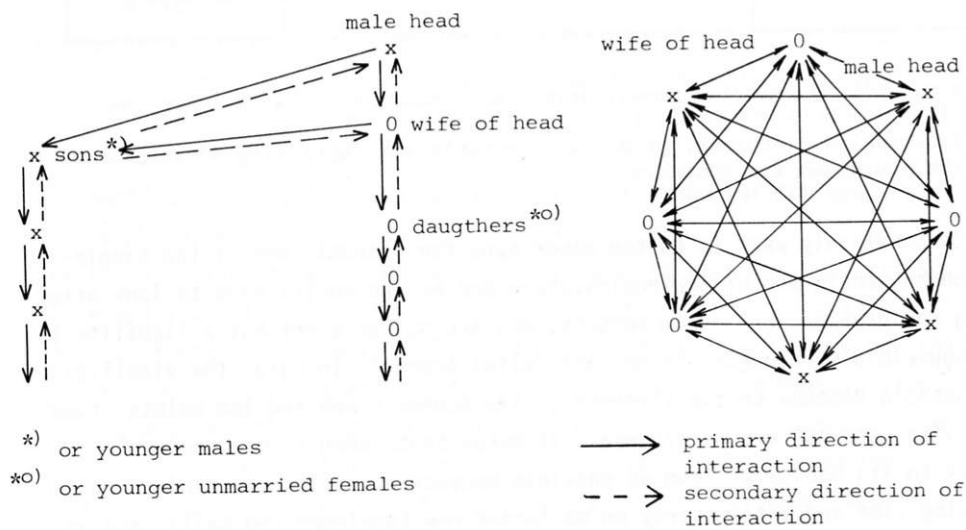


FIGURE 3. Two models of social structure for uncomplicated households of nuclear families.

A hierarchical structure as the one in the left diagram of figure 3 rests upon the social positions the society at large ascribes to individuals for the mere reason that they are related (by marriage or by blood) or unrelated, male or female, older or younger. Heads of household and their counterparts, who rely on these criteria for structuring the social relationships in their households may become wary when a younger member displays a greater amount of vital energy, knowledge and/or skills than they themselves possess. They may try to avoid that

risk by encouraging the younger one to engage into activities outside the household.

In the diagram on the right is so little scope for ascribed positions that it is very likely that in the course of time a social structure emerges that rests upon the individual characteristics and achievements of the members of the household. In order to safeguard in (nuclear) family households their ascribed positions as head and head's counterpart the incumbents of those positions may well encourage their offsprings to occupy themselves with activities outside the direct workings of the household such as education, vocational training, sports a.o. leisurely activities at the same time discouraging them to involve themselves into domestic affairs, the kinship network, and some prestigious domains outside the household (see figure 4). When in both types of household the heads and their counterparts succeed in safeguarding their own social positions by the means described, than it has to be hypothesized, that the food habits of the individual members in both types of households are almost exclusively determined by the couple at the top.

area assets	domestic domain	kinship network	education vocational training	occu- pation	public affairs	corporate affairs	sports a.o. leisurely activities
vital energy							
know- ledge							
skills							
time							

FIGURE 4. Matrix of individual assets and areas of activity.

The malleability of the food habits of the individual members of these households will then depend upon the individual characteristics of head and counterpart. In (family-) households, where the different positions in the network of structured relationships are determined by a judicious mixture of ascription and achievement, the individual members may well have more and better opportunities to make their food needs and -wishes felt. In other words

the malleability of food habits rests here on the interaction between all members of the household.

## 6. PEER GROUP AND FOOD HABITS

In the preceding paragraph it is implicitly taken for granted, that all individuals consume all their food within the confines of their households. That is of course not true. Many persons are on weekdays obliged to take at least one meal when out of doors and others do that now and again out of choice. When these persons are on their own when eating, it may well be that the food they eat fits into the Culture of Eating of their household. It is differently for those, who are in the habit of joining a group of peers over their out-of-door meals. Such a group will in all probability develop its own "Culture of Eating". This might signify that the members of that peer group get into the habit of supplementing their packed lunch by buying an extra food item (e.g. a hot snack). And that might well cause some to throw part of their packed lunch in the dustbin or feed it to the birds. Dutch schoolchildren, for instance, seem sometimes to form the habit of throwing all the home-prepared sandwiches away and to lunch on the French fries they buy in the snackbar near their school. Tamminga (13), who mentioned these observations in his article "The Dutch Meal in the Mirror of Time", raised in this connection the pertinent question if the level of authoritarianism or of democracy within the family-group of those adults and children perhaps has a bearing on the Culture of Eating they develop within their peer group.

## 7. RESEARCH TECHNIQUES

Because it is an intrinsic element of habits that they are almost completely involuntary, an individual will have great difficulty in verbalizing his food habits. It will be even more difficult for him to tell exactly why he does as he does; much of the rationale behind his food habits is part and parcel of a Little Tradition and transmitted in informal processes of socialization. The Little Tradition has moreover little prestige in societies who pride themselves on their modern rational and scientific attitude. And last but not least an individual's age, sex and social position within his household seem to determine by and large the segments of the Culture of Eating of his social environment he knows best (14,15,16,17).

These circumstances make it necessary that the investigator matches his research technique with the specific difficulties he will encounter in eliciting the data he wants to collect. The familiar questionnaire will in many cases not be his best choice. Neither the open, one time, interview or the participant observation. He will often have to rely on the lesser known ethnographic methods, or adapt some specific techniques from psychology such as the repertory grid technique (18). Thouvenot (2) developed a method for large scale research on food habits, that seems an asset to our still meagre armoury of research techniques. Some of these methods will also be useful when investigation comparatively differences in the perception of specific foods between the general public on the one hand and nutritionists on the other. Such a comparative study will among others shed light on the question how much in the Culture of Eating of nutritionists does not belong to the Great Tradition of their training but to the Little Tradition of their childhood.

Apart from this indicate some results of a secondary analysis of data collected by the dietary history method (19,20) that it is worthwhile to improve upon that technique so that the collected data can be used simultaneously for estimating nutrient intake and for the study of food grammar. The latter term refers to the fact that foods and drinks and dishes are not used randomly in a meal, during the day, the week, the year but according to some rules. But because individuals will have the greatest difficulty in verbalizing the rules they apply, it seems the better course to analyse data from dietary histories for patterning and to distil from such an analysis tentatively the rules, people apparently follow. The investigator will afterwards of course test the rules he discovered on validity. But with the patterning he found he may as well go back to his respondents and ask them why they pattern their foods as they apparently do. That way he may get some ideas on their Culture of Eating and/or on the restrictions their household or peer-group poses on them in practising their ideal Culture of Eating.

## 8. CONCLUSION

In the first paragraph of this paper an operational definition of the abstract concept "food habits" is unfolded and subsequently linked with descriptive research. The same definition will no doubt be useful in analytic research. Because the quality of that type of research, too, depends on a

proper operational definition of the concept "food habits". But when analytic research has to uncover and to measure next the socio-cultural determinants of food habits, adequate conceptualization and hypothesizing with regard to the possible socio-cultural roots of existing habits has to be formulated. Thereupon proper operationalisation of the concepts has to follow. In this paper the last phase is omitted due to the state of the art in this area. But it is questionable a redoubtable challenge to every social scientist in the field. And it is hoped that the brief notes in paragraph 7 on appropriate research techniques will urge all the social scientists in the field to join forces in developing a real arsenal of those.

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