



Social and cultural perspectives on hunger, appetite and satiety

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The aim of this review is to show how hunger, satiety and appetite can be seen as a central research subject for the social sciences, both as the locus where food consumption is bodily regulated and as the nexus where biology, social praxis and cultural meanings meet and are negotiated by the individual. The number of people developing overweight and obesity is increasing, as is the prevalence of eating disorders and weight preoccupation. These tendencies can be considered as expressions of a polarization of eating habits in modern societies, where lack of control or exaggerated control over eating are still more common phenomena. At the same time the tendencies may be seen as the result of a more general ambivalence in relation to food, which influences the experiences of hunger, satiety and appetite and their regulating effect on food consumption. *European Journal of Clinical Nutrition* (2000) 54, 473–478

Introduction

Statistical evidence documents that the percentage of populations defined as obese is increasing (WHO, 1998), as indeed is the occurrence of eating disorders and related risk behaviour (Nasser, 1997). Social scientists have seen these simultaneous tendencies as indicating a polarization of eating habits, in which not only lack of control or exaggerated control of eating (Counihan, 1999; Holm & Iversen, 1997), but also cyclical eating patterns in which individuals overeat and slim by turns (Lupton, 1996), are phenomena that appear to be occurring with increasing frequency. It has been argued that the analysis of the occurrence of obesity and eating disorders should be seen partly as a breakdown in the adaptation of human biology to its environment and partly as a cultural crisis (Fischler, 1980). Social and cultural influences upon food consumption and its changing patterns have been documented in recent years (Mennel *et al.*, 1992), but the activity and the experience of eating in everyday life have hardly been investigated (Jenkins, 1999). Hunger, satiety and appetite can be seen as a central field of research in this context, as the point at which biological factors, social practice and cultural meanings meet in the individual.

Nutritional research, based on the methods of the natural sciences, focusses on biological factors of appetite regulation measuring the intake of calories and genetically determined digestive and metabolic processes. It also includes more subjective bodily experiences that are recognized as influenced by cognitive and sensory factors (Blundell & King, 1996). Still, hunger, satiety and appetite are nevertheless primarily approached as an 'explanatory principle' that can be deduced from observations and measurements of a range of physiological processes, rather than approached as 'specific sensations' which accrue to the desire for food (this distinction is further elucidated in the work of Blundell & Rogers, 1991). To the

extent that sensations of appetite are investigated, they are measured by means of VAS-scores (visual analogue scores), which seek to provide a quantitative measure of subjective experiences of hunger, satiety and appetite in experimental studies.

In this paper it will be argued that the subjective experiences of hunger, satiety and appetite in a social scientific perspective need to be studied as an existential field in its own right. Integrated analyses of phenomenological and physiological aspects of digestion have been undertaken successfully (Leder, 1990), but a yet unexplored area of research is variations in individual conceptions of 'the inner body', seen as a semantic field that may exert a significant influence upon eating habits. Furthermore, it will be argued that the subjective experience of appetite in everyday life is embedded in and mediated by social interaction and social representations, as well as subjected to attempts at regulation by means of health education.

This has some methodological implications which will be touched upon at the end of this article. It will be argued that more qualitative methods are needed than have yet been attempted; when recognized, social and cognitive factors have so far been treated as comparable to physiological measurements in a quantitative way (see for example De Castro, 1996). Methods and analyses both need to conform to a hermeneutic paradigm. This means that results will not be immediately comparable to the results provided by scientists working within a positivist paradigm. This does not, however, imply that a social scientific approach is irrelevant to natural scientific nutritionists and vice versa. On the contrary, a mutual understanding ought to give both parties the opportunity to define more clearly the strengths and the limits of their own academic endeavour and, thereby, contribute to a better understanding of the phenomena of hunger, satiety and appetite on different levels.

Three analytical levels

Social scientists have analysed food and eating in different ways: as central to our experience of self and to the manner

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in which we live, and through our bodies (Lupton, 1996; Taylor, 1989); as a symbolic medium by means of which both the boundaries of social class, religious affiliation, gender and stage of life-cycle are expressed (Bourdieu, 1984; Douglas, 1975); and as a political field by means of which control of the body is established in the dieting behaviour of individuals as well as in the formulation of dietary recommendations (Turner, 1992; Crawford, 1984). In the following, these differences of approach are maintained. Social scientific studies of hunger, appetite and satiety and of ways of presenting and eating food that are related to the regulation of appetite are presented in a manner which distinguishes individual, social and political appetite as three analytically distinct levels. This distinction is inspired by the anthropologists Nancy Scheper-Hughes and Margaret Lock with respect to social scientific analyses of the individual, the social and the political body as three different levels of analysis (Scheper-Hughes & Lock, 1987). The presentation is by no means exhaustive. Neither will the analytical distinctions introduced here be stringently pursued, a fact which can partly be seen as a consequence of the interplay between factors on these different levels as observed in empirical settings.

The individual appetite

At the level of the individual body are studies of the fundamental and immediate experience of being a 'body-self'. Studies of appetite on this level include phenomenological analyses of the subjectively experienced and experiencing body in relation to food and eating.

The object of observation is somewhat different compared with the one in physiological studies, in so far as a number of the mechanisms and processes examined in physiological studies are not accessible to subjective experience. Physiology, on the other hand, is not irrelevant in the perspective of the individual appetite. Leder demonstrates in his analysis of the phenomenology of digestion that, by describing and conceptualizing parts and functions of the body, which are otherwise inaccessible to us, the natural sciences can clarify what he terms 'the structural correlates of our intentional capacities' (Leder, 1990). Even though the main purpose here is to demonstrate how subjective experience should be studied as embedded in different social and cultural contexts, Leder's correlation between physiology and phenomenology is useful in understanding the complex relationship between hunger, satiety and appetite as different modalities of bodily experiences.

Leder makes a point of distinguishing between what he terms the outer and the inner body. The outer body refers to the surface of the body, sense impressions registered by the body, the ability to move and to express reaction. As such, the outer body is the aspect of the body that is accessible to others and which enables interaction with the world to take place. The inner body, on the other hand, refers to the dimension of depth, which includes the organs of the digestive system, the respiratory, cardiovascular, urogenital and endocrine systems, as well as the spleen. According to Leder, the outer and the inner body are not only distinguished by their functions, corresponding to different physiological mechanisms, but also by the different manners in which they are perceived phenomenologically. Compared to the perception of the outer world, transmitted as sensory impressions of the surroundings by the five senses, perception of the inner body is characterized by

what is termed as qualitative reduction, spatial ambiguity and spatial and temporal discontinuity (Leder, 1990).

By qualitative reduction Leder means that inner perceptions tend to be vague and to be characterized by the reading of signals in a non-differentiated manner that greatly contrasts with the nuanced manner in which the sense impressions of the outer world are differentiated—what we see, hear, touch, taste or smell. According to Leder, reports of feeling full, having cramps, registering a feeling of biliousness or heartburn are approximately exhaustive descriptions of the sensory impressions of the inner body that are usually offered, and which it is possible to obtain by enquiry. While this can be queried (and I return to this point), it should be noted that the limited capacity to differentiate inner perceptions is thought to be due to the fact that these impressions are affect-laden. The more matter-of-fact manner in which the outer world is perceived rests upon the possibility of distinguishing the observer (or observers) and the observed, a state of affairs that is not available to perceptions of the inner body. For this reason, the latter are frequently equated with an emotional state, taking us as it does 'from the inside', the example of experienced unpleasantness in connection with stomach cramps being a case in point.

By spatial ambiguity is meant the poor capacity of inner perception to localize precisely what is experienced. For instance, many of the internal organs do not register sensations of pain, such sensations being frequently expressed and experienced in other parts of the body than the organ in which they originated. Hunger and thirst can also be experienced as a mixture of more precisely located sensations and as a more diffuse feeling in which the entire body is involved. Hunger, for instance, is not necessarily experienced only as an empty stomach. It can also manifest itself as a general feeling of heaviness or dizziness in the body, or as a feeling of longing in the mouth. As such, it is a complex combination of impressions and feelings which, despite the localized character of particular sensations, nevertheless involves the whole body in a somewhat ambiguous manner.

Finally, inner perception is characterized by spatio-temporal discontinuity. The process of digestion is characterized by Leder as presenting itself subjectively in the form of 'intermittent impressions in a shroud of absence'. While heartburn, insistent cramps and the need to defecate are consciously apprehended, most of the intricate digestive processes (enzymatic secretions, peristaltic waves, the diffusion and active transport of food particles) lie submerged in impenetrable silence (Leder, 1990). Causal factors are therefore likely to be conceived as opaque. For instance, it can be difficult to know whether pain in the stomach is due to hunger, stress or the possibility that one has earlier eaten something which one's body cannot tolerate.

The differences between outer and inner perception described here can be used to demonstrate qualitative differences in the perceptions of hunger, satiety and appetite, respectively. The experience of the latter is mediated through the outer body and is determined to a significant extent by sense impressions of particular kinds of food available in the outer world, rather than by sensations arising from the inner body. The dependence of appetite upon outer perceptions enables us to differentiate between a very wide range of nuances in regard to the appearance, smell and taste of food, while the ability to differentiate

inner perception seems to be severely limited in regard to the experiences of hunger and satiety.

There are, however, several instances in which the distinguishing characteristics of experiences of the outer and inner body need to be relativized. Generally speaking, there is a high degree of interdependence between the functions of the outer and the inner body. While the activities of the inner body are circumscribed and proceed automatically, the objects which are manipulated in this manner have already been selected, filtered and channelled through the surface of the body (Leder, 1990). On a purely functional level the inner and the outer body are closely related—outer perceptions, for instance, are often experienced as weakened by hunger and sharpened by the energy that food gives us. The relationship between the outer and inner body in relation to the subjective experience of hunger and appetite also appears to be a rather complex phenomenon. This is not addressed by Leder, but Lupton describes the subjective experience of hunger and appetite on the background of her own study as being partly simultaneously phenomena, hunger being experienced as ‘flavoured with feelings’ when our favourite food is cooked and the mouth begins to water. However, an appetite for certain kinds of food can also be experienced independently of the sensation of hunger, just as hunger can occur without being accompanied by any marked feeling of appetite. Loss of appetite is often related to feelings of anxiety, fear, grief or even of particular joy, excitement or the experience of falling in love. Although the loss of appetite in such emotional states can be such that the mere thought of food turns the stomach, it is possible at the same time to be aware of hunger as a gnawing sensation in the empty stomach. It can also occur that hunger is strongly felt and, if it is not satisfied, can give rise to such emotions as anxiety, irritation and anger (Lupton, 1996).

Furthermore, several recent studies can be interpreted as giving evidence that inner perceptions are increasingly subjected to semantic reflection. For many people, the experience of exercising a control of appetite, or of lacking such control, appears to be closely related to their self-feeling and self-understanding. According to the sociologist of food, C Fischler, food is a source of anxiety on an existential level—for both vital and symbolic reasons—because what we eat becomes part of us. We literally incorporate food when it crosses the border between what is outside the body and what belongs to the body itself (Fischler, 1988a). The above-mentioned study by Lupton seems to indicate that this universal tendency to existential anxiety is currently intensified in the Western world, in so far as her study demonstrates that feelings of alienation and separation from the body that are diagnosed as abnormal conditions are not exclusive to people suffering from eating disorders. Many people, who can be described as normal eaters, have similar although less intense experiences. When they find that they are unable to control their desire for favourite foods and adopt a slimming diet, they experience guilt, shame, frustration and self-disgust (Lupton, 1996).

Such feelings should not exclusively be seen as related to the physical body, but also as related to the body as representation. It is characteristic for instance that the perception of ‘disgusting food’, which many these days associate with fatty foods, is also food which is seen as making one’s body disgusting, and which in turn for many people is represented by an obese body. For this reason it is

interesting that Leder, inspired by the phenomenologist Merleau-Ponty, points out that intersubjectivity is of decisive importance for our self-experience. The consciousness of the body arises through the experience of our fellow creatures as embodied, and through the awareness of their gaze upon our own bodies. For obvious reasons the gaze of the other is primarily directed towards the outward appearance of the body, its proportions and behaviour. As shown in Lupton’s study, awareness of this is related to the perception of the need to control the desires of the body. On this basis it would seem to be evident that hunger, appetite and satiety are experienced differently in different social contexts, depending on whether we are alone or with family, friends or strangers, or whether we feel secure in a particular social situation. This also implies that a satisfactory understanding of appetite must take account of the manner in which ways of eating and conceptions of body shape are related and influenced by social practice and cultural meaning. Although Leder’s philosophical and universal approach does not address this semantic dimension in relation to hunger, satiety and appetite, it should not necessarily be seen as contradicting his analysis. It may very well be that the qualitative reduction, ambiguity and discontinuity, which universally tend to characterize perceptions of the inner body according to Leder, are factors that render this area of experience a field of interpretation in a culture that increasingly reflects upon meanings of the body and food.

The social appetite

The level of the social body include studies of the body as a symbolic medium by means of which the boundaries of, for example, social class and gender are expressed. Theories of food culture and modernity make the point that the value of food and meals conceived as substance has generally decreased, while at the same time their symbolic value has increased. According to Roland Barthes, the associative meanings of food and meals have expanded in the course of modernization, as seen in the fact that its value as a sign has been attributed more importance than its nutritional value. Whereas formerly food was employed as a marker of an occasion for celebration, it is now employed as a sign in diverse social contexts including work situations, sport, personal achievement and leisure. In this respect the activity of eating has increasingly obtained the character of transcending and substituting its primary objective, being employed to summarily indicate and signal the character of other activities (Barthes, 1979).

In his classical analysis of the ‘civilized’ meal, the sociologist Georg Simmel has already shown how such a meal is characterized by prohibitions and rules which aim to elevate it above the levels of the ‘physiologically primitive’ and the ‘inevitably common’ to a level of social significance. The natural character of eating is conquered by the introduction of recurrent patterns and aesthetic demands to the meal, as well as a wide range of prescriptions and proscriptions regarding when, how and what should be eaten (Simmel, 1993). In this manner, the ability to control the appetite during meals and between meals becomes one of the characteristics of being civilized and well-bred. The French sociologist, Bourdieu has analysed how such aesthetic characteristics of the meal, have importance attached to them in bourgeois eating habits and table manners in which deferred gratification, luxurious

items and advanced taste preferences have served to dissociate the bourgeois class from the working class and its preference for the functional, hedonistic and traditional meal. The 'habitus' of the bourgeois meal according to Bourdieu is founded on order, restraint and propriety, whereas that of the working class is characterized by a more natural, straightforward relationship to eating, and to eating one's fill (Bourdieu, 1984).

Bourdieu has also shown how different body schemata govern the physical activities of eating. A masculine manner of eating in certain milieu is seen as related to an ideal of the male body as being vigorous, big and strong with commanding and brutish needs, contrary to the feminine manner, according to which women are expected to set aside their own needs. In this respect, purely biological differences seem to be underlined and accentuated by means of expressed attitudes as well as gestures, posture and behaviour, which also serve to express individual positions and relations in the social world (Bourdieu, 1984). A recent study partly confirms this, documenting that men and women offer different reasons for terminating meals. In a survey of a student population in the United States both men and women stated that they stop eating when they are full, but 55% also offered additional reasons for terminating a meal. Women mainly tended to mention hedonistic reasons such as the fact that they stop eating when the food no longer tastes good, while men more often referred to external conditions such as the fact that there is no more food left (Zylan, 1996).

Fischler has likewise pointed out that the selection and eating of food cannot be understood by exclusively employing such parameters of nutritional science as physical needs, perceptual and cognitive factors (seen as independent of social praxis and cultural meaning), and the nutritional value and sensory qualities of foods. Culturally specific food preferences, social class, gender and age must also be taken into consideration (Fischler, 1988a). Furthermore, the distinction between biological and cultural factors, according to Fischler, is more theoretical than real, in so far as social rules and cultural meanings concerning food are internalized and inscribed in our taste preferences and in the metabolic processes as these occur in the organism (Fischler, 1980, 1988b), and thus also in the regulation of appetite. The views of the Swedish sociologist, Sten Andersson, are particularly interesting in this context, not least his description of the manner in which feelings of satiety are related to sex differences and to the food preferences related to social class. While a lighter feeling of satiation, according to Andersson, is associated with a modern, effective lifestyle, with femininity and liberation, a heavier feeling is associated with a more traditional lifestyle, and also with hard physical work and with masculinity (Andersson, 1980). In this way our social life seems to be deeply integrated and internalized in what is often treated as and considered to be referring to registrations of pure physiological mechanisms and processes.

The appetite has also been associated with the symbolic characteristics of the outer body. Lupton has provided a cultural historical perspective upon the manner in which greediness and power were earlier associated with the overweight male body, commanding and inspiring fear, while the overweight female body was associated with softness, passivity and helplessness, suggesting the need to be cared for (Lupton, 1996). On the other hand, the

symbolic characteristics of the obese male body seem to have undergone radical changes. Rather than inspiring awe, the middle-aged man with a potbelly symbolizes a loss of youth and status in many social contexts today, which does not invite respect. What is more important, in regard to both men and women, the obese body today tends to be seen as the uncontrolled body, inability to control the appetite being understood as synonymous with an inability to control oneself, while the slender body is associated with control and rationality (Glassner, 1989).

Even if studies of food and eating at the social level rarely focus on hunger, satiety and appetite in the same specific way as studies at the individual level, they are relevant to the understanding of the subjective experience of appetite. By emphasizing the importance of a broader contextual understanding, studies at the social level show the interconnectedness between bodily experiences of appetite, social practice and cultural meaning. However, to understand how the experience and practice of body and eating are changing, the interactionistic and symbolic approaches presented above do not yield sufficient explanations. To account for a more diachronic perspective one has also to consider how body and food, besides being embedded in social reality, are subjected to scientific investigation and political intervention.

The political appetite

At this third level of analysis, the *political body* refers to the analysis of regulation, supervision and control of bodies (individual or collective) in regard to reproduction, sexuality, work and leisure, and in regard to disease, forms of deviation among people or differences between them.

Inspired by the French philosopher, Michel Foucault, the sociologist Brian S Turner has studied the introduction of regulatory diets, and their strong moral connotations, as from the mid-18th century. Obesity, in particular, became associated with moral deviation, an understanding which, in contradistinction to today, especially affected the wealthier classes who enjoyed a lazy and luxurious life. The cause of overweight was ascribed to the rare delicacies, the rich food and the fine wines, which were seen as arousing the appetite and stirring the senses and the passions to lust and pleasure. The great dietitian of that time, George Cheyne, therefore dissuaded his clients from eating meals that were particularly well prepared (Turner, 1992).

In our own century appetite is not only seen as problematic for the prosperous, but has become an issue in the overall health promotion addressed by nutritional and dietary recommendations. An analysis of nutritional recommendations in Denmark, 1936–1986, shows how the role of appetite has changed in nutritional information to the public. In the immediate post-war period appetite was conceived as a mechanism that set natural limits to the quantities of food which the organism needs to consume, whereas dietary calculations of a recommended daily food intake are introduced in the early 1960s, as a principle for estimating a proper regulation of consumption. By means of diagrams the recommended quantities (measured in grams) for people in different age-groups are illustrated for different types of foods. So long as the food plan was followed, there was therefore no need to be aware of one's own feelings of hunger and satiation (Christensen, 1998).

Although, nutritional education represents a glaring contrast to the abundant supplies of cheap and delicious

foods on the market today, it does not seem to run counter to contemporary cultural assumptions. Paradoxically, the purpose of the contemporary diet of consumer society can be seen as the provision of pleasure—the maintenance of life in order to increase enjoyment (Featherstone, 1982). The idea has been put forward in this context that food culture is characterized by ambivalence, in so far as anxiety and insecurity are aroused by new and often contradictory messages concerning the relationships between food, the body and health (Crawford, 1984). In this light, food culture can be seen as an area of contradictory desires—the desire to be rational, self-controlled and self-disciplined in respect to food and, at the same time, the desire to be impulsive, to express feelings, to be true to and to forget oneself. It would seem that for many people, pursuit of the latter desire means eating food which is unhealthy and which nevertheless gives pleasure of a kind. As such, the body is conceptualized both as a source of hedonistic pleasure and indulgence, and as a location of moral and aesthetic ideals (Taylor, 1989).

Furthermore, the purpose of dietary regimes has changed, according to Turner, from mainly having been inspired by religious ideals of achieving inner purification by means of fasting, to now being inspired by ideas of prevention of disease and aesthetic ideals concerned with beautifying and embellishing the outer body. As a consequence, self-discipline, which was formerly rewarded by God's blessing, is now rewarded by health and beauty. This idealization of the body can be seen as an expression of the fact that our self-understanding is anchored in a conception of the body rather than the soul (Turner, 1992). In this context, the body has been described as a project that is continually being realized, one in which food choice is considered in the light of ideals of body size and body shape as well as ideals of physical health (Featherstone, 1982). In this respect, food has become one of the means employed to modulate the 'bodyself' (Lupton, 1996).

These tendencies can already be seen in the messages of Danish nutritional health education at the start of the 1960s, when aesthetic arguments regarding the body were related to issues of health. At that point in time, nutritional education began to address aesthetic issues as well as health issues and the relationship between these areas of concern (Christensen, 1998). This kind of policy has, together with fashion and lifestyle, been interpreted as one which is oppressive to women. The female body has been analysed as a body that has been rendered adaptable, one whose strength and energies are seen as adapted to external regulation, subjugation, transformation and 'improvement' by means of the demanding and normalizing disciplines of the slimming diet, cosmetic treatments, make-up and forms of dressing. By these means women are thought to have been rendered less oriented to social needs and more focussed upon self-modification. Inspired by Michel Foucault, the feminist Susan R Bordo analyses these developments as a specific type of repression, which is exerted in the disguise of self-realization (Bordo, 1990).

Studies on the political level critically analyse how hunger, satiety and appetite are directly and indirectly influenced by structural power through medical and aesthetic discourses. It should, however, be mentioned that these discourses rarely have uniform effects on the individual level. There exists a wide range of discourses at the present time offering competing conceptions of the body and of dietary regimes (Turner, 1992). Sobal makes a case

in point when analysing how individuals and groups attempt to reframe fatness as an explicit political issue rather than a moral or medical issue. Anti-diet movements have emerged in opposition to the predominant medical model-based intervention for weight control (Sobal, 1995). In general food and eating have become objects of reflection in our lives to an increasing extent. We are confronted and tempted by food in more and more forms and contexts, not only due to its increased accessibility, but also by means of health education and advertising commercials in which food consumption is linked to health, fashion and lifestyle and thereby to individual identity.

Future tasks

Although studies of the individual, social and political body employ different theoretical approaches and are based upon different canons of scientific procedure, the need to cross traditional disciplinary boundaries has been indicated. Schepers-Hughes and Lock points out that human feelings should be investigated on individual, social and political levels in so far as they are experienced both individually and collectively, are socially expressed through different symbolic representations and are regulated, disciplined and controlled by means of political, social and economic processes. In this respect feelings can be seen as a matrix of these three levels of analysis (Schepers-Hughes & Lock, 1987). Likewise in the case of hunger, satiety and appetite the task of future research will be to obtain a more adequate understanding of the intricate connections and relations between the conditions and meanings which have been briefly reviewed here—how they are perceived, understood, negotiated and translated into activities undertaken by the individual.

This is the ambition of an ongoing anthropological study which is being undertaken as part of an interdisciplinary project, embracing both physiological and socio-cultural aspects of appetite. Individual interviews about hunger, satiety and appetite will be carried out with a variety of people from different backgrounds and level of socio-economic privilege. Also informants with different body mass index and eating patterns will be represented. This selection of informants is made in order to achieve a high variation of accounts on appetite as a qualitative phenomenon. On the basis of the studies mentioned here it is expected that the subjective experience of hunger, satiety and appetite will be described and reflected upon in relation to different social contexts and to discourses on health, conceptions of the inner body, aesthetic of the outer body, food preferences, norms and conventions in social life. Narratives which revolve around specific practices and experiences with eating and drinking will be instigated. Informants will be asked to describe feelings and sensations related to satiety, hunger and appetite such as pride, shame, disgust and satisfaction in different social contexts, at different stages in their life- and body-story and in relation to nutritional recommendations. The results of this study are expected to contribute with greater knowledge and insight in the complex phenomenon of hunger, satiety and appetite as both structuring and structured by social life and individual agency.

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