# CONSUMERS FACING SUPRA-COMPLEX CHOICES IN THE MODERN MARKETPLACE\*

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### **Abstract**

In this paper, we suggest that many of the choice situations confronting consumers in the modern marketplace have become supra-complex. Supra-complex decision-making occurs when the perceived difficulty of transforming product information into knowledge exceeds the expected benefits of doing so, even if decision-making heuristics, or other kind of attribute-related decision rules, are applied. Under conditions of supra-complexity, we propose that consumers instead use mental markers in order to justify their decisions. Mental markers are any mental construct the consumer uses for the purpose of gaining mental justification of overall choices. We argue that the usage of mental markers leads to reductions in cognitive dissonance, reduced usage of mental resources and time. Drawing on the principle of mental justification as well as consumers' propensity to use goals as blueprints for directing their behaviour, we propose a framework for understanding consumer decisions when faced with supra-complexity.

**Keywords:** Market complexity; mental markers, consumer goals; mental justification

## Introduction

In the modern marketplace, consumers are faced with challenges (increased market complexity, relatively scare cognitive resources and lifestyle changes) (Hansen and Thomsen, 2013), which urge consumers to rely less on a thorough consideration of attributes and their derived consequences when faced with many choices. As a consequence traditional 'cognitive' marketing (i.e., marketing that refers to problem solving or to the achievement of product attributes/benefits) may fail, since this is based on information, which the consumer to an increasing degree does not seem to take into consideration (e.g., Wang and Shukla, 2013; Mahajan and Wind 2002).

Cognitive dissonance theory (Soutar and Sweeney, 2003; Festinger, 1957) implies that a consumer when faced with a decision problem (like buying a food product) seeks to balance her/his knowledge, attitudes, goals, feelings or desires in order to serve her/his self-interest and to avoid a state of cognitive dissonance. Extant research (Chrysochou, 2010; Dolfsma, 2002; Betmann et al., 1998; Denzau and North, 1994) suggests, however, that in the complex real world consumers rarely have a comprehensive idea of what behaviour may serve their interests in the best way. Nevertheless, consumers keep on buying products and services every day, without necessarily ending up in dissonant and stressful states. In trying to understand this behaviour consumer research has proposed that when consumers are facing a complex decision-making situation and/or if they are under time pressure, consumers may use decision (or cognitive) heuristics to simplify the task and thereby regain competence to

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select best choices (e.g., Lee and Marlowe, 2003; Chrysochou, 2010; Allison et al., 1990). Also, it has been proposed that consumers in some situations may instead evaluate products based on a holistic, or affective, approach. For instance research suggests that the perceived physical appearance may affect consumers' expectations of liking for a food product and subsequently buying intentions (Hurling and Shepherd, 2003; Hansen, 2002). This view is supported by gestalt theory proposing that consumers may hesitate to use mental resources to analyse individual attributes if the mere holistic perception (the 'gestalt') provides the consumers with 'sufficient' information to justify their decision.

In this paper we propose, however, that neither of these approaches is sufficient enough to explain the decision problems that confront consumers in the supra-complex marketplace. The supra-complex marketplace denotes a situation where consumers' perceived difficulty of transforming product information into knowledge exceeds the expected benefits of doing so, even if decision-making heuristics, or other kind of attributerelated decision rules, are applied. We suggest that in the supra-complex marketplace consumers will refrain from evaluating products based on attributes per se because consumers' felt competencies to handle choice complexity by referring to product attributes have decreased to a level where they have become insufficient. Thus, in the supra-complex marketplace consumers no longer deal with product attributes in order to assess the product's value to them. Instead they deal with something else - which we propose to be mental markers - in order to achieve justification for consuming that particular product. While refraining from evaluating attributes may be relatively harmless when carried out in relation to products like furniture, clothes, mobile phones, etc., obviously its consequences can be serious in relation to other products, such as food products due to their impact on the human body and financial services due their impact on consumers' economic wellbeing: (1) One consequence could be the consumption of unhealthy food/risky investments, which would not have been bought upon thorough cognitive considerations. (2) Also, refraining from evaluating attributes may seriously limit health authorities' and the marketers' ability to educate the consumer by information campaigns that traditionally seek to promote certain product attributes (i.e., calories, fat, APR and/or interest rates).

On this backdrop, we propose a framework for understanding consumer decision-making under conditions of supra-complexity, discuss the practical implications of the proposed framework and provide suggestions for further research.

# Consumer behaviour under conditions of perceived non-complexity, perceived complexity and perceived supra-complexity

Conceptualizing perceived complexity

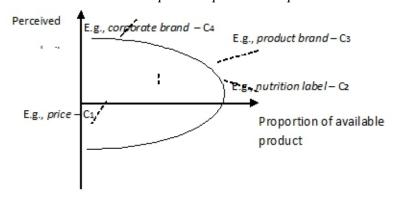
By nature, consumers will seek to serve their self-interests. The main problem confronting consumers is thus to find the 'best' road to accomplish this task. We suggest that 'perceived complexity' is a key construct for the purpose of understanding how consumers respond to the task of fulfilling their self-interests in various choice situations. If consumers' rationality was unbounded and if they had unlimited amounts of time they would always know what choices to make to serve their interests - and since this can happen with full certainty no cognitive dissonance would occur. In principle, choice complexity therefore does not arise because of characteristics related to the marketplace; it arises because consumers' processing capacity is limited, which prevents consumers from processing unlimited amounts of cognitive information in relation to all choice situations. Thus, in many choice situations consumers are burdened with bounded rationality. Bounded rationality can be seen either as the attempt to do as well as possible given the demands of the world – the notion of optimization under constraints – or as the suboptimal outcome of the limited cognitive system (cf. Todd and Gigerenzer, 2003). However, not all consumers suffer equally from bounded

rationality in relation to all choice problems, since the main answer to bounded rationality is learning. Learning means developing a (cognitive) knowledge structure consisting of concepts and categories, which can be used for interpretation and evaluation of the real world (Denzau and North, 1994). Since no two consumers have exactly the same structure, choice complexity is subjective and therefore the concept 'perceived complexity' is appropriate. More specifically, we may think of perceived complexity as being equal to the degree of perceived information disorder – or uncertainty - in a certain choice situation. When perceived information disorder increases, the transformation of market information into knowledge will impose a higher burden on the consumer due to bounded rationality. Thus, we conceptualize perceived choice complexity as the perceived difficulty of transforming information into knowledge in relation to a certain choice situation. We argue that the transformation process is moderated by consumers' already established knowledge structure since perceived choice complexity can be expected to decrease with a more sophisticated and developed (context-specific and generalized) knowledge structure (e.g., Hansen, 2012; Zinkhan and Braunsberger, 2004).

Consumer choice under different forms of perceived complexity

A very simple choice situation arises if consumers perceive the products in a certain product category to be homogeneous. In such a situation, consumers' main problem is to locate the supplier, which offers the product at the lowest price. No extra attributes would be evaluated since the consumers would not expect such an evaluation to be beneficial. This simple choice situation is marked 'C<sub>1</sub>' in Figure 1.

Consumer choices in the supra-complex marketplace.



If instead, consumers find that the products available in a certain product category are distinct, they must direct their attention to the possibility of getting different outputs from different products. This imposes no problem if they possess the necessary competencies to firmly evaluate relationships between product attributes and benefits ( ${}^{\circ}C_2{}^{\circ}$ ). An example of this – classical - choice formation procedure is consumers' evaluation of the information found on nutritional labels on food products.

However, when the number of available product attributes further increases consumers become more heavily burdened by the choice task since this amount of attribute-information is relatively harder to be categorized, interpreted, and evaluated (Swait and Adamowicz, 2001). In such a situation (' $C_3$ '), consumers are likely to seek information that is believed to be the most important for a beneficial outcome of the choice (Wang and Shukla, 2013). Consequently they may refrain from evaluating all the available attributes due to scarce resources. Thus, in  $C_3$  there is no longer a one-to-one correspondence between available attributes and evaluated attributes. In situation  $C_3$  consumers may often seek to overcome their mental boundaries by using product brands to guide their choices (e.g., Chrysochou, 2010). Since consumers in this situation no longer trust themselves to be able to calculate the best choice, they will most likely turn to product brands that they deem

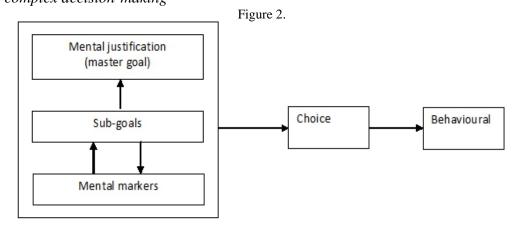
trustworthy in terms of quality and/or that incorporate some preselection of attributes in their products (e.g., Coca-Cola or Nutrasweet).

We suggest that in many choice situations, and probably increasingly by number, consumers will simply stop relating attributes to product benefits because the attempts to develop such relations have become overly complex. We denote these situations as supracomplex choice situations ('C<sub>4</sub>'). In these situations, consumers do not consider one or more product attributes, or brands, for the sake of evaluating product benefits as in choice situations  $C_1 - C_3$ . This is because consumers have simply given up on using products characteristics as guidance for their choices. Even product brands are no longer useful because the number of product brands, and the underlying attributes they represent, have simply grown too large in number. Instead, consumers are shifting to focus on the overall choice - while still seeking to obtain 'mental justification' of their choice. Hence, in choice situation C<sub>4</sub>, consumers seek to simplify their choices by focusing on an abstract, and often easily understandable, attribute such as a corporate brand, an organic label, an appealing photo portraying the beneficial consequences of using the product (e.g., slimness, healthiness), and others. More specifically, corporate branding conveys the essence, culture, character, and purpose of a company. When successful, a corporate brand may provide mental justification to consumers who simply may choose a product based on a belief that (desirable) internal company values (e.g., a company promising to deliver only the 'best') are transferred to the offered products. In a similar vein, consumers may find that organic labels indicate the presence of overall benefits such as animal welfare, sustainability, and/or healthiness (Cerjak et al., 2010), which they, in turn, can use to mentally justify purchasing the products.

## Consumers facing supra-complex choices – a suggested framework

We suggest that consumers, when facing supra-complex choice conditions, are likely to use *mental markers* to justify their decisions. We conceptualize a mental marker as 'any mental construct the consumer uses for the purpose of gaining mental justification of *overall* choices'. As already touched upon above, mental markers may include corporate brands, labels, self-perceptions, photos, etc. By 'overall' we mean choices that are not justified by referring to specific product benefits but choices that are justified by balancing the mental markers against the *(sub-)goals* (such as healthiness, sustainable purchases, etc.) that consumers may bring to - or may construct at - the marketplace (Bagozzi and Dholakia, 1999; Bettman et al., 1998). Indeed, studies of decision making indicate that choice goals are the most important motivational aspects relevant to decision making (Wang and Shukla, 2013).

The proposed framework for understanding consumer decision-making under supracomplex choice conditions is displayed in Figure 2. Supra-complex decision-making



The framework argues that under conditions of supra-complexity consumers evaluate the properness of their decisions against whether mental justification is achieved (i.e., the master goal) and whether one or more sub-goals are satisfied. Moreover, mental markers, sub-goals and mental justification are interrelated in the framework. The availability of mental markers may influence the construction of sub-goals since consumers are assumed to avoid mental imbalance when possible. This can be achieved by constructing goals that 'match' the available mental markers. The sub-goals, which consumers construct on the spot or which they bring with them to the marketplace, may – on the other hand - also influence the selection of mental markers (e.g., "I want to be slim [a sub-goal] therefore I'm looking for mental markers that that guide me in that direction"). We propose that mental justification results from the consumers seeking a mental balance between their sub-goals and the mental markers. Thus, consumers establish goals for good reasons. Goals serve as personal blueprints for directing the consumer's behaviour and thus goals also constitute useful referents in the process of mentally justifying intended and/or actual choice behaviour.

Sub-goals, mental justification, and mental markers

In the marketplace consumers will have to exercise some degree of self-regulation in order to identify 'reasonable' and 'unreasonable' decisions. Control process theory (e.g., Nyman et al., 2012; Carver and Scheier, 1982; 1990) suggests that goals can invoke a regulatory influence on consumer decision-making and also that goals can be activated when consumers are confronted with various choice situations. For example, a consumer buying a brand on a routine basis may be exposed to information in the news saying that the production process related to that particular brand is under suspicion that it may harm the environment. The consumer may now find it difficult to mentally justify the continuing buying of that particular brand since the consumer's assumed sub-goal of conducting environmental friendly behaviour is now compromised. Also, Chernev (2005) has demonstrated that in order to maintain status quo - which is easiest to justify since abnormal choices are avoided (Simonson and Tversky, 1992) - consumers use goals. Consumers are believed to organise goals into goal hierarchies where lower-level goals may help obtaining higher-level goals (e.g., Salerno, Laran, and Janiszewski, 2014). Higher-level goals (like achieving mental justification) represent the most basic consumer motivation. The goal hierarchy can be regarded as a way the consumer breaks up complex (and perhaps long range) problems into smaller (and perhaps short range) and more manageable problems.

Lawson (1997) proposes a hierarchical goal structure consisting of four levels of goals; abstract principles or values, actions programs, more concrete product acquisition, and brand acquisition goals. Heckenhausen and Kuhl (1985) distinguish between action goals (concerned with the act itself), outcome goals (immediate effects on action), and consequences (indirect effects stemming from outcomes). Consumer goals may be activated at different levels of abstraction (master goals, sub-goals) but may also be grouped according to whether or not a consumer is willing to make a trade-off (i.e., compensatory versus noncompensatory goals). Bettman et al. (1998) propose a 'choice goals framework' in which the construction of preference may be guided by the goals that the consumer brings to the marketplace. Examples of such goals, which all are contextual, include maximizing the accuracy of the choice, minimizing the cognitive effort required to make the choice, minimizing the experience of negative emotions when making the choice, and maximizing the ease of justifying the decision (p. 193). In Bettman's 'choice goals framework' consumers are assumed to relate product attributes to their goals in order to choose the product, which best satisfies the chosen goal(s). Thus, goal fulfilment is expected to occur as a consequence of consumers' selection and achievement of certain product attributes. In such a (complex) marketplace consumers are assumed to carry out their decision-making based on an analysis of the product content and of the derived consequences of that content. However, the choice

goals framework does not handle choice situations in which consumers are unable to relate product attributes to the chosen/constructed goals. We posit that under such conditions of supra-complexity consumers will seek to balance mental markers and sub-goals in order to mentally justify the considered decision. The successfulness of these balancing activities will then in turn affect the perceived properness of the considered decision. In relation hereto, a distinction can be made between the psychological-oriented goals put forward by Bettman et al. and more product-oriented goals, which may be more directly related to various products (e.g., in the case of food products, the achievement of healthiness, pleasure feeling and enjoyment, value-for-money, social approval, tastefulness, naturalness, nutritional value, and the like (Zeithaml, 1988; Okada, 2005). The proposed links between mental markers, subgoals, and master goal, resembles - in principle - the proposals put forward by Gutman (1997). Gutman considers the elements in a means-end chain - attributes, consequences, and values - to be elements in a goal hierarchy and suggests that "it is easier and more direct to think of goals being achieved than to think about attributes, consequences, and values being achieved" (p. 548). For example, a consumer who considers buying a cereal may attach various associations to this product category (e.g., amounts of calories, taste, social approval, etc.) but not all these associations may reflect the goal(s) that the consumer may have in mind when considering buying the cereal. In our model, which is specifically directed at explaining choice behaviour under supra-complex conditions, we refer instead to mental markers (as opposed to 'attributes' in Gutman's framework), subgoals, and master goal (mental justification).

Mental justification can be classified upon whether a state of positive, neutral or negative justification is obtained as the outcome of the balancing process. Positive justification occurs when consumers perceive that the constructed sub-goals are more than fulfilled by the use of mental markers, whereas neutral justification happens when mental markers match the constructed sub-goals. Positive and neutral justification may lead to purchase intentions if no other action barriers are present. However, if a neutral or positive balance between mental markers and sub-goals cannot be constructed (i.e., negative mental justification) this does not necessarily mean that consumers will hesitate from carrying out the decision. Instead, consumers may switch to other kinds of strategies in order to reduce the mental imbalance that may arise as a consequence of a perceived gap between mental markers and sub-goals. For example, the consumer can modify the importance of the gap by seeking to convincing her/himself that the gap is unimportant; the consumer can mentally postpone perceived negative consequences of a certain behaviour (e.g., smokers mentally postponing the unhealthy consequences of smoking); and/or the consumer can simply seek to neglect the goal or construct it to be of minor importance. Thus, consumers do not necessarily try to create justifications for all decisions; rather they seek to justify decisions they are motivated to make (Kunda, 1990) or which they cannot justify by using other mental strategies. In some countries, food authorities have introduced 'nutritional labels' that divide food products into healthy, less healthy and unhealthy products - thereby making it easier for consumers to choose healthy food products without having to evaluate product attributes.

Self-perception theory suggests that consumers may also use themselves as mental markers for accessing the properness of the considered decision. Consumers may perform evaluations by monitoring their subjective affective responses (feelings and emotions) to the product. Consumers may infer their overall evaluation (do I like this product?) from their affective response (do I feel good about this product?) to the product under consideration. In their affect-as-information framework Schwarz (1990) and Schwarz and Clore (1996) posit that affective responses may contain valuable judgmental information to consumers. In such situations consumers use their affective responses as mental markers for inferring the overall likeability of the product. This view is supported by results obtained by Pham et al. (2001)

suggesting that target-induced feelings may predict the number and valence of people's spontaneous thoughts about a target; and may even be better predictors than people's cold assessments of the target. Many other researchers (e.g., Damasio 1994; Wyer et al. 1999) also have emphasized that people may perform evaluations by monitoring their subjective affective responses to the target.

Choice properness

Consumers will seek to avoid making decisions, which they know, or suspect, cannot be justified. We thus posit that mental justification is an overall, non-compensatory goal to most consumers. Cognitive dissonance theory suggests that consumers are motivated to maintain both intrapersonal and interpersonal balance. That is consumers will prefer consistency between their behaviour and their personal goals as well as consistency with the goals they believe relevant others to have – or with the goals they believe will be beneficial for relevant others to strive for; e.g., when a consumer seeks to buy healthy food products for her/his family members. In supra-complex choice situations consumers do not 'measure' the properness of their choices by referring to the content of the product but by mentally estimating the degree to which their goals are fulfilled and - subsequently - whether the choice can be mentally justified. Keller and Staelin (1987), among others, have suggested that complexity may have an inverted U-shaped relationship with decision effectiveness. That is, in highly complex markets consumer decision-making is less efficient than in complex markets because of bounded rationality. Decision effectiveness can be conceptualized as how close a consumer's decision comes to the decision that would have been made in a perfect informational environment in which consumers can accurately process all available information, are willing to incur the cost of thinking, and are motivated and compensatory decision makers. However, other research (Dijksterhuis et al., 2006) suggests that - under conditions of high complexity - it may not be advantageous for consumers to engage in thorough conscious information evaluation before choosing. First, due to bounded rationality consumers tend to take into account only a subset of the relevant information when they decide. Second, consumers tend to inflate the importance of some attributes at the expense of others, for example when using choice heuristics, which can lead to suboptimal weighting of the importance of attributes. Based on a series of experiments Dijkersterhuis et al. found that - when exposed to the same information - people who deeply thought about the information before choosing were less able to make the best choice (both when 'best choice' was measured objectively and subjectively) among complex products (in the experiments conceptualized as 'products with many associated attributes'). In sum, while the quality of thoughtful choices deteriorate with complexity, less thoughtful choices do not share this characteristic because they do not confront with the bounded rationality of consumers. While the study by Dijkersterhuis et al. investigates attribute-related choices under simple and complex choice conditions it does not consider the mental process that mediates the link between complex choice conditions and behavioural response. We believe that the model displayed in Figure 2 offers a possible outline of the mental process that may occur when complexity has increased to a level where consumers' ability to deal with attributes has become insufficient.

## **Discussion and Conclusion**

The basic premise of our framework is that consumers want to make choices that are in their own interest (i.e., the fulfilment of goals) in order to gain mental justification. The approach taken here differs from previous research in a number of ways. First, we propose framework to explain how consumers may behave under conditions of supra-complexity. Second, we propose the construct 'mental justification', which is concerned with how consumers mentally justify certain decisions based on mental markers rather than product

attributes. Third, we centre our attention on the construct 'choice properness', which we conceptualize as 'the consumers' believed degree of goal fulfilment in a certain choice situation'. Prior studies calculate the properness of consumer choices in terms of 'best choice' (e.g., Muller, 1984; Best and Ursic, 1986) and 'decision effectiveness' (e.g., Keller and Staelin, 1987), based on product attributes. Fourth, we propose that while complexity may affect the average degree of attribute evaluation in an inverted U-shaped relation, consumers may (under high perceived complexity) switch to supra-complex decision-making because they believe that they are better off this way. The usage of mental markers leads to reductions in cognitive dissonance, usage of mental resources, and time-usage. Especially consumers with less skills at the evaluation task (i.e., with a less developed cognitive knowledge structure) should therefore be expected to be willing to pay a premium for a brand less effortful to evaluate.

From a welfare perspective, the implications of more choice situations being characterized as 'C<sub>4</sub>' situations may be rather serious. While refraining from evaluating attribute-benefit relationships may be relatively harmless when carried out in relation to products like furniture, clothes, mobile phones, etc., obviously it can be damaging in relation to other products, e.g., food products due to their impact on the human body and financial products due to their impact on consumer welfare. From a marketer perspective, 'C<sub>4</sub>' situations offer different opportunities than the traditional approach to consumer market conditions. First of all, they imply that managers have two distinct roads - an abstract road and a concrete road - towards offering mental justification to their customers. When focusing on the high-abstraction road towards mental justification managers have to build consumers' trust in the fact that the company has the 'best' products, which in turn requires trust building (Hansen, 2012). If trust building is successful, consumers may deal with C<sub>4</sub> complexity by trusting that the company actually delivers on its promises. Alternatively, managers may decide to focus less on trust building and more on offering simple, concrete attributes, which consumers can deal with and mentally justify without having to relate the attributes to product benefits. The most prominent example of this is the price, which can be either low (i.e., consumers may simply justify the choice as the best overall buy) or high (i.e., consumers may justify the choice as the best overall choice available). Notably, in both cases consumers are using the price to guide their overall choice in the marketplace without using the price to infer something about product quality, healthiness, and the like, of the product in question. Hence, when in C<sub>4</sub> situations, corporate branding and price may become two sides of the same case. While sensible in C<sub>2</sub> and C<sub>3</sub> situations, managers should not address either top or bottom product benefit segments when in C<sub>4</sub> situations. Instead, they need to address focal points of mental justification by simply offering good reasons (concrete or abstract reasons) to choose their products.

Several future research challenges can also be derived from our proposed framework for understanding consumer decision-making under supra-complex conditions. The evolving dynamism of modern markets makes the challenges for consumers to maintain knowledge structures suitable for decision-making increasingly higher. As claimed in this paper, at some point - when perceives complexity increases to a degree where consumers no longer can transform market information into knowledge - consumers may switch to supra-complex decision-making. Dynamism might influence this 'switching behaviour'. When the composition of the choice problem changes (e.g., when new and unknown attributes are added to a product) consumers may try to infer the content of these attributes from other, more well-known attributes - or consumers may give up on evaluating attributes due to supra-complexity. This may call for a contingency approach (e.g., Huneke et al., 2004) when seeking to assess the impact and the nature of dynamism (e.g., amount of changes, speed of changes) on consumers' likelihood to switch to supra-complex decision-making. The

motivation for seeking mental justification might, however, also differ according to other circumstances. For example, consumers who expect to justify their decisions to others may hesitate to use mental markers since attributes-based decisions can be expected to be easier to explain and to justify to others (McAllister et al., 1998). As another example, in incidents where consumers attach a high perceived risk to the choice situation this may cause consumers to improve their competencies in order to be able to evaluate (perceived) salient attributes.

The direct managerial implication of the proposed framework is that it introduces risks of communication failures in the consumer marketplace. It seems to be common practice that consultancy firms and the like, hired to assist companies to understand consumer perceptions and preferences, mainly concentrate on gathering information concerning consumers' perception of the offered attributes, and their satisfaction with those attributes, by the company and its leading competitors. While such information may be very helpful for designing the company communication effort in 'traditional' marketplaces (marketplaces which are perceived by consumers to be simple or complex, refer to Figure 1) it may be less fruitful for designing communication strategies in marketplaces dominated by supra-complex decision making. Although consumers - when asked in surveys and the like - may be able to assign weights and beliefs to various attributes, they may not consider various combinations of those attributes when confronted with real markets of high complexity. Instead they may refer to mental markers, making a communication effort focusing on combinations of various attributes less efficient. The future consequences associated with an array of choice alternatives, and consumers' preference for these consequences, will most likely not be determined based on considerations of attributes but based on considerations of possibilities for mental justification. It is therefore important that managers seek to understand the process of mental justification that may be associated with their offerings, and also the various possibilities for offering mental markers to be used by consumers.

As already touched upon, supra-complex decision making may also have social implications; especially when related to consumers' food behaviour. In the Western world an obesity epidemic caused by poor nutrition and lack of exercise is creating a looming health crisis, with average life expectancy expected to drop for the first time in more than a century (e.g., Hansen and Thomsen, 2013). Reduced quality of life among consumers as well as increasing health expenses following from obesity related diseases are among the serious consequences. If conditions of perceived supra-complexity cause consumers to refrain from evaluating some food products based on nutritional attributes, but instead refer to mental markers when making a buying decision, two main implications/possibilities for food authorities can be derived from this behaviour. One possibility is to educate consumers in order to reduce perceived complexity to C3 or – preferably – to C2 (refer to Figure 1). Another possibility is to adapt to the behaviour created by perceived supra-complexity and seek to provide (trustworthy) mental markers (e.g., health labels issued, controlled and guaranteed by food authorities) to guide consumers through the complexity of the food market.

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