COMMITTEE V
The Human Food Chain

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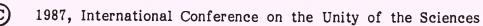
# NEWER PERSPECTIVES ON FOOD, CULTURE AND FOOD CONSUMPTION PATTERNS

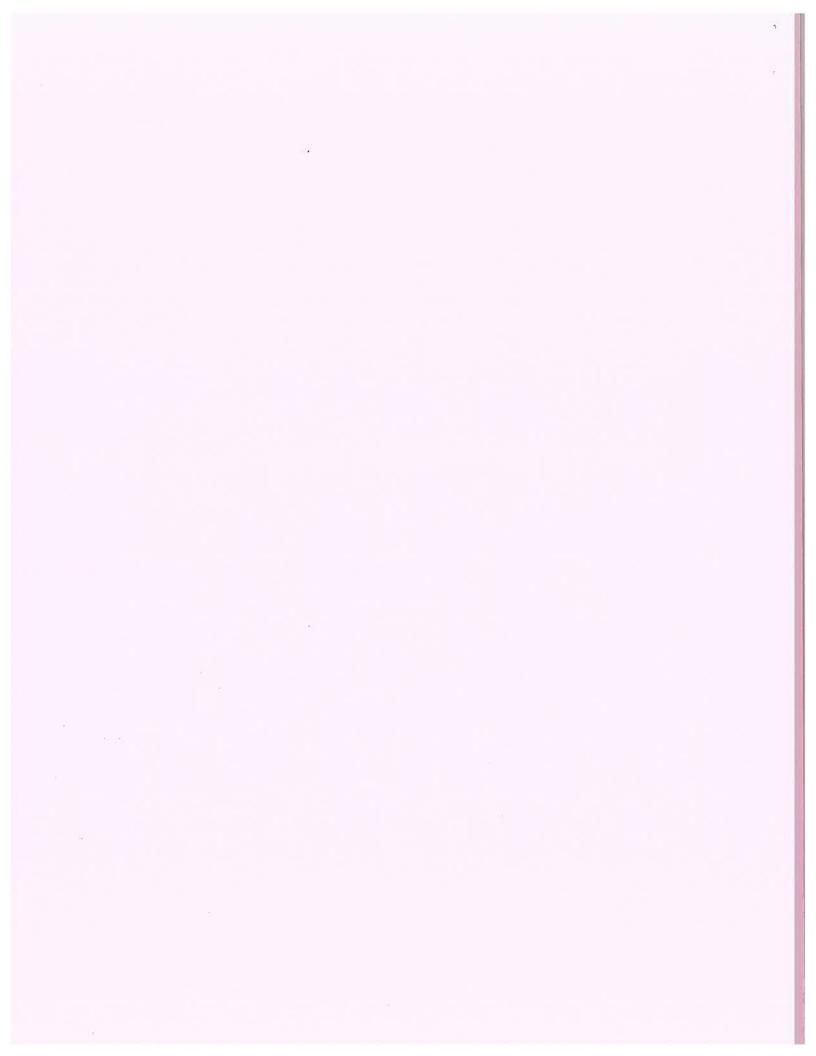
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### INTRODUCTION

At some point during the past 10 years, even the casual observer over the age of 35 must have remarked that dietary patterns and food consumption behaviors have changed significantly. These remarks would not have been limited to the world's metropolitan capitals but would embrace remote villages, small towns and isolated hamlets worldwide.

The continuing delocalization of food and foodstuff, and the relocation of people from south to north and from east to west (and the reverse) have fomented intercultural contact and its associated food exchange and dietary change. These changes could have a significant impact on how the food chain is perceived and described today. Today's food chain links continents and climates almost as quickly as yesterday's linked the plantation and pot. This rapid transit-preservation food system provides a type of homegeneity that Jack Goody (1982) has termed "industrial food". OBJECTIVES

This paper has three major objectives. First, to provide a critical overview of some anthroplogical perspectives on food and culture. Secondly, to re-examine one concept of culture and food use which limits our understanding of dietary change processes. And finally, to propose an alternative concept of the patterning of foods in the customary diet. The concept being proposed is not bound to time and space, and therefore has the advantage of capturing the patterning of diets worldwide. The theme of this paper is dietary persistence and change, its capture and measurement.

## FOOD AND CULTURE

Many anthropologists address food and nutrition issues through cultural frameworks and paradigms. Given the concept and definition of culture, that approach should be expected. An abbreviated definition of culture by Wuthnow and colleagues (1984) aptly captures why food per se has been inextricably linked to culture. "Culture", they state, "is the symbolic-expressive aspect of human behavior". Beginning with the earliest written records, anthropologists have depicted how food and culture interact in local environmental contexts to express social organization, beliefs, values and other aspects of living.1

Variants of the food-culture paradigm persist in the anthropological literature. For example, Mary Douglas (1966, 1972, 1984) and Claude Lévi-Strauss (1969, 1973, 1978) approach food as a self-contained system which can be analyzed to determine symbols, meanings, and structural components. Douglas and Lévi-Strauss search for thoughts and meanings encoded in the food system including its preparation (or transformed state), presentation, particularly sequence of presentation, and consumption. In other words, they recognize that for any cultural community, food use represents a coherent system of social relationships held together by symbols and codes. Structure and meaning in the food system can be determined and understood if appropriately decoded.

In her introduction to Kuper's book (1977:2), Douglas reasoned that the anthropologist's interest in food stems from food, the medium, itself. She explains that food is "an apt medium for purely social symbolism, from private hospitality to great ceremonial dramas". She is right. But food embodies much, much more than social symbolism. Its biological properties should never be overlooked.

Goody (1982) and Khare (1976) describe how the social symbolisms embedded in food are played out in two highly different societies. Goody claims that West African cuisine is not highly differentiated; as a result, symbolisms are few. Hierarchical structures exist but they are not as elaborate as described for India by Khare. Hindu rules of food exchange and food classifications are presented as extensions of the elaborate social organization and caste status in India.

Could it be that for West Africa the physiological functions of food outweigh the symbolic? It is possible that the exigencies of daily life mute the social symbolisms in West African cuisine.

Goody's notion that an entire society can be identified by its cuisine has parallels in the food as ethnic marker theme, the subject of current debate and a variant of the food-culture paradigm. Kalcik, and Goode and her colleagues promote this perspective in <a href="Ethnic and Regional Foodways">Ethnic and Regional Foodways</a> in the United States (Brown and Mussell, 1984). On the basis of their research, these authors assert that food is a powerful marker of ethnic identity for old and new ethnic groups in the United States.

However, their analytic strategies for arriving at this conclusion differ significantly. Kalcik refers to "food" and "foodways", as her unit of analysis, while Goode and her colleagues cite the "meal cycle" as their unit of analysis. For analytical purposes, the meal cycle of spatio-temporal units include the week, the weekend, the season, and the year (punctuated by regularly occurring feasts).

Ethnic identity, according to Goode and her colleagues, is more process than state since the food system is transmitted and reinforced through social interactions and social sanction at the community level. By contrast, Kalčik advances earlier suggestions that food is related to well-defined social boundaries.<sup>2</sup> This proposition

indicates more state than process. The specific "ethnic food" determines who is included or excluded from the group. However, an individual can consciously express his or her self-identity or choice to be "ethnic" by adopting or rejecting a "bounded" food. Social interplay matters little; transactions are few in Kalcik's scheme.

A less symbolic and more practical approach to food and culture deliberations was taken during the early 1940s in the United States. The need then was to study ethnic food habits so as to aid the war effort by facilitating changes in American food habits, if needed, as shortages occurred. Margaret Mead led the effort to combine scholarly pursuits with practical goals. She emphasized standardized, habitual food behaviors as an approach to study and document ethnic food habits in the United States of the early 1940s.

Mead defined food habits as "the culturally standardized set of behaviors in regard to food manifested by individuals who have been reared within a given cultural tradition. These behaviors are seen as systematically interrelated within other standardized behaviors in the same culture" (Mead, 1943:21). This definition leaves no room for innovation or for variation within the culture; also, it does not permit the influence of such external forces as information and technology transfer, diffusion of new ideas and products, reinterpretation of traditional ideas, and culture contact to modify the dietary behavior. It should be noted, however, that Mead's major concern, as stated later (Burgess and Dean, 1962:51), was to explain to non-anthropologists "the inclusive approach to the study of any cultural pattern - an approach which views any particular food habit as an inseparable part of the total pattern of living".

Cussler and DeGive (1952:20) were less restrictive in their definition of food habits. They acknowledged the reciprocal influence of ecology, including human

biology, on the food pattern. They asserted, however, that "the traditional and contemporary attitudes and values of the local culture" are more influential on the food pattern than ecological factors. "The local culture" they state "sifts and selects until only certain foods remain open to individual choice. These, too, are ranked more or less definitely until the final choice available for an individual's acceptance or rejection on the basis of individual experience is relatively limited, for often these experiences are themselves subconsciously colored by the common sentiment about certain foods."

The food selection process described by Cussler and DeGive was probably true for self-contained isolated communities and populations in which group consensus was absolutely necessary for individual survival. However, these conditions do not accurately capture the U.S. southern rural communities studied by them in the early 1940s. Moreover, there is an assumption here that "the local culture" is a homogenous entity with no variability within the group. It is hard to accept the proposition that households in those communities consistently ate from a common pot! Could the meagre resources of the communities account for the dietary homogeneity described by these authors?

#### FOOD, CULTURE AND DIETARY CHANGE

It has been generally accepted that limitations in the local environment often lead to individual experimentation and innovation. The literature on cultural adaptation provides numerous examples of innovation in situations which at first appeared to present few or no options (Alland, 1966;1970).

Case reports show how individuals in small-scale societies and cultural communities redefine and reinterpret traditional ideas and beliefs to achieve practical

goals. Thus, cultural beliefs and dietary ideology do change, although they do not necessarily change in the same way for the same individuals. Therefore, dietary behaviors should not be expected to match expressed beliefs, nor should uniformity be expected.

Montgomery (1978:43) underscored these points by advancing five principles or "shared general orientations" for studying food-related cultural variability. They are as follows:

- "(1) The recognition of the necessity to understand people in their own terms;
- (2) The maintenance of a healthy suspicion that what people say or believe bears no necessary relationship to what they do;
- (3) The recognition that much of "culture" or "cultural behavior" is expressed in nonverbal ways (e.g., gestures, postures, modes of dress, intricate dietary patterns);
- (4) The recognition that some of "culture" or "cultural behavior" is "unconscious", in that its existence, performance, or patterning is manifested within the actor's conscious or express awareness; and
- (5) The recognition that, in any group of people, significant variations among and within individuals with respect to both beliefs and actions are to be expected."

These "shared orientations" have been applied in a number of studies. Some are presented below. DeWalt and her colleagues (1980) demonstrated significant "micro" variations in food consumption patterns in a small economically marginal Mexican community. Variations in the dietary patterns were linked to small economic differences; however, the study's respondents had similar notions about "tastiness" and "healthiness" of dietary items, regardless of economic strata. In other words,

perceptions about what is good to eat based on sensory characteristics and health goals were not consistent with consumption patterns. Obviously, people made dietary compromises based on what they could afford.

Laderman's research (1983) on Malays in a rural east coast Malayan community provides another exemple of reinterpreting traditional dietary beliefs to achieve practical goals. She notes that

"the concept of behavioral flexibility in the face of ideology is not current in many discussions of food behavior. Although people have been recognized as practical and even clever in their social and cultural manipulations of other areas of their lives, they are often represented as rigidly following traditional dietary rules which may drastically limit the utilization of otherwise available foods, even though this may lead to malnutrition" (1983:3).

In describing how the precept of reinterpretation applies to Malay women, she notes that women invoke certain rules about the humoral system (viz. a cultural system categorizing foods, diseases and treatments as "heating" or "cooling" although these qualities may not be equivalent to thermal measurements) in order to break rules about food behaviors. That is to say, if a dietary behavior is shown to be inconsistent with general beliefs about the appropriate diet during the puerperium, a woman would cite another rule permitting the behavior under question. To illustrate her point, Laderman presented the results of a substudy which showed that less than one-fourth of her 38 respondents, residents of two hamlets in the parish she was studying, classified foods only as "hot" or "cold". The majority recognized a neutral category. Thus, this open neutral category within the humoral system makes the system less rigid and conveys greater flexibility to the majority of foods. Similar results concerning the relative openness of the humoral systems have been described

for a South Vietnamese population in Sydney, Australia (Mathers and Manderson, 1981), and for a Puerto Rican sample in New York City (Harwood, 1971).

Other modes of variation and change involve restructuring, reformatting, recreating and redefining. These processes in dietary persistence and change have been demonstrated in two ethnic urban communities in the United States. The studies reveal some interesting ways in which traditional dietary patterns persist within a fast-changing new environment. For Italian Americans in Philadelphia, Goode and her colleagues (1984a) noted community-shared rules about their food system which could not be easily observed at the level of the household.

The communities consisted of stable social networks of kin and friends established since childhood. The social networks maintained through the years also maintained the food system or food culture through weekly meals, holidays, and life cycle feasts. Menus were negotiated through these eating events, and meal cycles and formats could be maintained and elaborated. The authors emphasize the need to study the larger community system to understand how ethnicity and dietary continuity are played out within a fast changing environment.

In an ealier period in the United States, persistence in the dietary pattern could be observed at the household level. Jerome's research in a Black midwestern community in the mid 1960s showed that individuals enculturated in the Southern United States maintained aspects of the Southern food pattern on a daily basis in the new environment (Jerome, 1967). However, weekday meal formats were restructured in the new milieu to accommodate time consuming responsibilities outside of the home.

The centerpiece of the main meal in the weekday pattern determined its terminology. Thus, there emerged two dominant meal formats - "boiled dinners" and "fried dinners". These meal formats were alternated in the weekday pattern on the basis of time and money constraints. "Boiled dinners" of beans or greens (inexpensive plant foods) seasoned with meat scraps could be simmered slowly while laundering and ironing. "Fried dinners" of chicken or pork took little time but more money.

In terms of persistence and change in the new environment, it was shown that "fried dinners" were breakfast formats in the old environment transposed to the new environment as dinner formats. "Boiled dinners", the sole dinner format in the weekday cycle in the old environment, continued without much change. The alternating cycles of "frying days" and "boiling days" represented a functional adaptation to the new socioeconomic milieu.

This breakthrough study on dietary adaptation was the first to point to intracultural variation in inner city Black communities. Four lifestyle groups were identified. Each had its distinct pattern of eating which matched its lifestyle. The nutritional quality of the diet also varied with lifestyle.

Culture is dynamic. It is not static. Dietary patterns change in subtle or distinct ways as cultures change. The astute researcher should be able to detect how patterns persist over time and how they are modified with time and other stimuli.

## FOOD AND ECONOMIC ADVANCEMENT

It is instructive to examine reports describing dietary shortages and malnutrition in transitional communities. They call attention to the negative effects of urbanization, commercialization of agriculture and rapid expansion of the international food trade. As people move away from a subsistence to a cash economy

and rely on purchased foods, malnutrition increases. Effects of this type of economic transition have been well described.<sup>3</sup> Factors associated with poor nutritional status under these conditions include increased export of food crops, reduced crop diversity, destruction of wild food sources, loss of control in food production by small rural producers, over-dependency on imported foods, and absence of appropriately trained nutritionists in agricultural projects (Fleuret and Fleuret, 1983).

Women and children appear to bear a major portion of the burden in transitional economies. Often, shifts to purchased foods - wheat, rice, pre-packaged maize meal - are undertaken to ease the monotonous drudgery of laborious daily grain preparation - women's and children's work in most transitional societies. Local milling cooperatives appear to solve that problem.

In 1986, Botswana's Rural Industries Promotions won the first International Prize in Development Technology for developing a dehuller for sorghum. The mechanized dehuller has the potential for widespread use in semi-arid areas of Africa and Asia, and to reduce the drudgery of home food production. The award was organized by the International Centre for Peoples' Development in Genoa, Italy (Schmidt and Toomey, 1987).

The health hazards associated with moving from a subsistence to a cash economy can be reduced significantly if people continue to produce and use home-grown foods. For a large segment of the world's rural population, the burden of food production and preparation can be ameliorated through mechanization at the village and household levels.

Dewey (1981) suggests, also, that development planners should determine under what conditions a more progressive form of agricultural change can occur. "The

solution", she states, "is not to return to subsistence farming."

It should be possible to strike a balance to achieve self-sufficiency in modernized home food production in a cash economy. In that event, economic advancement will not cannote disruptive dietary change and adverse nutritional conditions for powerless people in the developing countries.

#### INDIVIDUAL SELECTIVITY

The concept, individual selectivity is based on ecological principles of human-environment interactions. Operationalized, individual selectivity depicts the contemporary diet as continuous patterning and re-patterning as the individual responds to the constantly changing social and food environment. Responses include access to new or different foods and modes of processing, restructuring traditional meal formats, non-access to traditional foods and modes of processing, acquired tastes, new styles of living, redefining, reinterpreting, and reformulating traditional ideology including food ideology, receiving and applying new information, entering into new transactions and social relationships, and experimenting with new ideologies including new food ideology. Continuity and change are at the core of this concept; not cultural retention.

## Sources of Variation in Food Selection and Consumption

Food selection and consumption patterns respond to a number of influences, including alterations in the food system; the physical, social, economic, cultural, and technological environment; and changes in consumer perceptions, behaviors and lifestyles. Research to elucidate sources of variation in people's food selection and consumption patterns has led to a variety of factors including economic perceptions; food value perceptions; convenience perceptions;

communication behavior perceptions; perceived health needs; perceived health perceptions; aesthetic-sensory perceptions; perceived symbolism (e.g. status, power, achievement, romance); perceived age differences; perceived status differences; perceived sex differences (Fewster and colleagues, 1973).

Essentially, these factors represent the "whys" of an individual's or population's food patterns since, when used appropriately, they help us to understand the rationale behind specific food consumption patterns, which includes dietary change. By extension, these factors also advances our understanding of intra-group and inter-individual variations in food selection and consumption.

## Dietary Patterning, Continuity and Change

If the reader recorded his or her food and beverage intake for one year and noted specific eating events, settings, and situations, analysis of these data should demonstrate five characteristics of dietary patterning and change: (1) food patterns are not fixed, but vary; (2) the varied patterns can be categorized as follows - (a) repetitive (b) varying widely in frequency-of-occurrence (c) varying widely in simplicity or complexity (d) varying in nutritional quality; (3) novel foods and nontraditional forms of basic foods and food products enter meal patterns at irregular intervals; (4) certain customary foods and beverages exit these patterns at irreglular intervals; and (5) patterns change as other changes occur in the food system (i.e., economy, the physical, social, cultural and technological environment). Moreover, they change as perceptions and lifestyles change. They may also change with mood. Of course, major alterations in health conditions will lead to changes in the dietary pattern.

Essentially, like two strands of thread, dietary patterning and dietary change are intertwined and continuous. Dietary change should therefore be viewed as continuous re-patterning.

The concept, individual selectivity, is directly related to the concept, continuous re-patterning - the process by which persistence and change occur in the dietary pattern. Individual selectivity occurs even in communal eating and situations and when food supplies are marginal.

People change their food consumption patterns without direct intervention by change agents, such as educators, clinicians and advertisers. All individuals respond to the social, cultural, technological and economic trends which catalyze changes in food consumption patterns. They adopt new foods and fooduse strategies, and modify certain traditional practices, while retaining others intact. Individuals change their food patterns as they change other aspects of their lives, with the emerging patterns often reflecting the individual's changing perceptions and styles of behavior.

#### Dietary Patterning: An Organizational Framework

To understand dietary patterning and dietary change as a continuous process, food consumption data can be organized according to consumption frequencies and patterns of recurrence in the overall diet. A framework for monitoring dietary patterning is presented in Table I. It depicts food consumption as a hierarchy of recurrence and frequency-of-use in a calendrical cycle.

The model's rationale is sound. The dominant dietary pattern of a society emerges from specific features of a macro food system but is shaped by cycles operant in that food system, and by selections from the available food supply.

TABLE I

DIETARY PATTERNING: AN ORGANIZATIONAL FRAMEWORK

Dietary Pattern Components

Property	CORE	SECONDARY	PERIPHERAL	CEREMONIAL	MARG! NAL
RECURRENCE	Constant	Constant	Constant	Constant	Inconstant
FREQUENCY- OF-USE	Very High	Moderately High	Moderately Low	Very Low	Very Low
CALENDRICAL	Nx/day or week	Nx/week	Nx/month	NxSear	Nx/year
Example	~2-3	8	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	~4 - 5	0.4-5

Foods and beverages are cycled into the pattern regularly or irregularly, constantly or inconstantly, depending upon season, calendar, and time of day. The pattern is also determined by two major selectors (factors), accessibility to the food supply, and acceptability of the food supplied.

Accessibility and acceptability are largely conditioned by three cycles operating in the food system. These cycles, SEASONAL, TEMPORAL, and CALENDRICAL, help to frame the "rules" which govern what is to be eaten or drunk by whom, with whom, when, where, how often, and in what sequence.

Although the cycles and "rules" may vary with the food system, the selectors (factors), accessibility and acceptability act as ultimate determinants of food patterns and the dietary pattern.

The food system, the basis of the dietary pattern, is structured within the larger economic system and develops in response to the specific physical and biological environments, level of technology, and socio-political and cultural milieu. Features of the food system are reflected in relevant cycles. The SEASONAL cycle reflects features of the physical and biological environments and levels of technology, and the CALENDRICAL and TEMPORAL cycles reflect the religious rituals and secular traditions of a society which are largely dictated by these cycles and by selections from the available food supply make up the dietary pattern depicted above (Jerome, 1982, 1986; Jerome and colleagues, 1983, 1984).

The dietary patterning model provides five domains or frequency-of-use categories for organizing the recurrence of food in the seasonal, temporal and calendrical cycles. It is based on the following observations on food acquisition.

selection, distribution, preparation and consumption:

- variations in dietary patterns stem from actions taken in selecting foods
   and beverages from the available food supply;
- two major selectors (factors), accessibility and acceptability, determine which foods and beverages in the food supply will be structured into the pattern;
- accessibility is largely conditioned by seasonal, temporal and calendrical
   cycles operating in the food system;
- acceptability, by contrast, is largely conditioned by operant psychophysiological conditions and the individual's sociocultural milieu;
- food-beverage items within an individual's or group's dietary pattern can
  be depicted according to the hierarchy of recurrence in the annual cycle
   constant and very high (CORE); constant by moderately low
  (PERIPHERAL); constant and very low (CEREMONIAL) and inconstant
  by very low (MARGINAL);
- novel foods and beverages and non traditional forms of basic foods and food products deemed acceptable enter and <u>expand</u> the pattern at irregular intervals;
- food and beverage items move from one frequency category to another
  at irregular intervals through an informal exchange system involving the
  process of SUBSTITUTION;
- the selectors, accessibility and acceptability, determine expansion and substitution;

- some food and beverage items structured into the pattern but no longer
   accessible or acceptable are also ejected at irregular intervals;
- qualitative changes in the dietary pattern can be measured by determining the process or processes - EXPANSION, SUBSTITUTION of EJECTION - involved in the change;
- food and nutrient components vary with the dietary pattern.

The dietary patterning approach and the framework can be used to elucidate dietary change since, as implied above, dietary patterning and dietary change (or re-patterning) are integrated and continuous processes. Dietary change is really a re-patterning process and should be viewed as such. Consequently, the model is sensitive to measuring both persistence and change.

The acquisition, selection, and consumption links of the food chain are exceedingly complex due to the dynamics involved. The rapid transit-preservation food system linking far-flung continents adds to the complexity, despite "industrial foods". The model proposed here offers a strategy for capturing and organizing these complexities in order to clarify some of the issues concerning humans and their use of food.

## NOTES

- Cf. Jenks, 1900; Waugh 1916; Wissler, 1917; Powdermaker, 1932; Richards, 1932 and 1939; Firth, 1934; Malinowski, 1935; Fortes and Fortes, 1936; Richards and Widdowson, 1936; Benedict and Steggerda, 1937; Ashton, 1939.
- 2. Cf. Powdermaker, 1932; Douglas, 1972.
- Cf. Gross and Underwood, 1971; Weiss, 1980; Fleuret, 1980; Dewey, 1981; Bindon,
   1982; Harvey and Heywood, 1983.

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