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**A comparative analysis of the
influence of economic culture
on East and West German
consumers' subjective product
meanings**

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Preface

The present piece of research was inspired by a public discussion which took place in Denmark in the late Fall of 1991, when the Danish discount chain NETTO, which had opened shops in former East Germany, accused Danish food manufacturers of not adapting their products to the special needs of the East German consumer. Are or were East German consumers different from West German consumers, and do these differences, if they exist, warrant different marketing strategies in East and West Germany?

First answers to these questions were sought during a study tour in January 1992, which resulted in a case, *The market for food products in East Germany*, which has been used in teaching both students and food industry executives. The main impression from the study tour was that while it may be debatable whether the East German market calls for new product development, the differences in East and West German consumers' buying behaviour certainly seemed large enough to warrant different marketing strategies, especially regarding market communication. However, it seemed that basically all companies, Danish and otherwise, treated the East German market only as an extension of the West German market, to be served by the same marketing mix.

The study tour also resulted in the idea of carrying out the study described in the present paper. It was an idea which was developed spontaneously, not as part of a larger research programme. We were able to secure a little support from the fund for basic research of the Aarhus School of Business, and from project 14 of MAPP, for which we are thankful. The project could not have been carried out without the cooperation of MARTA - Marketing Transfer GmbH in Rostock, who conducted the data collection as part of an educational project. We would like to thank MARTA's director, Gisela Britt, and the whole MARTA team for their enthusiastic work with the project. We would also like to thank Sönke Albers and Karin Gedenk from the University of Kiel for providing logistic support for the Kiel part of the study. Finally, we would like to thank Ingo Scheidweiler for his help in analysing the laddering data.

Apart from its scientific merits, the study lends support to the impression from the study tour: that a major marketing opportunity has been missed in East Germany.

Executive Summary

1. Consumers in central planning economies have developed different skills from consumers in market economies: while the former have developed skills in locating products, the latter have developed skills in comparing and deciding between products. Even now, some of these differences probably remain.
2. In the food area, the former East Germany was characterized by a range of products that was quantitatively sufficient, but offered little variety and had low to medium quality. Products were sold at uniform prices in the whole country. Now, the variety and quality range of products is the same as in the West, and there are considerable price differences.
3. Differences between East and West German consumers were analysed by comparing samples of consumers in Kiel and Rostock. It was analysed how they perceive food products (frozen ready meals and cheese), and how they relate them to values (*means-end approach*).
4. While product perceptions are more focussed in the West and more fuzzy in the East, the basic perceptual dimensions are the same: they are based on concrete product attributes.
5. An analysis of the fundamental life values of East and West German consumers (using the *Schwartz value inventory*) showed that the East German sample scored higher on collectivistic values and the West German sample scored higher on individualistic values.
6. An analysis of how consumers link concrete product attributes (for frozen ready meals and for cheese) to fundamental life values showed that (1) there are slight differences in values, (2) West German respondents did get to the value level more quickly, (3) West German respondents started with more abstract attributes.
7. These differences indicate that East German consumers are, compared to West German consumers, at a lower level of *habitualization* of their shopping behaviour. While the purchase of food products in West Germany is to a large extent characterized by low involvement and inertia, the same purchases in East Germany seem to be characterized by high involvement and real decision-making.
8. These differences have implications for appropriate marketing communication. The West German food consumer will generally be difficult to influence, because s/he is not highly interested in the product, and communication therefore requires media and messages that attract attention, are based on peripheral (eg emotional) cues, and are highly repetitive. East German food consumers will be interested in the product and in information about the product, and communication should therefore be more informative, based on functional product attributes.

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Consumer behaviour on East European markets: A different consumer culture

East European markets are currently in a period of transition. The replacement of a central planning economy with a market economy has, to varying degrees, changed the environment in which economic decision-making takes place. This has an impact on, among other things, consumer behaviour.

Consumer behaviour in the central planning economies occurred under the conditions of a sellers' market. The supply of goods was centrally determined and only loosely related to consumers' needs and wants, although some market research did take place (K.G. Grunert, 1993; Naor, 1991). Many goods were in short supply, and those which were available did not usually offer many options to choose from. Most goods were on a low-to-medium quality level, and there were mostly only two or three variants to choose from, if any at all. Prices were uniform across outlets, and mirrored a politically determined distinction between basic and luxury goods. There was little use being made of market communication in form of advertising, in-store communication, or salespeople advice.

The academic analysis of consumer behaviour in East and West has mirrored this basic distinction. Wosinski (1989), in his model of consumer behaviour in a situation of shortages, concentrated on the various courses of action available to a consumer when a product is not available through the ordinary channels. This can be regarded as the opposite of the starting point of Western consumer behaviour models of the Engel, Blackwell and Miniard (1990) type, where the basic problem analysed is how to link needs and wants with the excessive choices available in the marketplace.

Eastern and Western consumers have therefore developed different skills in buying. Western buying behaviour skills aim at reducing information overload, narrowing down sets of choices, comparing multi-attribute alternatives, handling emotional buying appeals, and establishing congruence between own needs and wants, product stimuli in shopping environments, and the resources available to the individual. Eastern buying behaviour skills have aimed mostly at locating scarce goods.

Differences in buying skills are supplemented by differences in product meaning. Consumer behaviour differences between East and West are not merely a question of a time lag, where product life cycles would just be lagged by 20 years in the East as compared to the West. Due to mass communication and travelling, East European consumers have, to varying degrees, been exposed to Western goods long before they were widely available to them. There is numerous anecdotal evidence of how Western consumer goods have achieved symbolic meanings in the East which differ considerably from their meaning in the West: Hungarian consumers paying a premium for getting served beer in cans in a restaurant (if they are allowed to open them themselves); Albanian students, for the first time in Italy and invited to a good restaurant by their hosts, insisting on getting pizza and coke; stone-washed jeans as the almost ubiquitous uniform of East Germans after the fall of the wall.

Thus, in addition to differences in buying skills, there are differences in product meaning: differences in the way products are linked to motivating values in the mind of the consumer. These basic differences in skills and meaning may be called differences in *consumer culture*, which again would be a part of *economic culture*, ie, a community's shared expectations of what guides the management of economic resources, and how one's actions influence one's own as well as the common welfare. Differences in economic culture are based on the former differences in the economic and political systems.

With the rapid changes now going on also with regard to the environment in which consumer behaviour takes place, Eastern consumer culture is no longer functional with regard to the prevailing conditions. But well-established, possibly automated routines do not change quickly, and new skills are learned slowly. Product meanings which have attached high centrality to certain products will not change quickly either. There is thus good reason to believe that consumer behaviour in Eastern countries will remain different from consumer behaviour in Western countries for some time to come.

This has clear marketing implications. Marketing instruments and sets of marketing parameters appropriate for the West may not be appropriate for the East. Companies need a better understanding of Eastern consumer behaviour in order to be successful on these markets, and especially in order to remain successful after these markets have consolidated. The arrogance presently expressed by some Western companies, having an 'educating' attitude towards East European consumers, will be dysfunctional in the long run.

The aim of the study described in the following was to look at differences in East and West German consumers' product perceptions. A comparison of East and West German consumers, as an example of East/West differences, is interesting for a number of reasons beyond the general reasons just given. This will be elaborated in the next section. The product area chosen was food products. Food products are especially interesting, because they are, more than other consumer products, culturally dependent and carry central symbolic meanings (S.C. Grunert, 1993).

The case of East and West Germany

Normally, the effect of differences in economic culture would be difficult to distinguish from other cultural differences, which are not related to the economic and political systems, between the Eastern and Western countries. The case of Germany, however, allows a comparison where differences may be largely attributed to differences in economic culture. East and West Germany may to a certain extent be regarded as a joint cultural region with language, history etc. in common¹.

¹ The information in this section is based on expert interviews conducted with market researchers, producers, salespeople, and consumers in East Germany. This information was collected in January 1992 and updated in January 1993. See also K.G. Grunert (1993).

Supply of food products in the former GDR

Up to October 1, 1990, East Germany was an independent state, the *German Democratic Republic*, with an economic system based on a socialist planning economy. In the food sector, just as in all other sectors, the needs of the population were assessed and turned into a production plan for the whole economy. This production plan specified in detail who had to produce what in which quantities and with which inputs. The goods were then distributed to the population by a system of wholesalers and retail outlets, most of which were also government-owned.

The assessment of needs was partly based on desk research, but market research was carried out, too. The *Institut für Marktforschung* in Leipzig conducted surveys measuring consumer needs, the results of which served as input to the overall planning process. The employees of the institute felt, however, that their work did not have a large noticeable impact on the plan.

The central planning system led to a food supply which, in quantitative terms, was widely regarded as satisfactory. In comparison to the food supply in a typical Western economy, however, four main differences can be noted.

1. There was very little *variety*. Since competition of brands of products of the same kind was officially regarded as a waste of resources, there was usually only one product of a kind available. There was, for the consumer, therefore usually no need to make brand choices. Indeed, since brands as a means for identification and differentiation were not needed, there was little branding and comparatively many generic products. Also, since packaging did not have to be used as a means of differentiation, most packaging was, by Western standards, dull and simple.

2. There was also usually only one level of *quality*, ie, there was neither horizontal nor vertical differentiation. The system did not encourage quality improvements. The *Amt für Standardisierung und Meßwesen* had to certify all products before they were sold in the shops. Their certification system was some kind of quality grading, in which a certain threshold value had to be surpassed before a product was allowed to be sold. Production was thus geared to meeting this threshold, but, since quality *above* the threshold was not rewarded - and possibly punished, when it led to an output which was quantitatively less - products were generally of low-to-medium quality.

3. *Prices* differed considerably from prices in the West. First of all, there was no price variation at all - a given product would be sold at identical prices in all shops. Basic food products were heavily subsidised, and were correspondingly cheap. Items which were regarded as luxury items, eg, coffee and chocolate, were, by Western standards, vastly overpriced. Some East German top products, which went mostly into export, and some products imported from the West could be bought in the *Delikat* speciality shops at prices about two to three times the average level. In addition, Western products could be bought for Western currency in the *Intershops*. However, only those with relatives in the West normally had access to Western currency, and only in limited quantities. There was some possibility for exchange on the black market, but at an unfavourable rate.

4. A few product categories, like tropical fruits, were usually in *short supply*. This applied particularly to all commodities which could not be produced within the country, and thus, would have to be imported. This situation has led to the development of substitutes such as dried green tomatoes for candied lemon peel.

In the food sector, it was hence not so much the quantity as the quality and variety which could give concern. In other product categories, supply was considerably more scarce. This, together with the facts that basic living was relatively cheap and that most households had two incomes, resulted in considerable excess purchasing power and a high saving rate of, on average, 20%. There was no shortage of income in the GDR. The problem was spending. Some products were either unavailable or so prohibitively priced that only long-term saving made purchase possible, especially since consumer credit was unknown.

It seems that, during the last years of the GDR, product quality deteriorated in certain areas. The economic conditions enforced a production of larger quantities with lower inputs, resulting in incentives to reduce quality. Butter (with a reduced fat content) and beer are two frequently mentioned examples in the food sector.

Retailing before and after reunification

In the GDR, distribution went from the producers to a regional wholesaler, and from there to the retail outlets, most of which were part of two organisations: *Volkseigene Handelsorganisation (HO)*, and the consumer co-operatives Konsum. HO owned about 20.000 shops ranging from department stores to small outlets of 35 square metres, and served mostly the urban areas. Konsum, owning about 30.000 shops, served mainly the rural areas, and most of the shops were small. Since shops had only a distribution function, and had no aim to stimulate sales, most of them would have been regarded as boring by Western consumers.

After the monetary union came into being July 2, 1990, the retailing scene in East Germany has changed dramatically. More than half of the food retail shops have been closed. Most of the rest have been bought by West German chains. *Spar* has bought 2000 premises, *Tengelmann* 400, and *Edeka* about 350. In addition, many West German chains look for suitable new locations in East Germany, because many of the former East German shops are too small by Western standards, ie, under 100 square metres. Some chains, like *Aldi*, have therefore from the beginning decided to build new premises. Some discounters, like *Allkauf* and *Massa*, have erected temporary premises in the suburbs on parking lots and other unused space, covering temporary walls with a tent roof. Discounters, a retail form unknown in the former GDR, already account for 30% of the sales in the food area - more than in West Germany (20%). The total number of shops is expected to decline further, and it is the small shops which are expected to close. The average sales area is still considerably lower in the East (128 sq.mt.) than in the West (274 sq.mt.).

Adjusting for the differences in sales area, the assortment in East German supermarkets is now, at least on the surface, not noticeably different from West German ones. In the big outlets, all the speciality counters are there. The selection of deep frozen items is somewhat smaller than it would be in the West, whereas there is a larger choice of canned ready meals.

Changes in consumer behaviour

After decades with literally no variety of brands to choose from, the variety in East Germany is now in some respects larger than in the West. Most manufacturers, at least the West German ones, have gone into the East German market. Suddenly, the East Germans were confronted with the problem of having to make choices.

East Germans knew a lot of Western brands - in some areas, their brand awareness was actually higher than in West Germany (Wittek, 1991; see table 1). This brand awareness was mainly due to Western television, which they have been able to receive for many years. In addition, since the sixties, millions of parcels with gifts from friends and relatives in the West were received in East Germany, which helped building brand awareness especially in product categories like coffee and chocolate.

Table 1. Number of brands named spontaneously in East and West Germany for certain product categories

| product category | # of brands named | |
|------------------|-------------------|--------------|
| | East Germany | West Germany |
| sweets | 183 | 145 |
| soft drinks | 75 | 172 |
| shampoo | 114 | 142 |
| TV | 71 | 78 |
| audio cassettes | 39 | 77 |

Source: Wittek, 1991

After the monetary union, East German consumers thus were in the unique situation that they knew a lot of brands, but had no own experience with them. Now that the trial period is mainly over, consumer demand is levelling in on certain price categories, and brand preferences are slowly beginning to develop. Brand preferences have been developing most rapidly for coffee and chocolate, because of the previous experience with these products from the gift packages from West Germany.

The revival of Eastern products

Immediately after the monetary union came into effect, Eastern products basically disappeared from the shelves and were replaced by Western products. The official policy of producing more goods with less raw materials had ruined the image of Eastern products a long time before the political changes. The fact that Eastern products were sold at low bargain prices right before the monetary union, in order to free shelf space for Western products, did not help either.

Recently, however, East German products have been on their way back to the consumer. Experts estimate that between 15 and 30% of the stock in supermarkets is now of East German origin; in some product categories, like fresh meat and bakery products, the share is considerable.

rably higher. Most of them are relaunches, often backed by a Western partner. Various quality improvements have been enacted, and especially packaging has many times been redesigned.

There seems to be a considerable East-West difference concerning consumers' attitude towards and expectations about advertising. The attitude towards advertising is more positive in the East than in the West. People are not yet as overloaded with advertising as Western consumers typically are. The higher degree of problem-solving behaviour in the East, and the lack of product experience, brand loyalty, and product knowledge results in it being easier for advertisers to attract attention to their message in the East than in the West, but also that the expectations with regard to message content are different. It is, for example, expected that advertisements contain information about the product and its use, while life-style type advertising emphasising, eg, hedonism and enjoyment, is rejected.

Before describing our empirical study on differences in product perception between East and West Germany, we will present our theoretical framework, leading to a more precise formulation of our research questions.

Theory

We start by assuming that human behaviour can be explained by a cognitive paradigm, ie, by the interaction of comprehension processes, integration processes, and cognitive structure. Cognitive structure is the organisation of knowledge in human memory. Comprehension processes refer to how information in the environment is perceived, comprehended by retrieving information from cognitive structure, and stored, thus changing developing cognitive structure. Integration processes refer to the use of stored knowledge in determining behaviour and includes processes like the formation of evaluations, attitudes, and behavioural intentions (K.G. Grunert, 1990; Peter & Olson, 1993).

We further assume that cognitive structure can be conceived as a system of cognitive categories and their associations. Cognitive categories vary in level of abstraction; associations vary in strength. A cognitive category can be described as a classification of a class of objects which, for some purpose, are regarded as equivalent. Cognitive categories and their associations can be regarded as the result of life-long learning. We would therefore expect that differences in consumer culture are mirrored in people's system of cognitive categories and their associations.

If we conceive of cognitive categories ordered by their level of abstraction, we obtain a hierarchy of cognitive categories. The most concrete class of cognitive categories, when dealing with problems of consumer choice, may be called *product perceptions*. The most abstract type of cognitive categories are usually called values. We assume that consumer choice is motivated by the way product perceptions are linked to values in consumers' cognitive structures. The types of categories performing these links are at the core of marketers' interests. This view, named the means-end perspective, has been widely discussed in marketing recently (Gutman, 1982; Olson, 1989; Olson & Reynolds, 1983; Peter & Olson, 1993; Young & Feigin, 1975).

Product perceptions may be viewed as the result of a categorisation process: products which are perceived as similar are grouped into one category, resulting in a system of categories, or a *taxonomy*, of products. Categorisation is to a large extent goal-dependent (Gutman, 1982): products which are regarded as similar with respect to one goal may be regarded as different with regard to another (only for very basic stimuli do 'natural categories' exist, cf. Rosch, 1973). The way people categorise products will therefore mirror the way in which they relate products to goals and values. Also, the clearer consumers perceive the way in which products can be useful in attaining goals and values, the clearer the categorisation will be.

Values can be conceptualised as criteria used by individuals to select and justify their actions and to evaluate people and events, thus representing motivations. These criteria are assumed to differ in content as well as in the structural relations among these. This assumption hinges on the following formal characteristics and principal meaningful contents of values. Formally, values are characterised by the five main features (Schwartz & Bilsky, 1987): Values are (1) concepts or beliefs (2) about desirable end states or behaviours (3) that transcend specific situations, (4) guide the selection or evaluation of behaviour and events, and (5) are ordered by relative importance.

As noted, it is the basic premise of the means-end perspective that consumer choice is driven by the way in which product perceptions are related to values. Such links can be expressed as *means-end chains*, which are sequences of cognitive categories, ordered by level of abstraction, and linked by associations expressing causality or implication. It is usually assumed that the main intermediary links between product perceptions and values are *higher-order product attributes* and *consequences of product use* (functional or psychosocial). The set of chains linking a particular product to a set of values is also called this product's *subjective product meaning*. Particular links between a product and a value are also called *perceptual orientations* (Reynolds & Gutman, 1988).

We can now formulate the research questions guiding the present study more precisely:

RQ1: Which differences are there between East and West German consumers' subjective product meanings, as expressed in their product perceptions and in the way products are linked to consequences and values?

RQ2: Can these differences be related to basic differences in the values endorsed by East and West German consumers, and/or to differences in experience and involvement with the products?

Design of the study

The study was designed to measure product perceptions, values, and the ways perceptions are linked to values. The study was carried out with two groups of consumers in East and West Germany, using a number of food products as examples.

Samples

Given the exploratory nature of the study, the partial use of qualitative techniques, and resource constraints, it was attempted to find two small, but comparable samples of East and West German consumers. It was decided to run the study with consumers in the East German city Rostock (R) and the West German city Kiel (K). This ensures a reasonable degree of comparability. Both cities are in the Northern part of Germany, with a common cultural heritage. Both cities are of about equal size and about equal degree and type of industrialisation. Both cities have universities and cultural facilities normally available in regional centres. Kiel is the largest city in the state Schleswig-Holstein, while Rostock is the largest city in the state Mecklenburg-Vorpommern.

Comparability of the sample was further enhanced by using a quota plan specifying quota for sex, three age groups, and three educational groups.

In both cities, data collection was done in connection with supermarkets, four in each city, selected in such a way that different clienteles were reached. Shoppers were approached, and, upon agreement, led to a separate room where the data collection was carried out. Respondents received a 10 DM purchase coupon for the supermarket where the interview was carried out.

Sample sizes of about 80 were aimed at in both places. 85 interviews were completed in Rostock, and 70 in Kiel, both in June 1992. Total interview time varied from 30 to 70 minutes.

Overview of data collection process

The data collection process consisted of three different components: 1) similarity judgement tasks, 2) laddering tasks, and 3) a value questionnaire. In addition, demographic data were ascertained.

The laddering tasks and the similarity judgement task were carried out for two groups of food products: frozen food and cheese. The product groups were selected in co-operation with Danish food manufacturers and the Ministry of Agriculture of Mecklenburg-Vorpommern.

Similarity judgement tasks

For the product groups frozen food and cheese, respondents were asked to rate the perceived similarity of pairs of products. Perceived similarity is a commonly-employed measure for product perception and allows the derivation of perceptual spaces. It is used here in order to investigate whether product perceptions in K and R differ. Similarity was rated on a 9-point scale.

Seven cheese products were selected for this task. Selection was based on having a broad range of different cheeses, including cheeses which were typical Western products and hence new for consumers in R, and cheeses which were known in R before reunification, and which may be unfamiliar to consumers in K. The products chosen were: 1) Kraft "Scheibletten" (separately packaged slices), a product which has been on the Western market for decades, but where the convenience aspect is new to people in R, 2) "Rügener Bodejunge", a brie-type cheese manufactured in Mecklenburg-Vorpommern, 3) sheep cheese from Bulgaria, which has been available in R for a long time, 4) "Küstenland" cottage cheese, manufactured in Mecklenburg-Vorpommern, 5) Danish "Buko" cream cheese, a brand with high awareness in K, 6) "Roquefort" blue cheese, and 7) "Milkana" melting cheese, a traditional West German brand.

With regard to frozen products, it was assumed that perception of these could be analysed best in relationship to canned and fresh products. Hence, four frozen products, two canned products and two fresh products were used in this part of the study. The products selected were: 1) frozen fish fingers, a product which has been on the West German market for 30 years and is at the end of its life cycle there, 2) canned spaghetti, 3) fresh filet of fish, 4) canned goulash, 5) frozen spring roll, 6) fresh steak, 7) frozen, pre-seasoned chicken ("Feinschmecker-Hähnchen"), and 8) frozen lasagne.

Laddering task

Laddering is a qualitative, semi-structured technique for measuring consumers' means end chains (Asselbergs, 1989; Reynolds & Gutman, 1988; Valette-Florence & Rapacchi, 1991). It consists essentially of two parts. In the first part, concrete product attributes are elicited from consumers, which can be done by presenting triads, sorting cards, direct elicitation etc. Preferences for these attributes are then ascertained. In the second part, these preferred attributes are taken as the starting point for a number of questions of the type "why is it important for you that....". These questions have the aim to elicit relevant consequences associated with the preferred attributes, and subsequently values motivating the relevance of the consequences. Although methodologically not without problems (Grunert & Grunert, 1991; Gutman, 1991), laddering is widely used to ascertain how consumers link product perceptions to values.

As noted before, two types of products were laddered: frozen food and cheese. In each case, attribute elicitation was done by presenting triads. To this end, three products were physically present within each category. These were subsets of the products used in the similarity judgement task. For frozen food products, spring roll, fish fingers and pre-seasoned chicken were presented. For cheese, Buko cream cheese, Kraft "Scheibletten", and "Rügener Bodejunge" were presented.

The ladders were recorded on laddering schemes.

Value questionnaire

Table 2. Motivational domains of values

- *Self-direction* (SDI, individualistic domain):

The motivation for this value type is independent thought and action, derived from the organismic need for mastery and control through choosing, creating, and exploring, and interactional requirements of autonomy and independence. It means to be unconstrained by externally imposed limits.

- *Stimulation* (STI, individualistic domain):

Stimulation values are related to the need for variety in order to maintain an optimal level of activation and their motivational goals are excitement, novelty and challenge in life.

- *Hedonism* (HED, individualistic domain):

Closely related to stimulation, this value type is described as representing pleasure and sensuous gratification for oneself.

- *Achievement* (ACH, individualistic domain):

This domain is defined by the goal of personal success through demonstrating competence according to social standards and thereby obtaining social approval.

- *Power* (POW, individualistic domain):

The central goal of power values is the attainment of social status and prestige, control or dominance over people and resources.

- *Security* (SEC, individualistic and collectivist domain):

This motivational domain derives from basic individual and group requirements and represents the goal of safety, harmony, and stability of society, of relationships, and of self.

- *Conformity* (CON, collectivist domain):

Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations and norms, this is the defining goal of this value type.

- *Tradition* (TRA, collectivist domain):

The motivational goal of tradition values consists of respect, commitment, and acceptance of the customs and ideas that one's culture or religion impose on the individual.

- *Spirituality* (SPI, collectivist domain):

This domain should encompass all those values that represent the attainment of meaning in life and inner harmony through transcending everyday reality.

- *Benevolence* (BEN, collectivist domain):

Benevolence values are motivated by the goal to preserve and enhance the welfare of those people with whom one is in frequent personal contact.

- *Universalism* (UNI, individualistic and collectivist domain):

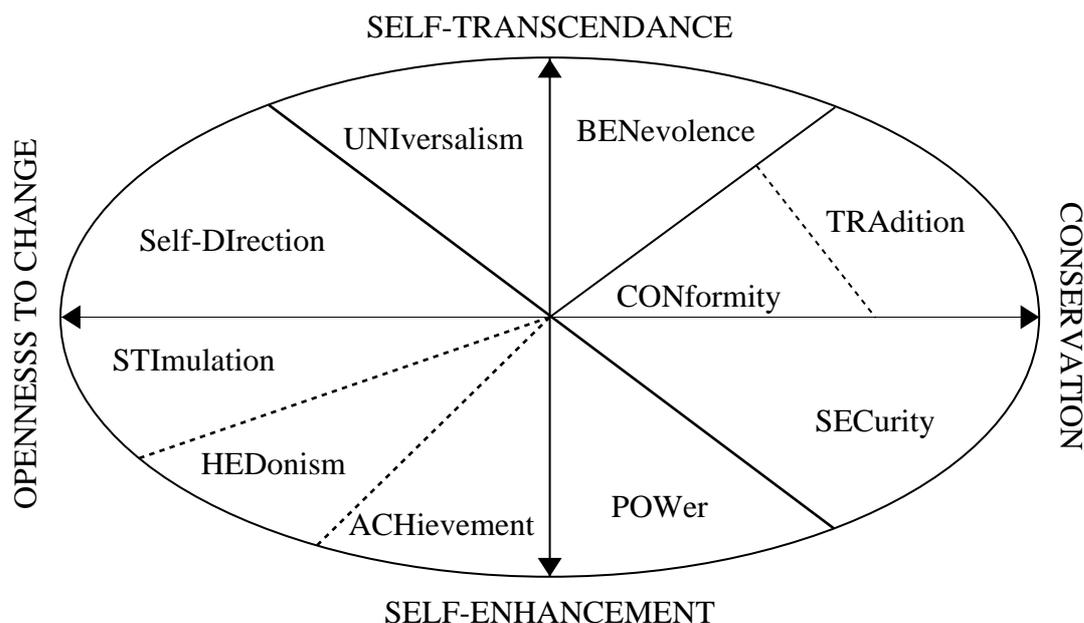
This domains' motivational goal consists of the understanding, appreciation, tolerance, and protection for the welfare of all people and nature.

The questionnaire consists of 56 values to be rated on an 8-point scale using the least-most method. These 56 values, according to the underlying theory, belong to eleven motivational domains (Schwartz, 1992). The theory also postulates that these domains are culturally universal in their content and structure. These domains express either an individualistic interest dimension, or a collectivist one, or both. The value domains were derived from the work of a number of researchers in social sciences (eg, Bandura, 1988; Berlyne, 1967; Deci & Ryan, 1985; Kluckhohn, 1951; Maslow, 1959; Scitovsky, 1976). The content of these different value types is briefly described in table 2.

The theory suggests that these eleven motivational domains are structured in a circular arrangement of regions emanating from a common origin with each region containing values from only one motivational domain. This is called a polar facet (Shye, 1985), graphically represented in a two-dimensional space as a circumplex structure (Borg, 1981), which is predicted when two or more of several elements in a qualitative facet are in conceptual opposition or compatibility, respectively, to each other. Figure 1 shows the hypothesised structural relations among the eleven value domains. The figure is meant to illustrate that adjacent value types are most compatible, whereas an increasing distance around the circular order indicates a decreasing compatibility and therefore an increasing conflict. Value types that emerge in opposing directions from the origin should be in greatest conflict (for more details see Schwartz, 1992). The eleven motivational domains are furthermore related to four higher-order value dimensions, namely *self-transcendence*, *conservation*, *self-enhancement*, and *openness to change*.

Results

Figure 1. Value domains and the structural relations among them



General results

As can be seen in table 3, the sample composition in terms of sex, education, age, size of household, and presence of main shoppers/cooks is very similar in the K and R samples.

Table 3. Distribution of sex, age, # of years education, # of persons in household, who shops, who cooks

| | male | female |
|---------|-------------|-------------|
| Rostock | 52 61.2% | 33 38.8% |
| Kiel | 44 62.9% | 26 37.1% |

| | Rostock mean - (SD) | Kiel mean - (SD) |
|---------------------------|------------------------|---------------------|
| age | 41.2 (15.0) | 39.6 (10.3) |
| # of years education | 10.3 (1.6) | 10.3 (1.9) |
| # of persons in household | 2.9 (1.1) | 2.3 (1.1) |

| | Rostock | Kiel |
|---|-------------|-------------|
| respondent is main shopper in family | 66 76.7% | 58 81.7% |
| respondent is main cook in family | 59 69.4% | 57 81.4% |

Product perception

As mentioned above, product perception was measured by ascertaining perceived pairwise similarity between food products. All possible pairs (21 for cheese, 28 for frozen food products) were rated. Initially, t-tests were performed to check for significant differences between similarity judgements in K and R. Table 4 gives an overview. Differences in similarity judgements were found mainly for the cheese study. Interestingly, all differences are in the same direction: respondents in R regard the two products as more similar than respondents in K. We may provisionally interpret this as evidence of K respondents having clearer perceptual categorisations of food products than respondents in R, at least for the cheese category.

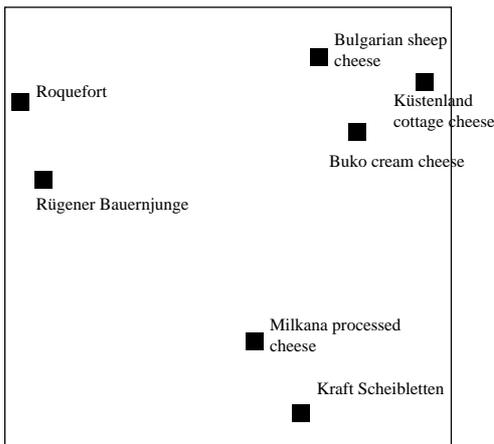
Table 4. Evaluation of similarity between food products

| | # of statements | # of significant differences | # greater similarity in Kiel | # greater similarity in Rostock |
|--------------------|-----------------|------------------------------|------------------------------|---------------------------------|
| general meal items | 28 | 2 | - | 2 |
| cheese | 21 | 10 | - | 10 |

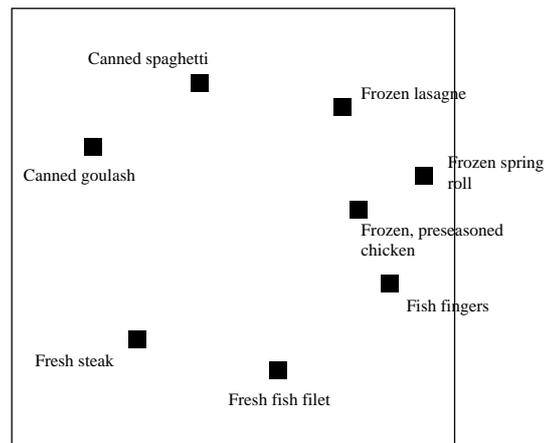
The mean similarity values for the K and R samples were subjected to a multidimensional scaling procedure (Kruskal loss function, monotonic regression). Satisfactory two-dimensional solutions were obtained in all four cases (stress values cheese: .003 in K, .016 in R; stress values frozen food: .092 in K, .070 in R). These configurations are shown in figure 2.

The configurations obtained are clearly similar in both samples, although the groupings are *Figure 2. Perceptual maps*

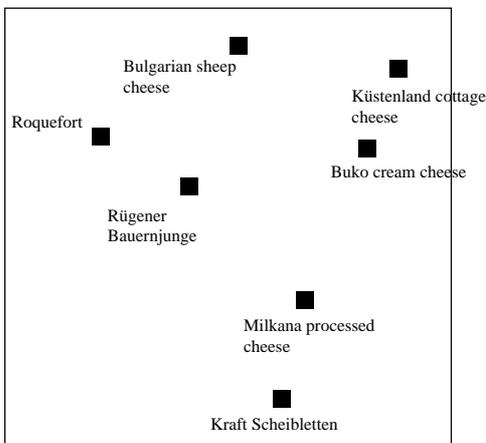
(a) cheese Kiel



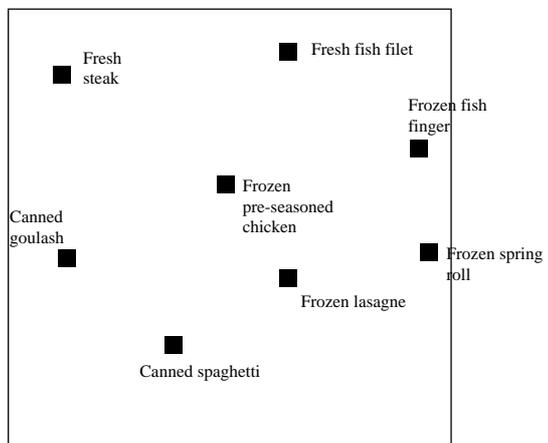
(c) frozen food Kiel



(b) cheese Rostock



(d) frozen food Rostock



clearer in the K sample. For cheese, three clusters can be distinguished in both configurations: the soft cutting cheeses (Roquefort, "Rügener Badejunge"), the processed cheeses (Milkana, Kraft "Scheibletten"), and the cream cheeses (Buko, cottage cheese, and Bulgarian sheep cheese). Computing correlations between the product co-ordinates in the two samples, .985 and .911 are obtained for the two dimensions.

The configurations for the frozen food items and their possible substitutes are similar as well, although the grouping is again clearer in the K sample. The configuration seems to follow a radix structure, with three adjacent segments representing frozen, canned, and fresh products, and four adjacent segments for meat, fish, pasta, and poultry, where the spring roll is in between pasta and poultry. Again, the product co-ordinates are highly correlated between the two samples: -.985 and .926.

Inspection of these configurations thus reinforces and extends the impression when analysing mean differences. K respondents have clearer perceptual groupings than R respondents. However, even though more fuzzy, the basic way of grouping the two groups of products is the same for R and for K respondents.

Since the groupings were derived from judgements of perceived similarity, we have no information on which characteristics respondents used in making their judgements. Perceptual categorisations of products may be based on physical product attributes, but also on product uses, consequences of product use, or even values attained by using the products (Gutman, 1982). The groupings found make it plausible, however, that they were predominantly based on physical product attributes. Physical product attributes, like soft versus hard, type of raw material, and degree of processing, can account for the cheese groupings. Likewise, raw material and degree and type of processing can account for the groupings in the frozen foods configuration.

One may speculate that these basic ways of grouping food products were probably present also in East German consumers before the advent of Western products. The prototypes of the groups found did exist also under the central planning system, although the variants within the groups were considerably fewer. New variants may have contributed to making the groupings more fuzzy. "Scheibletten" is a processed cheese, but comes in a sliced form, which is not quite in congruence with prototypical processed cheese. Frozen fish fingers are clearly a frozen fish product, but differ in terms of form and convenience.

When perceptual categorisations of products are based on physical product characteristics, similar categorisations may still go hand in hand with differences in product meaning when we come to higher levels of abstraction. We will now first look at the highest level of abstraction, namely possible differences in values. Afterwards we look at the link between products and values.

Values

The first step in analysing the values data is to check whether the internal structure of the data corresponds to the theoretically expected structure as explained above. When this structure can be reproduced, this indicates that the value measurement has been valid, and differences between samples can then be looked at.

The internal structure of the values data was analysed on the basis of a Pearson correlation matrix derived from the importance ratings of the 56 values by using smallest space analysis SSA with the Guttman-algorithm, which is appropriate for the structural analysis of similarity data (Davison, 1983). The two samples from Kiel and Rostock were pooled.

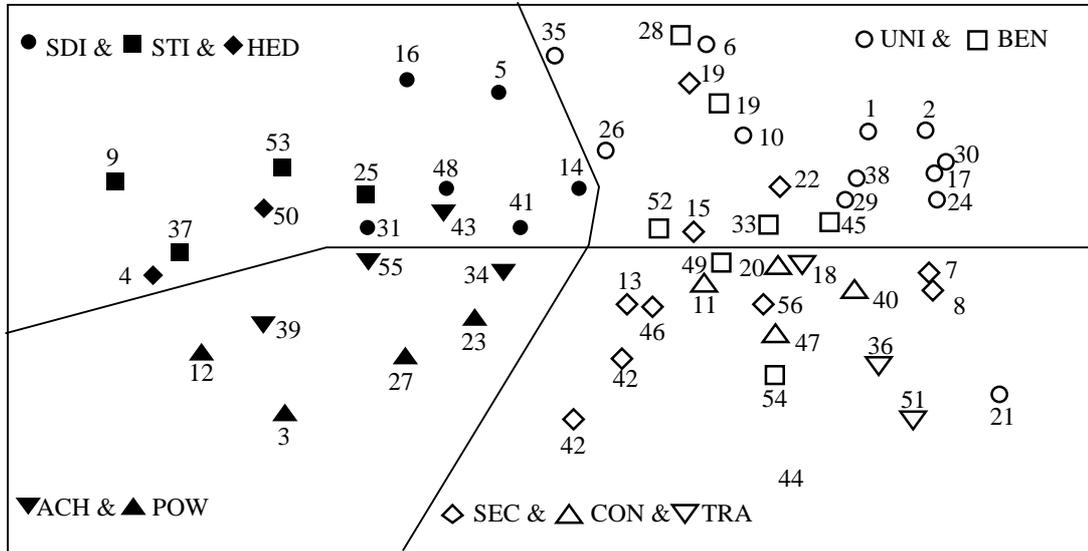
The emerging picture is interpreted by using a so-called configurational verification approach (Borg, 1981; Lingoes, 1981), that is by interpreting the configurations of substantively related points that emerge to form regions and the arrangement of these regions in space relative to each other. The content universe is conceived as a geometrical space in which the specific values are but a sample of all conceivable values comprising the total space with points everywhere, whereas the axes are not assumed to have substantive meaning as they are arbitrary. This implies that one might find some values at the edge of one region correlating less with other values of the same region than with certain values on the edge of a neighbouring region. Partition lines denoting regions may be straight or curved, as long as they yield regions having continuous boundaries that do not intersect with the boundaries of other regions. The centre is central in terms of content, not in terms of some abstract mathematical notion.

The motivational content of values is the most powerful principle in the organisation of individuals' value preferences, thus the organising effects of motivational content may be evident even in the projection of value points obtained with a two-dimensional solution. The first analysis step thus examined whether the points filling the two-dimensional space could be partitioned into distinct regions that reflect the a priori eleven motivational domains. At the same time, it can be checked whether the regions obtained form the suggested circumplex structure of compatible and conflicting value domains.

The results are shown in figure 3. Figure 3 displays the results of a two-dimensional SSA-solution (stress: 0.276), representing the hypothesised motivational domains of the 56 values, and, at the same time, the distinction between interests served by these values (filled for individualistic, opaque for collectivistic values). The results show a partial confirmation of the value content hypothesis. One motivational domain did not appear distinctively by forming its own region, namely spiritualism. This phenomenon has been observed in other studies, too (eg, S.C. Grunert & Juhl, 1991). Several of the values hypothesised to belong to the spiritualism domain were, however, found in the regions where they also might belong to. No clear distinct regions emerged for several other value types, but its values were intermixed with those of a type postulated to be adjacent. This holds for universalism and benevolence, security and conformity, as well as hedonism and stimulation. Although the value structure found does not separate the eleven regions as well as hypothesised, the order of the types around the circle and the basic oppositions and compatibilities, expressed in the higher-order dimensions of self-transcendence vs. self-enhancement (UNI, BEN vs. ACH, POW) and openness vs. conservation (STI, SDI vs.

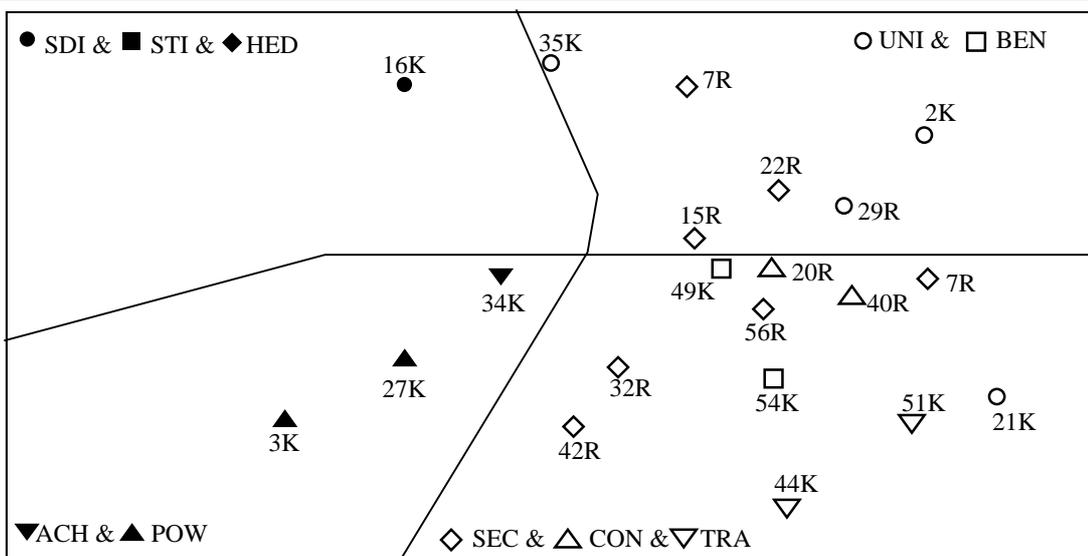
SEC, CON, TRA), are in accordance with theory. Moreover, the distinction between individualistic, collectivistic, and mixed interests of values showed up very clearly.

A discriminant analysis was carried out to investigate whether the endorsement of the 56 *Figure 3. Values and motivational domains for the pooled sample*



values can discriminate between K and R respondents. The one possible discriminant function was significant. The values with the highest positive and negative correlations with the discriminant function are shown in figure 4. Figure 4 is a reproduction of figure 3, but shows only those values which discriminate best between the K and the R samples. It is also shown in the figure whether the particular value is endorsed more in K or in R. People from Rostock tend to emphasise more collectivistic values belonging to the higher-order domain conservation, particularly SEC-values, while Kiel respondents seem to prefer more individualistic values. These differences are intuitively plausible. People having lived under a socialist system can be

Figure 4. Differences in importance of values between K and R respondents

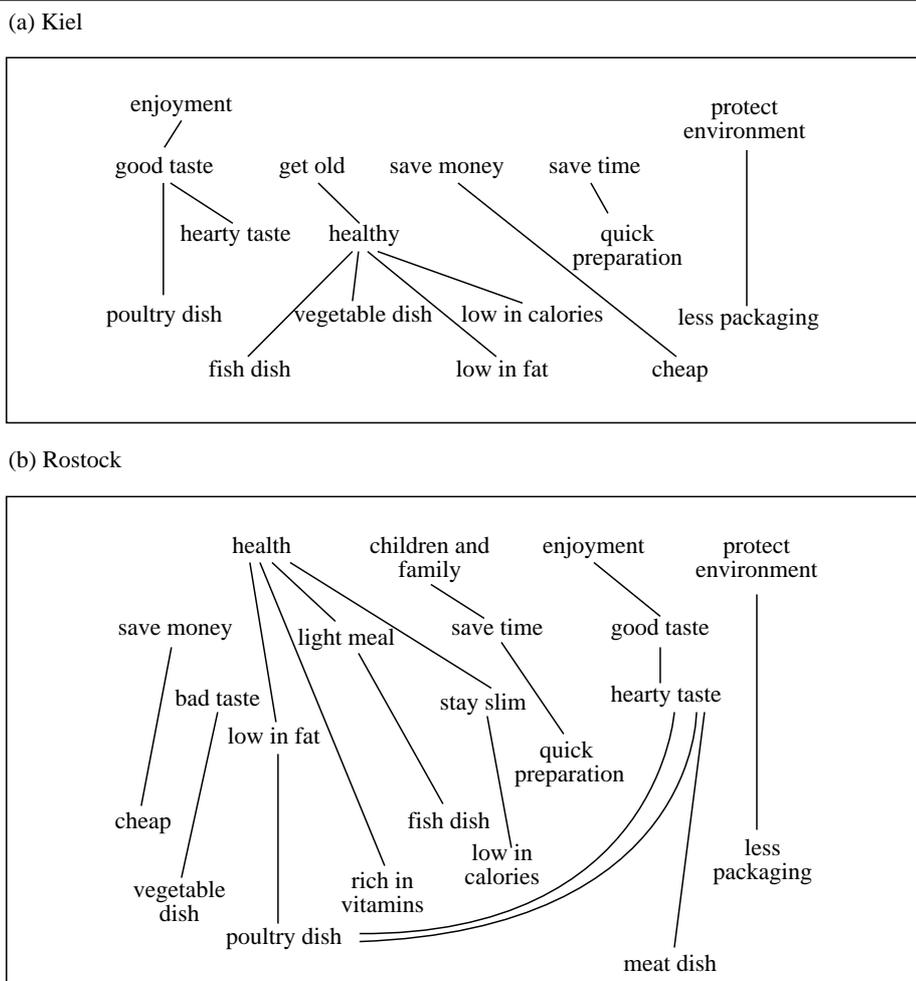


expected to be socialised to emphasise collectivistic values, while people living under a capitalist system can be expected to be socialised to emphasise individualistic values. These differences in value endorsement can be expected to have implications for a number of areas of economic behaviour, eg, entrepreneurship, which however is outside the scope of this article. But these differences can also have impact on product meanings. Sense of belonging, family security, healthy, clean - four of the values being endorsed more in R - are intuitively plausible as possible motivators in connection with food products, as are the K values of creativity, social power, and inner harmony.

Means-end chains

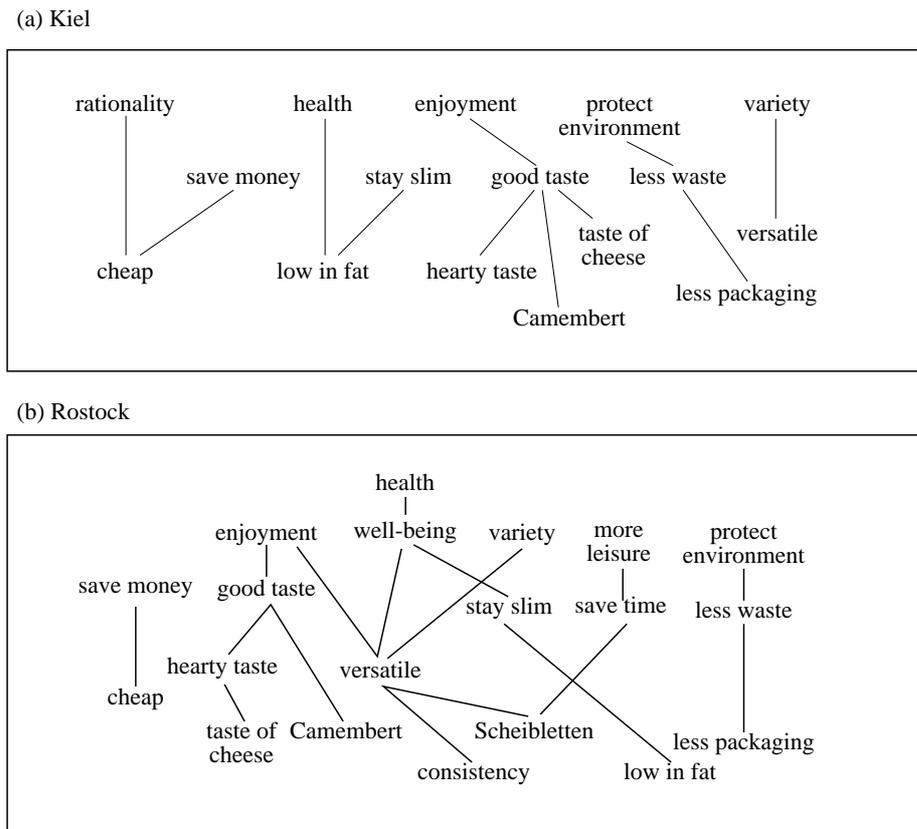
The data from the laddering interviews were coded, and entered into and analysed by the programme LADDER by Reynolds and Gengler³. Hierarchical value maps were derived separately for the K and R samples. A cut-off level of 6 was found to yield the most interpretable results. The hierarchical value maps are shown in figures 5 and 6.

Figure 5. Hierarchical value maps for frozen food products



³ We would like to thank Tom Reynolds and Charles Gengler for making this programme available to us.

Figure 6. Hierarchical value maps for cheese



Starting with the map for frozen products, it can be seen that the physical product attributes starting the maps at the concrete level are basically the same for both groups: the main ingredient of the dish (fish/poultry/meat/vegetable), its fat and calorie content, price, and amount of packaging. This congruence is not so astonishing given the congruence of product perceptions based on physical attributes seen in the perceptual maps. At the abstract end of the maps, there is also considerable congruence with regard to consequences and values: health, enjoyment, protecting the environment, and saving money appear in both maps. In R, children and family appear as an additional value. This indicates an additional perceptual orientation among the R respondents which was not found among the K respondents.

The main differences between the K and R maps is in the way concrete attributes and values are linked. The chains are clearly longer and more complicated in the R sample. This goes especially for the chain leading to health. While the concrete product attributes are directly linked to health in the K sample, there are intermediate links in the R sample: poultry dish - low in fat - health, fish dish - light meal - health, low in calories - stay slim - health.

As for the hierarchical value maps for cheese in figure 6, we again find that the chains are longer and more complicated for the R sample, again especially with regard to the health value. We also find a family/leisure related value which does not appear in the K map. In addition, we find that more concrete product attributes are named in R, while the K chains tend to start at higher levels of abstraction. For example, a K chain starts with the abstract attribute "versatile", whereas this abstract attribute is linked to the concrete attributes "consistency" and

"Scheibletten" in the R map.

The general conclusions from both sets of maps are hence: (1) there are slight differences in values, (2) K respondents got to the value level more quickly, (3) K respondents started with more abstract attributes.

Discussion and conclusions

Relationships between the three sets of results

The three sets of results complement each other. The results of the perceptual mapping task showed that products are grouped according to similarity with regard to physical product attributes, and while the grouping is more pronounced in the K sample, the same basic set of physical product attributes seems to be used in both groups of respondents. This is mirrored in the hierarchical value maps resulting from the laddering tasks, where the sets of physical product attributes starting means-end chains at the concrete level are largely similar.

The hierarchical value maps also indicated that the same sets of values motivate purchase of the products in question, with the exception of family-oriented values, which appear only in the map for the R sample. This is in good accordance with the results from the Schwartz value inventory. The 'enjoyment' value from the hierarchical value maps relates to Schwartz' hedonism domain (pleasure, enjoying life). The value 'protect environment' relates to the universalism domain. The 'variety' value relates to the stimulation domain. For all of these domains, no differences were found between the R and the K sample.

Four values, which R respondents rated higher, were named above as possible motivators for food products: Sense of belonging, family security, healthy, clean. The first two are clearly related to the values/consequences 'children and family' and 'more leisure' which appeared in the two R hierarchical value maps. Health is a central value in both the K and R maps, though there are differences in how it is linked to concrete product attributes. The three values where the K respondents rated higher and which were named above as plausible motivators of food products - creativity, social power, and inner harmony - did not appear in the hierarchical value maps.

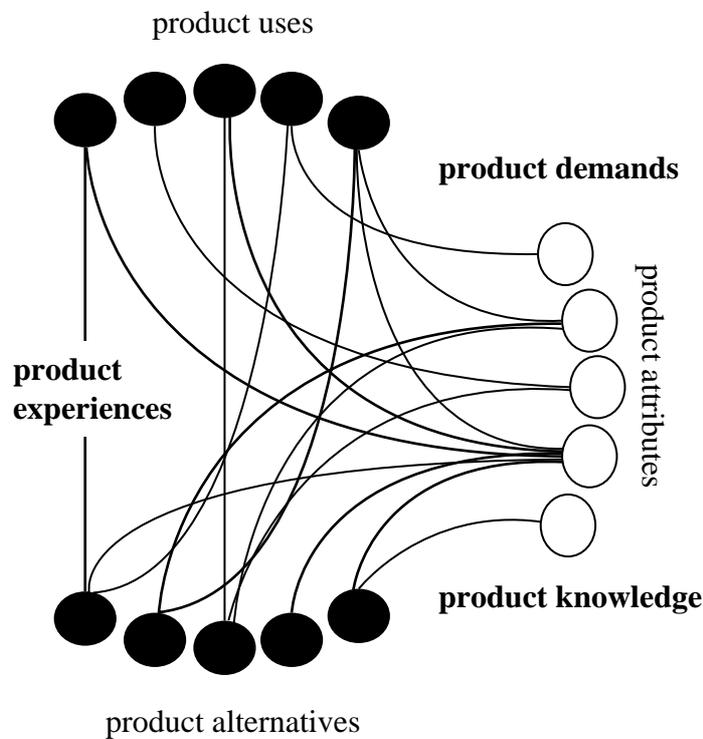
Interpreting the differences in linking attributes to values

The major difference between the two sets of results was in the way in which attributes were linked to values. The chains were longer in the R map, with more intermediate consequences. In addition, K respondents tended to start at higher levels of abstraction.

One way of interpreting these differences is suggested by the model of product-related cognitive structure suggested by K.G. Grunert (1989, 1990). In this model, it is suggested to distinguish between three groups of cognitive categories: product alternatives, product attributes,

and product uses. When these three groups of cognitive categories are linked by associations, three parts of the cognitive structure can be distinguished, as shown in figure 7: associations between product alternatives and product attributes can be called *product knowledge*, because they stand for what a person knows about various products; associations between product uses and product attributes can be called *product demands*, because they stand for the attributes the person will believe to indicate that a product is suitable for a certain use; and associations between product alternatives and product uses are called *product experience*, because it is assumed that such associations come about only by direct experience with the product. The relative importance of these three parts of cognitive structure is assumed to change over time; when products are bought for the first time, product demands and product knowledge will develop, but over time product experience will, at least for frequently bought products, come to dominate the cognitive structure (K.G. Grunert, 1990).

A similar reasoning may be applied to the differences in cognitive structure which show up in Figure 7. *Three parts of product-relevant cognitive structure*



the hierarchical value maps in figures 5 and 6. When concrete attributes are directly linked to abstract consequences or even values, this may mirror a higher degree of experience with the product group in question. Experience may lead to direct links of the kind 'fish dish - healthy' or 'low in calories - healthy'. Lacking this experience, the link may require an intermediate concept: 'fish dish - light meal - health' and 'low in calories - stay slim - health'. The longer chains in the R sample may therefore mirror a lower degree of experience and a higher reliance of information than in the K sample. Put more simply, the R respondents may have been at a lower stage of habitualization with regard to these food products than the K respondents.

Marketing implications

There has been some debate among marketing practitioners whether the East Germany market requires some special treatment, or whether it just can be handled as an addition to the West German market. Actually, most producers have chosen the second option. The same products are marketed in the same way in West and East Germany.

Our analysis has shown that K and R respondents grouped the food products investigated here in the same way, and that there were only slight differences in the motivators for these product groups. This argues for a uniform marketing approach. However, the differences in terms of how concrete perceptions are linked to values, interpreted as differences in stage of habituation, may call for a differentiation in communication strategy. It is known that differences in habituation go along with differences in information acquisition and information effect (Dieterich, 1986; K.G. Grunert, 1990; Kaas, 1982). A lower degree of habituation increases receptiveness for information about product attributes and consequences, at least when product involvement is high.

In terms of Assael's (1992) four types of consumer decision making (figure 8), the types of food products analysed here would be mostly classified as low-involvement products, so that buying behaviour would be either variety-seeking or inertia, depending on the degree of habit-formation. Market communication for such products is accordingly mostly geared towards attracting attention, contains little product information, and is built around peripheral cues and/or conditioning principles. This holds for much of West German food advertising, and this is the type of advertising which is now used for East Germans as well.

It is quite plausible that involvement is higher for the East German consumers. Risk, emotio-
Figure 8. Four types of consumer decision-making (from Assael, 1992)

| | | |
|-----------------|-------------------------|-----------------|
| | high involvement | low involvement |
| decision-making | complex decision-making | variety seeking |
| habit | brand loyalty | inertia |

nal appeal, and sign value, which are three major components of involvement (Laurent & Kapferer, 1987), are probably higher for East German consumers, given their lack of experience with the products and the considerable symbolic meaning which Western products have acquired over the years. Relating this to Assael's four types, East German consumers' decision-making for food products may rather be characterised as complex decision-making.

This difference can not be expected to continue. Over time, East German consumers'

involvement will decrease, and habits will be formed. But as long as the difference persists, it would present a unique marketing opportunity: involved consumers with a low degree of habit formation will be interested in product information, which may then result in brand preferences which may be more stable than the typical *inertia* case. However, this would call for a different communication strategy - more informative, more central and less peripheral cues, more reliance on cognitive learning than on conditioning.

Different consumer cultures?

The results do not support a clear-cut division of the Eastern and Western consumers into two distinct consumer cultures. The differences in economic background and economic socialisation described earlier are partly compensated by the common cultural heritage which is expressed, among other things, in a large comparable evaluation of life values. In addition, the results create the impression of a transitory situation. Differences in subjective product meanings exist, but they may be explicable mainly by differences in experience and possibly involvement, and may therefore disappear within a few years. This notwithstanding, the differences that do exist may, while they last, have considerable practical importance, as hinted at in the preceding section.

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MAPP publications

MAPP working papers

- No. 1: Grunert, K. G. & Baadsgaard, A. *market-based process and product innovation in the food sector: A Danish research programme*, January 1992.
- No. 2: Thøgersen, J. *Fødevareinnovation og emballage - miljøkonsekvenser og forbrugerreaktioner*, Marts 1992.
- No. 3: Bonke, J. *Choice of foods - allocation of time and money, household production and market services*, September 1992.
- No. 4: Grunert, K. G. & Ellegaard, C. *The concept of key success factors: Theory and method*, October 1992.
- No. 5: Harmsen, H. *Determinanter for produktinnovationssucces*, November 1992.
- No. 6: Grunert, K. G., Nissen, L. & Wildenhoff, L. *Do Danish food companies analyse their competitors*, February 1993.
- No. 7: Bech-Larsen, T.: *Overvejer forbrugerne emballagens funktions- og miljøegenskaber, når de køber fødevarer?* Februar 1993.
- No. 8: Lassen, J. *Food quality and the consumer*, March 1993.
- No. 9: Bonke, J. *Choice of foods - allocation of time and money, household production and market services, PART II*, September 1993.
- No. 10: Plichta, K. *Technological opportunities and paths of development*, September 1993.
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- No. 12: Grunert, K.G., Brunsø, K. & Bisp, S. *Food-related life style: Development of a cross-culturally valid instrument for market surveillance*, October 1993
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- No. 14: Grunert, K. G. & Grunert, S. C. *A comparative analysis of the influence of economic culture on East and West German consumers' subjective product meaning*, December 1993

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Furthermore there are a number of project papers, which are not available to the public.

The Mapp programme consists of the following 15 projects

1. Strategic Planning and Innovation Capability in the Danish Food Sector
Morten Kvistgaard & Kirsten Plichta, Copenhagen Business School; Lone Rossen, Biotechnological Institute
2. Innovation Capability as a Key Success Factor
Klaus G. Grunert & Hanne Harmsen, The Aarhus School of Business
4. Definition of the Sales Potential for a New Food Product to be Launched on Home or Foreign Markets
Anne Martensen & Kenneth Kæregaard, Copenhagen Business School
5. Primary Producers and Product Innovation in the Food Industry
Villy Søgaard, University Centre of South Jutland
6. Controlling Processes of Production to Guarantee Process Characteristics Demanded by Consumers of Food Products: Paradigms and Danish Experiences
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7. The Role of the Distribution System in Product Innovation
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