STRATEGIC BRAND COMMUNICATION IN PRODUCT DESIGN

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ABSTRACT

STRATEGIC BRAND COMMUNICATION IN PRODUCT DESIGN

This thesis shows the importance of 'strategic brand identity and strategic management of this identity through the product portfolio of the brand' and also the correspondence between them, with respect to create brand recognition and differentiation through brand specific design language, in a specific case by a qualitative case study approach. In this thesis, it is proposed a particular combination of both 'Design Format Analysis' method of Anders Warell and heuristic method of Toni Matti Karjalainen on 'Semantic Transformation in Design' to provide a heuristic method to identify how 'Bang & Olufsen' seems to comprehend its strategic identity through its history and how the semiotic aspects of product design is used to promote it through strategic portfolio management (Warell 2001 and Karjalainen 2004). Although there are some main differences between these two approaches, Karjalainen and Warell indicate that the product portfolio of the brand needs to consist of products that, at least to a certain degree, incorporate common design elements and characteristics that embody brand specific meanings in order to support brand identity.

The brand specific design language of B & O which is determined as 'Flush Design Concept' is dynamic with a right balance between novelty and consistency by a long-term strategic brand communication through whole product portfolio considering both 'internal design culture, design heritage of the company' and 'the changing market'. The products of the company have strong identity and have a considerable impact on the visual recognition of B&O brand even though the company mostly prefers the 'push' strategy in strategic design approach resulting from an innovative design approach and designing differentiating products instead of the 'pull' strategy offered by a strong market-oriented approach. The semiotic aspects of 'B&O typical Flush Design Concept' design style incorporate the core brand values such as 'magical, inventiveness, originality, selectivity' and reinforce brand recognition and differentiation. The company manage to transmit intended messages to the target customers through the communicative qualities of brand-specific design language by 'continuously renewal design based model of strategic change' (brand identity management) through 'continuously renewal design driven innovation' product strategy.

ÖZET

ÜRÜN TASARIMINDA STRATEJİK MARKA İLETİŞİMİ

Bu tez, özellikli bir firmayı niteliksel analiz yaklaşımı ile inceleyerek, markaya özgü tasarım dili aracılığıyla marka bilinirliği ve farklılığı sağlamada, stratejik marka kimliğinin ve bu kimliğin markanın ürün portfolyosu boyunca yönetiminin ve de aynı zamanda aralarındaki uyumun önemini açıklamayı amaçlamıştır. Bu tezde, elektronik tüketim malları üreten 'Bang & Olufsen' firmasının, stratejik marka kimliğini firma tarihi boyunca nasıl ele aldığını ve stratejik portfolio yönetimi aracılığıyla, ürün tasarımının iletişimsel özelliklerini marka kimliğini geliştirmede nasıl kullandığını belirlemede kullanılacak bulgusal bir method sağlamak için, Anders Warell' in 'Tasarımda Biçim Analizi' metodu ile Toni Matti Karjalainen'in 'Tasarımda Anlamsal Dönüşüm' üzerine geliştirdiği bulgusal metodun birleştirilmesi önerildi (Warell 2001 ve Karjalainen 2004).

'Ayni Düzeyde Tasarım Konsepti' olarak belirlenen 'Bang & Olufsen' markasına özgü tasarım dili, firmanın hem markanın tasarım kültürünü hem de değişen piyasa koşullarını dikkate alarak, tüm ürün portfolyosunu içine alan uzun soluklu stratejik marka yönetimiyle, süreklilik ve yenilik arasında tam bir denge kuran dinamik bir yapıdadır. Stratejik tasarım yaklaşımı olarak yenilik getiren ve değişiklik yaratan ürünler üretmek hedefinin doğurduğu, piyasanın koşullarının yönlendirdiği değil piyasa koşullarını yönlendiren bir yaklaşım tercih etmesine rağmen, firmanın ürünleri güçlü kimliklere sahiptir ve 'B&O' markasının tanınmasında önemli etkileri vardır. Bang & Olufsen markasına özgü 'Aynı Düzeyde Tasarım Konsepti' sitilinin tasarım elemanları ve karakterlerinin sözdizimsel, pragmatik ve anlambilimsel düzeydeki içerikleri, markanın öz 'sihirli, yaratıcılık, orijinallik ve seçicilik' değerlerini (karakterlerini) kapsamaktadır ve marka bilirliği ve farklılığını güçlendirmektedir. Firma, 'sürekli olarak yenilenen tasarım odaklı yenilik' ürün stratejisine dayanan, 'sürekli olarak yenilenen tasarım odaklı stratejik yenilenme' (stratejik marka kimliği yönetimi) stratejisiyle, stratejik olarak tanımlanmış markaya özgü anlamları mesajları ((temel marka değerleri-özellikleri) markaya özgü tasarım dilinin iletişimsel özelliklerini kullanarak (ürün tasarımıyla) müşteriye geçirmeyi başarabilmiştir.

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CHAPTER 1

INTRODUCTION

1.1. Definition of the Problem

In short, there are two reasons for why this thesis has been prepared. Firstly; the communicative aspects of design as a strategic tool in terms of creating brand awareness, brand recognition and brand distinction is rarely discussed in the literature so that there is apparent gap in the existing discussion on branding (brand research) and product semiotics, in other words the relationship between the product and the brand in meaning creation in a strategic approach. Secondly, selecting a specific case brand and products is considered a good means with which to explore the construction of using design in creating intentional meanings and associations which stems from the design culture of the brand and from the recognition and internalization of company's strategic objectives as that it is suggested as being in any case a highly case dependent subject by also the references of this thesis. All brands are special and need to be assessed separately, and also the specific niche and competitive success of consumer electronics company Bang & Olufsen in the market with its distinctive range of products, extraordinary designs and strong company culture is accepted as a topic that is worth to search for why and how their products has gained many national and international awards and included in permanent collections of design museums and why the customers prefer their products even though they are much expensive compared to the competitor's products at first glance. They are generally known with their striking, surprising, innovative designs and defined by people (although some of whom are not customers) in internet forums generally as such 'they are making art and using consumer electronic products as just for a tool', 'B&O...less expression more experience'. And also the creation and management of specific brand design language is eventually defined as an utterly case-specific issue and should therefore be considered individually in every specific brand situation. The differences in brands' heritages and cultures, industrial environments, as well as companies' business and product strategies may result in quite different approaches to the use of symbolic design cues in terms of their embodied semantic references that support strategic brand identity. The existing literature on the topic of how products represent brand identity is far from substantial. It

is aimed to search for a guideline and locate some relevant issues appeared in literature 'that are important to be aware of when designing for a brand by taking all aspects reflecting brand identity into consideration concerning communicative and visual qualities of products and when managing this strategic design language by still keeping the brand identity' and to apply this knowledge to Bang & Olufsen case.

In literature a fair amount of methods for visual analysis already exist, and some of these go specific into communicating brand identity and also there exists an extensive body of literature concerning corporate identity design and design management where brand identity design mainly refers to graphic design (logo, name, packaging, advertisements and so on). There are a few references to product design. Besides this, the communicative qualities of product design have been focused on product qualities on the general level of meaning creation, not from the particular stand point of brand communication and strategic brand management. However there appear few theories around the issue of brand specific design language in literature. The studies of Smyth and Wallace, propose the method of shape grammar for encoding the key elements of a brand into a repeatable Buick language (as the concept of Brand DNA) and come up with 63 different rules that can be combined for creating the new Buick (Smyth and Wallace 2000, McCormac and Cagan 2004). Both of these studies suggest rather mechanistic approaches to the analysis of the visual construction of brand-specific design and do not define why they are Buick specific as if the shape grammars of different brands viewed from a historical perspective, they may be rather similar to those of Buick. Dumas describes a totem building method about how to build sophisticated metaphors that helps define the products identity and evaluate concepts along the design process (Dumas 1999). Vihma looks into how design products can be analyzed semantically, and presents specifications of different references embodied in certain product features but she does not bring in the dimension of brand (Vihma 1995). Akner-Kohler provides a three-dimensional visual analysis of product forms in general (Akner-Kohler 1994). Ravasi and Lojacono suggest a method for managing design and designers for strategic renewal (Ravasi and Lojacono 2005). However, the lack of literature and research in this specific field about the internalization of the identity (the strategic, performance-oriented view) and in the externalization of the identity (the visual, operative-implementation view) is striking, after scanning existing literature, the two Phd thesis of interest found and taken as references in the field are ; 'Design Syntactics: A Functional Approach to Visual Product Form' by Andres Warell who

proposes a method called Design Format concerning the development of a design language as a tool in strategic (managerial) level and operative (new product development) level, and 'Semantic Transformation in Design: Communicating Strategic Brand Identity Through Product Design References' by Toni Matti Karjalainen who has investigated how semantic transformation in relation to brand occurs in product design (Warell 2001, Karjalainen 2004). The both approach include some similarities and dissimilarities in terms of the key aspects of strategic brand communication in product design and take references from each other in some levels. Warell emphasizes that the design format method can be used as a tool internally to communicate within the design team and to evaluate concepts where Karjalainen emphasizes that there exists no simple framework and pinpoints that an internal design culture or long term relationship with the designers are important. Emphasis in both theories is on analyzing existing products to discover brand-specific elements, and hence create a brand-specific design language for development of new products but little emphasis is on how a certain value can be manifested in a product form. Warell provides a conceptual framework for handling a brand-specific design language, and focus on the syntactic (visual- aesthetic, structural) aspect of design language but not focus what the brand-specific elements actually communicate and external and internal on changes in design style (Warell 2001). Karjalainen does not provide an as clear framework for the construction of a brand specific design language as Warell does, however, he discusses the brand-specific references more in depth on how and where they occur, how they can be identified and what they communicate so he focus on the semantic aspects of design language and also the strategic management of brand specific design language (Warell 2001, Karjalainen 2004).Both of them stress the importance of maintaining a recognizable 'style', a brand specific design language, across the product portfolio of the brand to support consistent brand identity and to avoid shape ambiguity in terms of brand recognition. It is aimed to maintain a powerful tool and framework in analyzing the process of Bang & Olufsen handling strategic brand identity and the process of strategic identity communication through the product portfolio in terms of creating products communicating brand identity and value by using a combination of the design format principle of Warell and Karjalainen's discussions about semantic transformation. The division of the company identity into external and internal dimensions in literature is considered a central conceptual notion and accepted as an important aspect for the purposes of this thesis. The contents of strategic brand identity and strategic brand communication is different

although they should be treated together in coherence. Strategic dimension of identity such as business idea, goals, mission, values that also involves the aspect of intentionality, in other words the inherent dimension consisting of company heritage, culture, past reputation is what the brand is stands for the messages that the brand wishes to customer believe. Strategic brand communication is management of strategic brand identity in external world, in other words, it means somewhat visual brand strategy, what the brand has been known for.

1.2. Aims of the Study

Bang & Olufsen has a competitive advantage in consumer electronics market through its product designs and internationally recognized for their classic form language and their distinctive, innovative, attractive products in high quality. The product range of Bang & Olufsen exhibit a relatively strong typicality, since they are quite characteristic compared to their competitors. Creating brand awareness, recognition, identification, distinction through syntactic aspects (visual typicality) and semantic qualities (verbal description of qualitative –descriptive- characteristics) of products and also managing these qualities strategically in terms of visual communication and portfolio management has become the central topics of creating competitive advantage in the market within various product categories most importantly in consumer electronics market where technical differences between products are diminishing.

So the use of design 'in terms of not only developing visually attractive designs that can substantially strengthen the company's brand image but also encoding intentional meanings into products that then improve the possibility of target customers interpretation in a favorable manner by managing selected design features strategically and consistently in terms of strategic meaning creation through products is important with regard to developing and maintaining brand recognition and distinction. This is a question of concern is about appealingness, message-creation and brand communication conveyed by each and every product and by a range of products in terms visual typicality and qualitative brand specific characteristics.

The main purpose of this thesis is to identify how Bang & Olufsen company manages its brand identity by using product design in terms of the visual and communicative design qualities of a products in each product and product portfolio

level as a strategic tool to create a certain association of the product and brand in the mind of the receiver and thereby make the customer prefer that specific product over competitors. As the question of 'what makes a audio product look like a Bang & Olufsen or Phillips?' in terms of strategic portfolio management is an individual case and should therefore be considered individually in every specific brand situation.

The context objective of the study is to obtain theoretic bases to identify how Bang & Olufsen seem to comprehend its strategic identity and how the product design is used to promote it in terms of creating brand awareness, distinction, recognition in the market by taking 'Design Format Model' of Anders Warell and Toni-Matti Karjalainen's discussions around the theme of semantic transformation (not a method) as they together connect perspectives of brand research and the communicative aspects of product design. And the objective with respect to content is to search for how Bang & Olufsen evaluate and manage their brand and to describe the construction, nature and implications of Bang & Olufsen specific design language in communicating their strategic brand identity concerning the development of a design language as a tool in strategic (managerial) level and operative (new product development) level.

The brand identity will be regarded primarily as a strategic concept that fundamentally involves the aspect of intentional actions and place the main emphasis on discussing the central means of product design within the message transmission. Consequently, the question of concern is more about searching for the correspondence between specifically 'defined' identity and intentional communication (meaning transmission) through product design. If there is the smaller the deviance between strategic internal brand identity (what is the brand stands for? the messages that the brand wishes to customer believe) and external brand identity (visual brand strategy; what the brand has been known for, how does product design support brand identity) than it would be accepted that the more believable the transformed intentional message is. In terms of identifying the concurrence between the business strategy and product strategy, in other words the way implementing design as a strategic resource, the focus of the analysis is on the communicated identity of Bang & Olufsen (core values, main messages) and the design features that are used to communicate these values.

The main question of concern will be 'How does Bang & Olufsen handle product design as a strategic tool in transmitting predefined (intentional) strategic identity (messages) to the target customers, hence create brand recognition and differentiation?'. The related questions to the main question are such as the following:

1- How the product design can be used as a strategic tool to communicate brand identity and values?

2- How may a brand (company) be able to create brand-specific meanings in physical design elements and characteristics of products? How can designer (company) evaluate the effects of certain design elements on the user interpretation and encode intentional messages to visual expressions with product design?

3- Who and what is Bang & Olufsen (the role and position of the brand, target customers brand heritage, design history)?

4- What is the strategic brand identity in other words the brand specific messages that Bang & Olufsen wishes the customer to believe hence what associations the brand (and also designer) wishes to evoke to be able design products as manifestations of brand identity. What are strategically defined central messages that differentiate the company from the competitors and that are intended to transmit to the target customers?

5- What are the core identity attributes as the expressions of core identity that remain the same across the whole product portfolio of the company?

6- In order to support its strategy how does Bang & Olufsen develop a distinct product language to obtain product differentiation and a consistent brand identity?

7- How can B&O maintain brand recognition (the degree of recognition that is embodied in a brand's products) and obtain differentiation through innovations (novelty) in product development at the same time keep up competitive in the market? Being innovative at the same time providing recognition and familiarity and staying competative is another issue that needs to be discussed.

8- While analyzing the product portfolio (analyzing strategic identity references in product design) it is aimed to decrease the subjectivity in interpretation of referring products as manifestations of brand identity and impute (refer) product attributes as proper (correct) as possible brand specific.

1.3. Methods of the Study

The purpose of the study is to analyze the contribution of product design and design management in global 'design-conscious' company operating in fluctuating and saturated market, where differentiation is the crucial key to success. Hence, the research focuses the role of design management as companies' strategic tool, on managerial and

organizational approach to design as strategic tool through product portfolio of case company, on product design and its connection to the building of product image and corporate identity, and on the influence of market information about consumer needs, trends etc. on product design decisions. As a result, the study aims to identify the ideas of managing the design function in a competitive way, in order to respond to constant changes in market demands. The study is qualitative in nature and will be implemented primarily through literature review and methods of case study research. Literature survey focuses on brand (company) identity, product design, creating and communicating a brand, communicative aspects of product design (not on primarily consumers' product perception), strategic brand identity and strategic brand communication. Consumers' product perception is taken into consideration from design's viewpoint (company view point). An essential part of the study will be formed by case study in which Bang & Olufsen will be analyzed in the context of the research frame. A planned approach is to conduct the main case where various data collection methods will be used to inductively derive empirical findings to complement and support (and to create) the theoretical framework.

The problem is defined as searching for concepts and definitions that aimed to describe the basis of strategic brand identity and strategic use of product design in terms of transmitting strategically defined ideas, concepts meanings to the customers by the great potential of semantic (communicative) product qualities from the perspectives of companies. It is aimed to observe the process of companies in transformation from strategy to ideas and concepts and further to design representations (the transformation from strategic knowledge to visual knowledge) to create a recognizable and distinctive brand and product identity through design in terms of having a competitive advantage in the market. Then, the aim of the thesis is directed to search for relevant issues that it is important to be aware of and should take into consideration when designing for a brand in terms of creating brand specific design language. Few theories around the issue of brand specific design language is found in literature, but it is seen that most of them suggest rather mechanistic approaches to the analysis of the visual construction of brand-specific design and not consider strategic brand communication. The existing literature on the topic of how products represent brand identity, in other words the relationship between the product design and the brand in meaning creation in a strategic approach, is seen as far from substantial. However, the lack of literature and research in communicative aspects of design as a strategic tool in terms of creating brand

awareness, brand recognition and brand distinction is striking, the two PhD thesis found in this specific field are' Design Syntactics: A Functional Approach to Visual Product Form' by Andres Warell and 'Semantic Transformation in Design: Communicating Strategic Brand Identity Through Product Design References' by Toni Matti Karjalainen (Warell 2001, Karjalainen 2004).

By a comparative analysis of Warell's Design Syntactics Methodology Warell's Design Format method and Karjalainen's discussions about semantic transformation and by using a particular combination of them it is aimed to provide a powerful tool and a theoretical framework for analyzing the case study of this thesis 'Bang & Olufsen consumer electronics company'. The both approach include some similarities and dissimilarities in terms of the key aspects of strategic brand communication in product design and take references from each other in some levels. The similarities and dissimilarities in between the design format principle of Warell and Karjalainen's discussions about semantic transformation are mentioned throughout chapter 4. By the guidance of these two approaches, concerning the use of product design in creating intentional meanings and associations, the brand specific design language of Bang & Olufsen throughout the audio product range is revealed and the congruence between specific brand associations and physical product manifestations of brand identity are analyzed from syntactic and semantic perspectives.

The method of design formatting (Design Format Analysis) to find out typical brand style through the product portfolio of brand in syntactic level where in this thesis pragmatic and semantic levels are added to the contents of analysis:

The collected visual appearance of the company's image in the mind of the customer can be defined by studying the visual appearance of the products through the method of design formatting. Warell's design format model is in danger of bringing along design elements or styling features which get a high score in the analysis into the brand-specific design language without them being manifested in brand values. In this thesis, the qualitative nature of Design Format Analysis and its potentially biased results are tried to be diminished and reliability of the results are tried to be increased by scanning the audio product portfolio of Bang & Olufsen deeply through brand's design history in terms of their 2D and 3D appearance with the thoughts and intentions of the designers (and also brand) behind the scanned products and not only the syntactic level and also both semantic levels and pragmatic level (that influence syntactic grammar so semantic interpretation) of design language (product identity) are taken into

consideration. The table of design format analysis of three audio products (launched in between 1996 and 2004) in syntactic, pragmatic and semantic levels are in Appendix A (Table A.1, Table A.2, Table A.3).

In Warell's design format analysis, products of brands (in single product level and product portfolio level) are analyzed according to which shapes and styling features (in terms of the syntactic aspect of design language) that are repeated over the product portfolio and only formal-aesthetic structure of the brand's products are addressed. Design Format modeling methodology of Anders Warell concerns the content of the visual form of a product; what form elements are present and how are they used to create products with a design language supporting a coherent visual brand identity. Warell defines the company-internal positioning such as corporate identity strategies, company values and design philosophy but he states that they are not directly evident to the ordinary consumer and thus not directly part of the format bank which is defined as collected visual appearance of the company's image in the mind of the customer. From Warell's formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues, thus, denoting the structure and nature of visual elements which enables recognition through visual similarity within the same brand, in other words which carries the semantic content and creates recognition through visual resemblance.

Design Format Analysis is of a qualitative nature and allows for flexible applications. It can be used systematically to generate semi-quantitative data because both the selection criteria of included features and products and also the occurrence of features in products (strong, weak, not at all) are often based more on subjective evaluation than on exact measurements. In this thesis, the qualitative nature of Design Format Analysis and its potentially biased results are tried to diminished and reliability of the results are tried to be increased by scanning deeply visual design history of the case brand with the thoughts and intentions of the designers (and also brand) behind the scanned products and not only the syntactic level and also both semantic levels and pragmatic level (that influence syntactic grammar so semantic interpretation) of design language (product identity) are taken into consideration. Also the method of semantic differentials, developed by Osgood will be used to analyze brand specific implicit design cues in semantic level to provide more objective approaches (Osgood 1957). As indicated by Krippendorff, it is 'first and well-known method to conceptualize characters' and Karjalainen states that it is applicable also to the study of the link

between brand characteristics and design features or products (Krippendorff 2005, Karjalainen 2007). If semantic differential scales are used to gather impressions of a large quantity of people, rather reliable data of the implicit recognition of the brand character can be generated (Karjalainen 2007).

The qualitative nature of Design Format Analysis and its potentially biased results suggest that the method offers the strongest contribution when used for communication purposes, whether among designers or between them and other parties and can boost insightful discussions with regard to the construction of a brand's visual recognition. It is also suggested that Design Format Analysis is predominantly a reactive analysis method but can also be proactively used, for instance, when planning the future product portfolio strategy of a certain brand. The visual appearance of the products can be studied through the method of design formatting by the designers of the brand or by the researcher for many purposes for example searching for typical brand style in terms of visual coherency in product portfolio of the brand. The approach of Design Format Analysis (DFA), developed by Warell that explores the occurrence of selected design features among a variety of products (explicit brand design cues) that construct the visual recognition is used as the main visual method (Warell 2001).

The approach of Design Format Analysis is a method has four different steps such as; visual scanning by which the visual elements is identified and selected for further study on basis of their legibility. It is used to analyze the product portfolio of the brand to identify the most prominent (characteristic) visual elements of the products that can be easily detected by visual perception in overall gestalt appearance and also in single element or less prominent (e.g., smaller) element which through repetition is perceived equally easy. Element weighting by which visual elements are compared pair wise with each other and the most visually characteristic elements are identified on the basis of how visually important (significant) they are to the overall visual appearance of each respective model. Typicality is a way of determining the visual coherence of a number of different products which refers to how representative a certain visual element is for all models of a certain brand as such a higher degree of occurrence of a certain element across models results in a higher 'typicality' value to use typicality as a criterion when selecting visual elements for the format assessment stage. Format assessment step can be performed in a format analysis using a 'design format matrix' which refers to a specific way of organizing the content of the visual product form. The most characteristic visual elements of the entire brand (respective brand) can be

assessed by format analysis in a design format matrix with respect to their presence in the studied models. Each model can be described by its own design format, which captures the essential elements of the visual appearance of that model. A number of products, such as a model range of a certain brand, can also be described by a design format, which in that case captures the essential visual elements of the entire model range.

The heuristic method of Toni Matti Karjalainen on Semantic Transformation in Design is used to define the semantic contents of brand specific design language and to create a generic outline in analyzing the strategic portfolio management process of Bang & Olufsen: Karjalainen' s discussions (not a method) around semantic transformation to provide theoretical framework in analysis of strategic brand identity, strategic brand communication and searching for brand specific design language in semantic level. Karjalainen's discussion around semantic transformation is constructed of four main interrelated aspects: the basis of strategic brand identity, visual communication and product portfolio management, design as brand manifestation and semantic transformation in the design process (Karjalainen 2004). In short, the Semantic Transformation refers to a framework for a setup in which the strategically defined orientations of the company's brand are actualized through product design. It is a tool to analyze the brand product portfolio not only in terms of the syntactic (visual-aesthetic, structural) aspect of design language but also embodied brand specific meanings in products reflecting brand identity (linguistic definitions of their semantic references to brand identity attribute-brand identity definitions). Warell talks about recognizable and consistent through the syntactic aspects of product design where Karjalainen talks about recognizable, consistent and distinctive brand identity through both the syntactic and also semantic aspects and qualitative characteristics of product design. Because, the total experience within the encounter between the product and the user combines aspects of both the tangible product features and intangible brand associations. Brand manifestation means of transmitting strategic identity evoking intentional associations references to brand identity attributes and design as brand manifestation defined by Karjalainen involves four aspects; the product typology, coding and associations, traceability of design elements and at last gestalts and single elements. Karjalainen's discussion regarding design as brand manifestation has been reviewed on the generic view of Charles Pierce's sign theory and the relation between R (the design cues of the brand that act as identifiers of brand) and O (brand identity attribute, the brand message,

sign meaning, processes, values, ideas, designer) is characterized by stringed associations referring to dynamic mutual characteristics of interaction in brand specific associations and meanings (Karjalainen 2004).

Karjalainen do not slightly enter to internalization neither the thoughts behind the analyzed products and the intentions of the designers who created the analyzed products across the product range of the case company in terms of transformation process from company's internal (collective knowledge) to designerly knowledge, nor the brand management process of his cases in terms of transformation process from strategic knowledge to visual representations. Karjaleinen aims to provide a structure for approaching semantic transformation and suggests a descriptive framework for the transformation between brand identity and product design, revealed from some common themes in his case studies and also from literature references in order to give concise directions for all companies' design practices. His framework presents the central issues and themes that appeared in the analysis of the case studies and the main components of the framework thus represent the focal issues of semantic transformation and aspects that are important in terms of strategic brand communication. In this thesis, the framework suggested by Karjalainen is taken as main reference to analyze the strategic portfolio management process of Bang & Olufsen, but also, the thoughts behind the analyzed products and the intentions of the designers and strategic brand identity management of the case company (appeared in three different periods) is deeply discussed (Karjalainen 2004). Because firstly, the main purpose of this thesis to analyze strategic identity management and strategic identity references in product design, secondly it is aimed to decrease the subjectivity in interpretation of referring products as manifestations of brand identity and impute(refer) product attributes as proper (correct) as possible brand specific.

Method for case selection is such as the following. The starting point for case selection is to find representative example with solid background in design and brand strategy that would enable a deeper view of subject matter and provide a good example for research to adapt and analyze the theorical framework (gained by a deep scanning through existing literature) on. The reasons are as following that Bang & Olufsen is considered to be a ground from which to choice. Besides all other factors and other fields, the technological equalization particularly in the field of consumer electronics goods makes it evident for the companies to find a specific niche in which to specialize in order to gain a sufficient level of differentiation and recognition. Bang & Olufsen has

strong company culture and brand heritage and are recognized for its distinctive designs on both overall gestalt and detailed design. Bang & Olufsen develops physical products with a intensity of industrial design. It is a well established so called strong brand that manage to turn national identity to global identity through mostly design-based winning strategy instead of marketing or other seven winning strategies and so prefer to have a competative advantage through product design. On the whole, this thesis conducts the selection of the case study in accordance with two general approaches that is called 'purposive' and 'theorical' sampling. The 'purposive sampling' ref means choosing a specific case because it illustrates some feature or process which the researcher is interested. Theoretical sampling presents the same generic view, but the purpose behind the sampling is theoretically defined. On the overall thematic level, the case deals with the generic themes of strategic brand identity and product design.

The qualitative case study method is selected as an appropriate approach for the study. This thesis approaches the themes that take place in the in a qualitative manner through the in-depth case of the design intensive Bang & Olufsen consumer electronics company. The answers to the case specific questions defined in aims of the study are merely explorative not definitive so the descriptive nature is suggested for the study. Descriptiveness not only refers to the outcomes of the literature review results but also to the empirical results. The case study topics, strategic brand identity of Bang & Olufsen and the externalization of this identity involve two main aspects for investigation through the use of empirical data. The first is the definition of the basis of strategic brand identity in a specific case by taking Karjalainen's approach as main reference so that the messages that are to be communicated through product design can be identified (by taking both Karjalainen's approach and Warell's method). Second is the question of how this message is physically manifest in product design.

A qualitative approach is used in data collection and analysis with respect to the research focus. Information has been gathered from a wide range of public (promotional) documents, core values list, brand stories in internet resources, marketing material, published annual reports of the company nearly for per year, published interviews with company and associated company employees and internal company document such as Bang & Olufsen: 'From vision to legend' and 'Sound and Vision: A history of Bang & Olufsen' (Bang and Palshoj 2000). They are the main sources with respect to strategic brand identity of Bang & Olufsen for the main question how externall strategic (intentional) representations of Bang & Olufsen identity are

illustrated in terms of empirical goals to clarify representations of brand identity and construct the basis of strategic brand identity (conceptualize what constitutes the concept of Bang & Olufsen's identity and how its constructed). Audio product range of the company (pictures and 3D), promotional documents, videos and stories of design process from public sources, interviews from public sources are used to identify design representations as main objective for data selection. The question of concern is 'How do audio products function as manifestations of brand, what is the construction of identity references in product design?' Focus is on first on studying the essence and representation of Bang & Olufsen brand identity through product portfolio and second on explaining how these attributes are transferred into product design representations.

1.4. Assumptions and Limitations

1- In the context of treating product design as a tool for strategic communication, product design (its gestalt form, characteristic shapes and single elements, reference levels) functions as a replica embodying specific signs or representations (communicative – semantic - product functions, semiotic qualities of products) that convey brand associations to a perceiver's mind. The ingredients of the process (meaning creation, interpretation and associations; representation, expression and knowledge), which are the brand design element (R: the object of reference, signifier, the design cues of the brand, product-brand- properties) that act as identifiers of brand (O: object, brand identity attribute, the brand message, sign meaning, processes, values, ideas, designer) and the interpretant (I: people, target customer, designer as a customer) that interprets the message from brand (O) that is communicated through the character of product (R) make the process complex in reality. Every brand is a specific case in its own influenced by internal and external aspects influenced by the market position of the brand, the product category that the brand belongs, the product lifecycle and market dynamics. As well as every designer has his or her personal way of working as the design process is a creative, individual process and they should not be interrupted or circumscribed by a guideline. It is also important to be aware that good (brand-specific) design is not totally measurable in the sense of certain elements and rules. The brand-specific design elements are also individual, appear on different levels and have very different characteristics, there is no simple, universal method on how to find a brand's strategic design language and apply

this in the development of new products for that brand. Brand identity can be reflected through different aspects of the products. A specific design element can be interpreted in various ways so as an object can have various representations and a specific brand attribute can be referred to through different replicas. Further more, interpreting subjects with different backgrounds affected also by cultural factors can end up with a consistent interpretation of different replicas and objects. The interpretation of symbolic references varies between cultural and social contexts that they are regarded as being based on socially and culturally agreed conventions and terms. Brand specific associations and meanings are constantly regenerate and reshape (for the brand, designer and customer) that are fused in dynamic mutual interaction. And also it is not guaranteed that the codes are interpreted in accordance with the message the companies and designers have encoded.

Besides all these aspects, the references that this thesis is based on present a more of a general guideline to point out relevant issues one should take into consideration when designing for a brand, in other words relevant issues that it is important to be aware of when designing for a brand which have to be individually tailored in each specific case. Although 'Design Format Model' of Warell is representing a method, Warell and Karjalainen generally suggest rather a discussion (not a universal method) around evaluating a brand and its specific design language to bring this on in the process of designing new products that communicates the brand identity and in terms of understanding how the visual and communicative design qualities of products actually communicate (and represent) brand identity (Warell 2001, Karjalainen 2004).

2- Although it is accepted as a highly case dependent subject throughout the literature and the importance of the influence of company's strategic objectives and decisions behind the brand specific design is discussed deeply only in Karjalainen' s study, Karjalainen do not slightly enter to internalisation neither the thoughts behind the analyzed products and the intentions of the designers who created the analyzed products across the product range of the case company in terms of transformation process from company's internal (collective knowledge) to designerly knowledge, nor the brand management process of his cases in terms of transformation process from strategic knowledge to visual representations. Karjaleinen aims to provide a structure for approaching semantic transformation and suggests a descriptive framework for the transformation between brand identity and product design, revealed from some common

themes in his case studies and also from literature references in order to give concise directions for all companies' design practices. His framework presents the central issues and themes that appeared in the analysis of the case studies and the main components of the framework thus represent the focal issues of semantic transformation and aspects that are important in terms of strategic brand communication. In this thesis, the framework suggested by Karjalainen is taken as main reference to analyze the strategic portfolio management process of Bang & Olufsen, but also, the thoughts behind the analyzed products and the intentions of the designers and strategic brand identity management of the case company (appeared in three different periods) is deeply discussed. Because firstly, the main purpose of this thesis to analyze strategic identity management and strategic identity references in product design, secondly it is aimed to decrease the subjectivity factor in interpretation of referring products as manifestations of brand identity and impute (refer) product attributes as proper (correct) as possible brand specific in order to reduce the number of likely solutions and conclude (attach, depend) the results on healthy (strong) bases.

3- The product design functions as the visual manifestation of brand (company) identity is taken into concentration.

4- Bang & Olufsen, the case company of this thesis is (circumscribe) selected in such circumstances below in order to make the case study coherence with the purpose of this thesis. This also means that the results gathered from the case study is case specific as also communicating strategic brand identity in products is really an utterly individual case that should be considered individually in every specific brand situation.

Bang & Olufsen is in the category of master brand that means one brand to identify all products / services and descriptions to unique product competencies. In the literature the corporate identity is divided into monolithic, endorsed and branded (pluralistic) corporate identity in terms of brand architecture. The identity can be monolithic means that the whole company uses one visual style and that the consistency between the corporate identity and the product identity is very strong, the product reflecting the corporation directly. In other words, monolithic identity is when a company uses only one name with belonging visual identity and this penetrates the whole company. The identity of Bang & Olufsen, the case company of this thesis is monolithic, in other words selected from this category in order to make the case study coherence with the purpose of this thesis.

The notion of corporate identity refers to the company behind the brand. In the literature, corporate identity has been generally used in this way. However, it should also be noted that a significant body of the corporate identity literature focuses on the graphic design aspect. With respect to my case company Bang& Olufsen, brand identity can be considered equivalent to corporate identity, because it can both be regarded as 'corporate brand' that is used to designate both the company and its products. This means that a product 'labeled' with a B& O brand embodies are organically intertwined with the company carrying the name of B & O.

In literature there is a classification due to degree of the brand/ product involvement and corporate/ source involvement in terms of company strategy such as 'high corporate involvement and low product involvement', 'high corporate involvement and high product involvement', 'Low corporate involvement and high product involvement', 'Low corporate involvement and low product involvement' . The case company of this thesis is selected from the 'High corporate involvement and high product involvement' category as it is proposed that a strong corporate voice strengthens all product messages by a strategy where the corporate voice and the brand work together to deliver a consistent service.

5- Brand identity and company identity are used as main concepts in the thesis in place of the notions of corporate identity, organizational identity, and other related concepts that appear in the literature. It is important to realize that a brand can have different definitions depending on the perspective from which it is viewed. Although, the concept of brand has also been defined in various ways in the literature, in this thesis, brand is regarded as the expression of the company identity as the interface between the company or product and the customer.

6- This thesis's aim is to study the perception and interpretation of product design especially from the perspective of company where as identity (brand identity) is controllable to some degree, where as perceived image (brand image) is always uncontrollable (subjective) with respect to terminology in literature. The focus is not to study the perception and interpretation of product design from the perspective of users. As a conceptual limitation, the consumers (recipients) are regarded as pure recipients of ready-coded meanings. The customer perception and interpretation of designed products with their connection to various aspects of product experience such as perception, emotions and cognition involve a huge research area and should be deeply discussed so that they are accepted as the topics of another (further) research. Besides this limitation,

the user side is not put out of consideration and is generally discussed because the strategic action comprises the feedbacks from the stakeholders and target customers.. And also the designers (and brand) need knowledge of the effects of different design features on the user interpretation to be able to construct relevant product messages. If inconsistencies between the intent and the perception occur, either the designer may be failed to 'encode' proper meanings into the product or the user does not succeed to correctly 'decode' them. The designers themselves are also the consumer of designed artefacts and belong also to the group of recipients. The company (designer) should forecast potential interpretations of the specific semantic aspects of product design in terms of encoded intentional (brand specific) meanings and the existing knowledge of how customers perceive the brand and products should be taken into consideration as extensively as possible during the design process. So the meaning transmission and shared meaning creation is regarded merely as a strategic action to affect others through goal-orientated means instead of a sole communicative action. Although the degree of coherency and flexibility is a case specific issue, if the brand use specifically defined features and characteristics of the products continuously to some degree, it is accepted that, the intended messages would be transmitted to costumers in the way that the brand (designer) intents, in other words, it may decrease the possibility of interpreting unexpected meanings from them.

7- It has not been impossible to reach firsthand information about internal documents of the company such as concept sketches of products and could not be managed to make personal interviews with the designers of case company. The data collection for the design process is achieved from the secondhand documents such as internet (videos, interviews with designers …), promotional documents of the company and the books of the company that are gifted for this thesis.

8- The case is studied retrospectively by analyzing already launched products only through the audio product range of the company. And also the critical assessment of the type of knowledge is focused on and gained through mostly a retrospective versus a real time analysis.

CHAPTER 2

OVERVIEW ON BRAND AND PRODUCT IDENTITY

2.1. The Importance of Brand and Product Identity Identity in Competitive Market

In today's contemporary market, the customers are faced and exposed to a increasing number of services, companies, brands and so a overload of product supply together with the overload of stimuli (very similar products in appearance) where also technical differences between products are diminishing. In this arena, the features and quality of many products are more or less the same while competitive products have converged in terms of technical performance and also the customers do not select a certain product only because it is superior technically. So the companies has been forced to find powerful way to stand out from the crowd (its competitors) and it becomes more important for the companies to launch products with qualities that customers become attached to. Besides all other factors and other fields, the technological equalization particularly in the field of consumer electronics goods makes it evident for the companies to find a specific niche in which to specialize in order to gain a sufficient level of differentiation and recognition. It becomes a challenge for companies to create a recognizable and distinctive brand and product identity through design to have a competitive advantage in the market. In literature, firstly the symbolic dimension of products is seen as an important aspect in order to design products presenting different product attributes with recognizable identities to stand out from the competitors. Secondly, it is being stressed that the companies need to communicate their vision clearly and efficiently to gain market position and define some guidelines in how to ensure a company vision through product design.

The basic meaning of identity is distinguishing one thing from other things and identity can only be used to denote differentiation from something else. In the company context, the notion of identity thus predominantly refers to differentiation. The communication surfaces of companies are generally products or services and environment where the companies express their identity through. In literature, identity is divided into three dimensions such as customer identity, company identity and product

identity. Brand is more than the product as that product identity is the identity that the product itself expresses and the company behind the product often wants to control this identity through a brand. It means that the brands are more than the products, beside this, however, the products are, in effect, brands that every product has a brand and, in many cases, the primary encounter that the user has with the brand is realized precisely through the product. The products are representations (touch points with customers) of the brand in external word, in other words, the products are differentiated through the brands they represent for a customer and they take on identities that are associated with their brands in the external word. Brand identity is understood as something that the company can recognize, have control over and modify with respect to the requirements coming from the external environment, and also besides its distinctiveness, the central character of a company involves features that are typical for the brand that exhibit sameness overtime. All companies are connected to specific values, attitudes and ambitions that are the core of the identity, the main issues the brand stands for. A set of core values are often proposed that contribute to the company's underlying beliefs, ideas and opinions and are created through a social context. They describe what the company or brand stands for and guides how it operates and reacts. The companies have to live the values continuously to be credible as integrity (reliability, trustworthiness) ensures continuity this is what separates values form beliefs, ideas and opinions.

Resent years a holistic view on brand, product and product portfolio has become more and more important. This manner steams from the notion of identity with a core in company values. The abstract level of identity is seen as a concept that explains different mental and emotional factors of a company, such as its business idea, goals, mission, character, and values. The concrete level of identity is defined as including specific features (physical features) that the company can be recognized and identified (differentiated) through. In effect, design, as a whole, can be defined as a strategic activity that is handled by the company. Brand identity management concerns multi-faceted communication and the product design forms only a part of brand management yet an important one, as the design functions as an intermediate means of communication. In this sense, product design can be considered a strategic tool for the company with their communicative qualities. Consequently, as a holistic view on brand, product and product portfolio has become more and more important in the resent years, the companies should have a essential message by which the brand is recognized and differentiated from the competitors and should find a proper way (that depends on the

target group of the brand, the market and product category they belong) to use the communicative qualities of product in order to communicate their brand identity (at least to some degree) coherently through the product portfolio of the brand. This means that, for the companies, there is a need for the development of a proper strategic design language for the brand's products. This language, as they are the ultimate manifestation of brand identity and value, should aim at evoking specific associations in the minds of the customers reflecting the brands identity and core values.

Mastering the symbolic dimension of products has a vast challenge for companies while the contemporary product environment is saturated by a constant flow of signs and messages to our minds. The choice and consumption of products is shifting from the product itself to the values and experiences it provides and a major part of these values are created through the design of the product. The physical product is seen as a carrier of design elements and characteristics which the users/consumers can read or perceive so that product design plays an increasingly important role within the surge of competition as the companies wish to communicate something through design. As well as the aim of designing distinctive products increasingly stress the symbolic value attached to the products, as an aspect of product design, visual identity has also became increasingly important for differentiation in the marketplace. The product has to 'look', 'feel' and 'sound' right which is perceived by all senses and more specifically, 'visual appearance of a product' is the basis for the customer's first encounter and experience with the product. Visual product identity is seen as a meaning-making phenomenon in literature. The description of visual identity as 'visual sameness of essential or generic character in different instances' implies that visual identity carried by product form requires something in the appearance that is typical for a brand or frequently occurring in the brand, and that this typicality is applicable to all products of the brand. If the visual appearance does not contain something recognizable; the brand will not be legible. Identifying and utilizing the means relevant to communicating desired messages to their current and potential target customers is being seen as the crucial task of companies and designers where this communication involves presenting different product attributes that increasingly stress the symbolic value attached to the product in question.

Products are can be seen as brands that every product has a brand and, in many cases, the primary encounter that the user has with the brand is realized precisely through the product. The company needs to identify themselves to their customers and

the products are representations (touch points with customers) of the brand in external word, in other words, the products are differentiated through the brands they represent for a customer and they take on identities that are associated with their brands in the external word. 'Visual appearance of a product' is the basis for the customer's first encounter and experience with the product. The choice and consumption of products is shifting from the product itself to the values and experiences it provides and a major part of these values are created through the design of the product. The symbolic contents of product design have become a central aspect of the contemporary market place. The symbolic dimension of products in other words, the symbolic value attached to the products becomes increasingly important. Besides all other factors and other fields, the technological equalization particularly in the field of consumer electronics goods makes it evident for the companies to find a specific niche in which to specialize in order to gain a sufficient level of differentiation and recognition. It becomes a challenge for companies to create a recognizable and distinctive brand and product identity through design to have a competitive advantage in the market. The physical product is seen as a carrier of design elements and characteristics which the users/consumers can read or perceive so that product design plays an increasingly important role within the surge of competition as the companies wish to communicate something through design. In particular, the relationship between the product and the brand in meaning creation is seen as an issue that requires further contemplation because it is seen that there exists an extensive body of literature concerning corporate identity design and design management where brand identity design mainly refers to graphic design (logo, name, packaging, advertisements and so on). Communicating brand identity and value through products is evident for companies in terms of differentiation and recognition to make the customer prefer that specific product over competitors, but this process both does not only depend on sole capabilities of designers and also company communication is an strategic process depends on brand management and design management.

Brand identity is something that the company can recognize, have control over and modify with respect to the requirements coming from the external environment and so should be a topic of strategic management. Organizations have a factual identity (internal company characteristics) which is then communicated to publics through corporate identity management. And also it is seen that there is a main difference between the brand identity and image as identity (brand identity) is controllable to some

degree, where as perceived image (brand image) is always uncontrollable (subjective) with respect to terminology in literature. Also it is realized that the contents of strategic brand identity and strategic brand communication is different although they should be treated together in coherence. Strategic dimension of identity such as business idea, goals, mission, values that also involves the aspect of intentionality, in other words the inherent dimension consisting of company heritage, culture, past reputation is what the brand is stands for the messages that the brand wishes to customer believe. Strategic brand communication is management of strategic brand identity in external world, in other words, it means somewhat visual brand strategy, what the brand has been known for. Product design is regarded as the externalization of a certain strategic identity. And the subjectivity in the context of communicative product qualities and brand identity/image division make it evident to circumscribe the research study with company side and to study the perception and interpretation of product design especially from the perspective of company in a strategic approach.

2.2. Brand Awareness and Brand Recognition

From internal perspective, brand has an identity that is about the ethos, aims, and values that present a sense of individuality differentiating the brand which involves the whole company. A brand represents a cluster of values, for example, virgin values quality, innovation, value for money, fun and a sense of challenge. The brand consists of core and peripheral values to keep up with changes in the environment; the brand is fine-tuned by changing the peripheral values. The brand adds functional and most importantly emotional benefits to the (augmented) product that a customer should instantly associate a brand with a certain benefit. The brand focuses on visual signifiers to differentiate the brand that should be developed strategically. Brand vision is strategic and will motivate staff. In this perspective, the brand is seen as a beacon that directs management to where the company should be heading. The brand is dominated by the corporation and the values associated with the company. The brand represents information for the customer. This shortcut into the customer's memory aids decision-making. From externally perspective the brand image is how it is perceived by the customer with relationship. The image is formed through experience with the product and related communication. Each customer has a unique understanding of the brand but may share common features with other customers.

When branding is considered from the interactive perspective, brand points to the relationship between the company or product and the customer. The concept of recognition that has been widely used in the brand literature becomes important. Keeley also notes 'The principal mission of a company identity is to foster recognition' (Keeley 2001). The positioning, awareness, loyalty and associations are regarded as the key dimensions of brand recognition in literature. These additional concepts and terms for opening up the all-encompassing concept of 'brand' appear in most discussions on branding. The position of a brand that is at the core of all branding activities defines the concept of identity (deChernatony 1999). Brand positioning reflects product quality (both technical and semantic quality). Finally, brand is perceived in metaphorical terms as having a personality that is directly associated with the brand name and through which the brand becomes meaningful to the target audience. The holistic model of brand identity illustrates these concepts in Figure 2.1 that Urde assumes that position is the central aspect of brand identity (Urde1999). The Figure 2.1 also illustrates the key notions of associations, awareness and loyalty, as well as their relations to the product, brand name and target audience (Urde 1999).

Figure 2.1. The holistic model of brand identity.

(Source: Urde 1999)

As it is illustrated in Figure 2.2 below, Karjalainen shows another way of looking at the concepts (Karjalainen 2004). As Karjalainen states, differing from the model of Urge, this illustration highlights the process nature of brand identity

(Karjalainen 2004). The Figure 2.2 suggests that the perceiver becomes aware of the brand as a result of interaction between the brand and the perceiver. Interaction between the perceiver and brand leads, in the first encounter, to awarness and initial associations are constructed, and thus, brand personality is created. Thus awareness is a relevant concept in a situation in which the brand is previously unknown to the person (Karjalainen 2004). During additional encounters, the brand is recognized on the basis of pre-constructed associations that, now, are reshaped. Eventually, interaction may reinforce the consumer's loyalty towards the brand (Karjeleinen 2004). If a brand is known previously, the interaction functions through the process of recognition. During the first encounter, awareness evokes certain associations in relation to the brand and personality is formed for the brand (Karjalainen 2004). This personality and the associations are constantly reshaped during further interaction. Consequently, a sense of loyalty towards the brand may increase (Karjalainen 2004). The interaction may also remain merely on the level of recognition. The person recognizes the brand well and is able to attach specific associations to it but does not, for various reasons, show loyalty to the brand (Karjaleinen 2004).

Figure 2. 2. The figure distinguishes between the concepts of brand awareness and brand recognition.
(Source: Adapted from Karjeleinen 2004)

2.3. The Integration of Design Based Product and Business

In this thesis, the objective is to analyze and compare the relationships between company's competitive strategy and design strategy, as well as to analyze the strategic decision-making practices. The strategic dimension of design requires integrating design closely into company's decision-making processes.

A corporate identity should reflect the true nature of the company. It is necessary to ensure that design as a strategic tool is integrated in the company with the consciousness of its employees to actuate the development or improvement of a corporate identity. If the design tool is integrated and applied, it makes the corporate identity a useful tool both internally and externally. In order to optimize the utility value of a corporate identity, it is necessary to know the use of this as a tool. This involves the integration of it into the existing organization. Many researches have started to take place in literature to illustrate what conditions that needs to be fulfilled before a company's identity is optimized as a strategic tool in a business exposed to strong competitors.

Products are the most important 'spokesmen' for any brand or company. Thus, the key to a successful corporate communication resides in how well a company communicates its visions and values by means of the identity and image of its products, keeping the notion of 'audience involvement' in mind. As a product's identity and link to its corporate source are largely determined by the product's design, a through knowledge of the company should always be the foundation of any product development, where questions like 'who are we?', 'who do we want to reach out to?', 'where?', 'how?' and 'why?' should be central.

In design of consumer products the idea and its communication plays an important role, due to the competition on the market. Design is moreover understood as a competition parameter and a powerful tool to increase product values. The practical use and understanding of design has moved from an added to an integrated function and is now tending to be an overall concept for the use and integration of information (Burnette1995). A design that meets the cultural profile up front and, at the same time, carries familiar signs has great sales potential. Aesthetic form acts a medium for messages about values. The interactive nature of design is becoming more evident as are the active concept of design designing. Not as a one man show but as a cooperation and team work. This situation requires a common understanding of design, its elements,

structure and the principles of their interaction. Less experienced companies work separately with product design. Several companies work with product design mainly in the technological context and are inexperienced in the integration of this with the aesthetic context. The aesthetic function of the product acts as the physical representation of the values mission and a documentation of the product strategy if it is not conceived as pure form only, but as a system based principle of value interaction between designer, company and user. It has been underlining that, the business strategy and the cultural values on the market one to two years ahead to succeed. In a broader perspective, meaning making and business making reflect one another and reflect again a wider understanding of design, described as 'A meaning making and business making activity through transformation' including transformation as 'the learning organization', the 'market trends' and the change of the concept of design itself.

In order to create a common ground for understanding and organizing design more models have been created though out time representing the move of design from an added to an integrating factor (Stokholm 2003). In line with this, a model has been developed by the author, as a universal tool for a new and more holistic understanding of design. It aims at improving the communication in designing and to support practical work with design. The Integrated Design Model suggests a map to illustrate how the two contexts meet on the product level (Stockholm 2003). The Figure 2.3 shows the model and elements of integrated design as a tool for understanding and communicating design in general. Integration of design based product and design based business, adapted from general discussions about integrated design based on Marianne Stockholm, Erik Lerdahl, John Hetzel and Charles Burnette (Stockholm 2003, Lerdahl 2001, Hetzel 1998, Burnette 1995). The 'integration of design based product and design based business' is considered by the author to become increasingly important as we enter the Knowledge and Dream Society. Stockholm aims at presenting a 'Model of Integrated Design' as a tool for understanding and communicating design in general and the aesthetic function of a product in specific that with respect to its ability to improve understanding and communicating the aesthetic function of a product (Stockholm 2003). In the model, two main axes are seen evident in the company's work with design that one deals with design at product level and the other with design at business level. Companies that understand the full potential of design will work at both levels and manage to integrate them. The axis of form-material or aesthetic-technology represent the level of design based products and the axis of cause-purpose or philosophy-strategy

represent the level of design based business. The center of the cross field represents the interference in which design as product exists and designing takes place in form of a process of interaction and transformation, in which integration and optimization takes place. Further more the model suggests the concept of system as a metaphor and approach to design.

Figure 2. 3. The model and elements of integrated design
(Source: Stockholm 2003)

Strategic management of product design is a crucial issue with respect to brand recognition and differentiation. The key question to consider is: How may companies transform their strategic intentions to product design. To approach this question, a qualitative case study approach is used. The case study of Bang & Olufsen consumer Electronics Company is discussed in this thesis. The realities and approaches towards

strategic brand identity management and strategic portfolio management of the company is analyzed through the audio product range. The correspondence between business strategy and brand portfolio strategy is focused. The objective is to analyze and compare the relationships between company's competitive strategy and design strategy, as well as to analyze the strategic decision-making practices. The strategic dimension of design requires integrating design closely into company's decision-making processes. The integration of Brand Portfolio Strategy with Business Strategy and the correspondence between them are important aspects for gaining competitive advantage in the market (Figure 2.4).
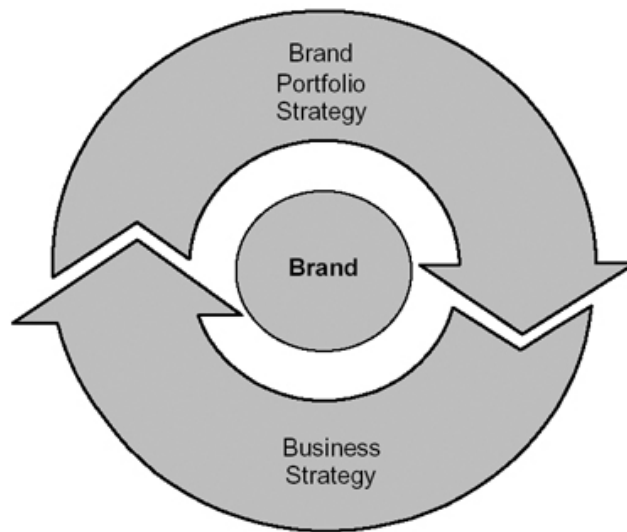
Figure 2. 4. The integration of brand portfolio strategy with business strategy

CHAPTER 3

COMMUNICATIVE PROPERTIES OF PRODUCT DESIGN

3.1. Communication Theory

One important task of industrial design is the design of the human-product interface, it being the most important factor for effective use of the product. The communication theory treats generally the process of communication between product and user. The interface may be seen as the 'arena' for communication of messages between the designer and the user; a successful design communicates the intentions of the designer and effectively aids in the use and handling of the product. It is thus advisable to investigate the factors, which influence the information carrying capacity of the human-product interface. A general definition of communication is 'social interaction through messages'. There are two main schools in the study of communication, the 'process school' which sees communication as the transmission of messages and the 'semiotic school' which sees communication as the production and exchange of meanings.

Design communication is found in several places in literature both within the design process and in other life phases, between different stakeholders and for different reasons. The design communication, is a complex research subject, context in which the design of the product's communication in an industrial context and as an artistic process, communication between different design disciplines (design team communication), involvement of users in the design process (consumer responses), and users expressing themselves by owning a product (people are seen as communicating with each other about products, their uses and users), etc. Where as the aim of the thesis is searching for possibilities of message encoding in products within company's own specific contents and considering company's control in the interaction between the product and perceiver. The focus is not on to study the perception and interpretation of product design from the perspective of users. But the existing knowledge of how customers perceive the products should be taken into consideration as extensively as possible during the design process as the designers themselves (as also the consumer of designed artifacts) belong also the group of recipients.

Related to product design, communication theory treats the communication of design messages from the product side to the user side. From the perspective of design science, it is seen as a process where information is transformed (signaled) from one state to the other in the mind of a perceiver. From the semiotic viewpoint, the message is carried by signs, and the design objective is viewed as a semantic problem. The signs are carried by the form of the product, and hence, we have a connection to visual aesthetics.

3.1.1. The 'Process School'

The process school emphasizes the process of communication and sees communication as the transmission of messages. It is concerned with how senders and receivers encode and decode and sees communication as a process by which one person affects the behavior or state of mind of another. This school defines social interaction as the process by which one person relates to others, or affects the behavior, state of mind or emotional response of another, and vice versa.

3.1.1.1. Shannon and Weaver's Model

One of the main and underlying theories within the process school is Shannon and Weaver's Mathematical Theory of Communication (Shannon and Weaver 1949). In Figure 3.1, a simple illustration of the model of communication is presented. The model is made by Buur and Andreasen and is based on the original theory of Shannon and Weaver (Buur and Andreasen 1989). In this model, which is linear, there is a sender and receiver. The message or signal is coded by the sender and again decoded by the receiver. According to the model when sending the information there will be a loss of information and noise will enter. The code of the model is for instance human language, symbols, drafting standards and projections. Outside of the brain, information can only exist in a medium, like sound, touch or written on paper. The theory of Shannon and Weaver grew out of the work with telephones and may be viewed as a more technical and linear approach to communication. In this school they assume basically that communication is a transfer of message from A to B. Their main concerns are with medium, channel, transmitter, receiver, noise and feedback, all of which are terms

relating to the process of sending a message. In the original model by Shannon and Weaver there was no feedback, but later works have found it useful (Buur and Andreasen 1989). Feedback helps the receiver feel involved in the communication. When relating to this thesis one will have different actors in a design team sending and receiving messages. These messages will be encoded and decoded. In the transfer there will be, according to the theory, a loss of information. Additionally noise will enter which 'distorts' the message more. The communication failure that occurs, according to this theory, will lead to misunderstanding and easily worsen the collaboration.
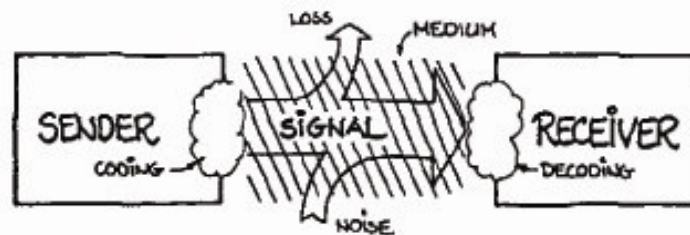
Figure 3. 1. The general communication process.
(Source: Buur and Andreasen 1989).

And in addition to communication in design team, the general communication process model of Buur and Andreasen is used in literature as a tool in discussions about the communication process when transferring information from a sender (the designer) to a receiver (the model user) (Buur and Andreasen 1989). The intended information is coded by the designer in the form of the product, and is decoded by the user during use of the product. During the transition of the signal, noise (distortions) may be added, or loss of information may occur, rendering the information received by the user different from the information intended by the designer. If the receiver of the information is the user of the finalized product, it becomes apparent that the 'code' of the product must be consciously incorporated into the design of the user-product interface, in order to convey the appropriate message (the information intended by the designer) via the expressed properties of the product. Monö presents an extended communication model that includes signal messaging from the designer's intentions to the user's interpretations as shown in the Figure 3.2 (Monö 1997).
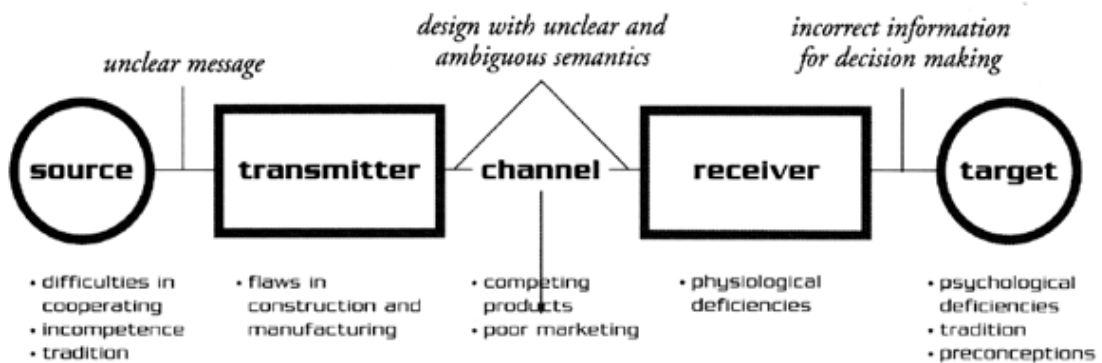
Figure 3. 2. The model of communication of design messages with potential factors of disturbance.
(Source: Monö 1997)

The model presented by Monö also considers how an intended message can become obscured or changed on its way to the target (Monö 1997). According to Monö's model, the coding is done by the designer (the source), giving form to, e.g., controls and graphics of the use-interfaces of the product (the transmitter, medium, or mediating object), with the intended purpose in mind. The signals are conveyed by the design (the formal aesthetics) of the product or by elements of the product's form. The decoding of the message is performed by the user (the receiver) during use of the product, as he interprets the message (target). Ideally, the conveyed message is identical with the information intended by the designer. However, a familiar and frequently observed situation is that the use and operation of the product are unclear due to design deficiencies, resulting in low product functionality, apart from frustration and confusion on behalf of the user.

3.1.2. The 'Semiotic School'

The semiotic school sees communication as the production and exchange of meanings. It defines social interaction as that which constitutes the individual as a member of a particular culture or society. In this school the sender, defined as transmitter of the message, declines in importance. The message is a construction of signs that through interaction with the receiver produce meaning. The receivers with different social experiences or from different cultures may find different meaning in the

same message. Everything around us can be appreciated as signs, which we perceive through our senses and basically, semiotics is the study of signs and their meaning. Product designers started using the term 'product semiotics' around 1985. The terms 'semiology', 'semiotics' and 'semantics' all derive from linguistics and deal with the study of signs. In the study of meanings, semantics or semiotics is a natural approach with which to start. However, a pluralism of different semiotic approaches exists (Nöth 1995). The terms semantic and semiotic is used in several ways. Semantic is the study or analysis of the relationship between symbols and their meanings or interpretation of signs in general so relates to signification and meaning in general. The term semiotic is used in a similar manner, referring to symbolic aspects serving to convey meaning. However, semiotics is, more precisely, the scholarly study of signification and communication, focusing on the interpretation of signs and symbols as they operate in various fields. The terms semantic and semantics refer to the subject matter of significantion more specifically than the terms semiotic and semiotics.

The transferred use of semiotics from the linguistic sense, pioneered by Saussere to objects was first introduced in the 'Sprachtheorie' by Bühler with the aim of analyzing the communication capacity of images (Bühler 1984). The semiotic school is among others represented by the American philosopher and logician C.S.Peirce and the linguist Ferdinand de Saussure. They are two main theories with a slightly different approach. Peirce initially represented a generic view on semiotics, a philosophical approach. Linguistics has been the starting point for many other semiotic branches, such as the French 'semiology' founded on the thoughts of Ferdinand de Saussure. The generic view of Peirce is more fruitful to product meanings than the linguistically based approaches (Vihma 1995). In 1916, the linguist Ferdinand de Saussure wrote 'Course in general linguistics', in which he laid the foundation of semiology or the study of signs in society. According to Saussure, the sign is a dyadic (or twosided) entity that can be decomposed into a signifiant or signifier and a signifié or signified. De Saussure's dyadic theory is not optimally suited for the application to product language, as it emphasises the signified side of the sign and gives the signifier 'the physical product' less attention (Vihma 1995). According to Pierce, a sign (or representamen) is defined as 'something that stands to somebody for something in some respect or capacity' and a sign is not a thing or an object, but a relation (Pierce 1998). The Piercian triadic sign is based on a relationship between three aspects, or perspectives of the sign. It consists of three terms: the sign, the object and the interpretant. The signs are classified as either

icons, index or symbols within the reference relation. The difference between linguist Saussure's and philosopher Pierce' approach in definition of sign (elements of meaning) is illustrated in Figure 3.3. Pierce (Pierce 1955) explains that messages and therefore meanings are created by signs (indexes, symbols and icons). According to Saussure, the sign is a dyadic (or twosided) entity that can be decomposed into a signifiant or signifier and a signifié or signified.
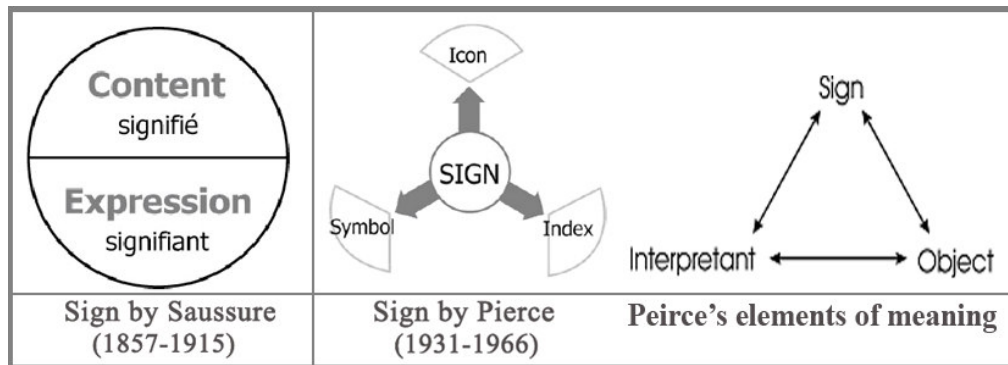
Figure 3. 3. The difference between linguist Saussure's and philosopher Pierce' approach in definition of sign (elements of meaning)

3.1.2.1. Peirce's Model

Peirce's model is one of the main models within the semiotic school (Pierce 1955). Peirce's theory of signs suggests that the process of signification is regarded as a triadic relationship between the representamen ('perceptible object', R), object (of reference, 0), and interpretant (meaning of the sign, I). Signs are thus divisible by this triadic construction (Karjalainen 2004). Firstly, the representamen, the sign in itself, is a mere quality, actual existent or general law. Secondly, in relation to its object, the sign has some character in itself, or is in some existential relation to the object or to the interpretant (reference relation). Thirdly, the interpretant represents the sign as a sign of possibility, fact or reason (interpretation relation). Meanings are constructed through and only through this triadic interaction (Figure 3.4).
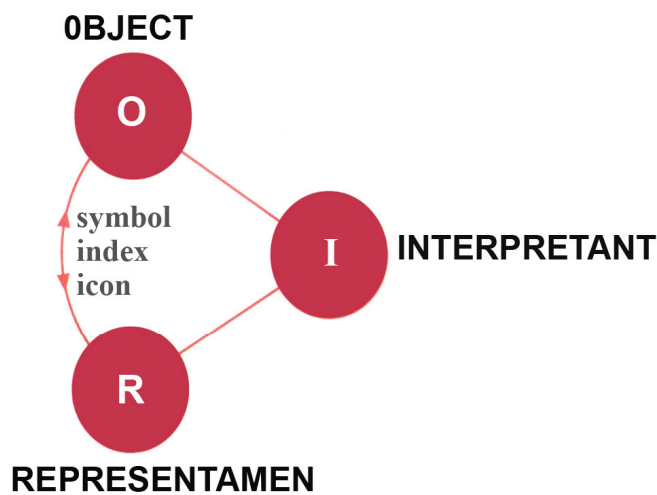
Figure 3. 4. The conceptualisation of the triadic sign of Pierce.
(Source: Adapted from Pierce 1969 and Morris 1971)

The R- O - I division of the sign is a theoretical construction. In effect, the semiotic sign as a whole is a conceptual device. The meaning of the sign resides in the interaction; sign is not located anywhere. As Merrell notes, 'meaning is not in the signs, the things, or the head; it is in the processual rush of semiosis' (Merrell 1997). Within the reference relation, sign can be regarded as an icon, index, or symbol. Iconic signs refer to certain objects merely by characters of their own. Icons convey ideas of the things they represent simply by imitating them, without any dynamic connection. Indexical signs, in turn, are actually affected by the object. An index involves a direct reference relation between R and O, for example, smoke is an indexical reference of fire. The dimension of usability is strongly dependent on indexical references that guide the user to perform proper functions. Indices do not involve complex interpretation such as symbols. They are related to a sort of automatic, usually subconscious, behavior. Thirdly, symbols, general signs, have become associated with their meanings by agreement. Such agreements are based on social and cultural constructions. Karjalainen states that according to the thinking of Peirce, the complex whole of the reference relations and the sign itself can, in fact, be called a symbol, because the symbolic aspect of the sign is the prevailing one (Karjalainen 2004).

3.2. Semiotics in Design

The semiotic concept is treated by several authors from Charles S. Pierce's sign model and Charles W. Morris's models of sign for a design product (product semiotics) and the product is divided into a material dimension, a syntactic dimension, a semantic dimension and a pragmatic dimension (Vihma 1995, Sless 2002, Monö 1997, Bense 1971). This subdivision is the most common approach to product semiotics, only the material dimension usually fuses into the remaining three. This thesis approaches the relationship of the semantic, pragmatic and syntactic dimensions.

A product sends messages to potential and actual users, which are formulated in a 'language' consisting of signs that we can see, hear or feel. These signs containing forms, colours, sounds etc. are the subjects of semiotics, which is 'the study of sign and sign systems and their structure, properties and role in socio-cultural behavior' (Monö 1997). Product semiotics places meaning into what we perceive, and this field is based upon the subfields of semantics, which is the study of the sign's message (the meaning of the sign), syntax, which is the study of the sign's relation to other signs and the way it interacts in compilations of signs and pragmatics, which is the study of the sign's use in different cultures and contexts. In other words, the main aim in product semiotics is to focus on syntax, semantics and pragmatics and the three dimensions of semiotics include the semantic, the syntactic and the pragmatic dimensions of the sign. The consumer influences of sign variations in product design have also been theorized in terms of recognition, comprehension, learning, memory and appreciation (aesthetic reactions) at the product-type level and occasionally at the brand level.

There is, however, a basic difference in approaching an existing product which is used and known in an existing context and approaching the act of designing new interpretants through new objects resulting in new sign carriers. Therefore it is stated in literature that we must distinguish product semiotics from design semiotics, which is the field of making new realities based upon semiotic analysis. Steedman describes how (finished) product semiotics should be basically distinguished from design semiotics (Steedman 2000). In the latter the product does not exist yet and is intentionally defined through abstraction (e.g. words) describing sign carrier objectives and structure. A design process in accordance with this framework can be characterized as theoretical analyzes eventually approaching physical representation towards the end.

Design activities are not reducible to the model of verbal language (or of any other sign system). On the basis of Peirce's definition, the authors define diagrammatic representations that can serve as an operational model. The contents of Peirce's definition are categorized as the representamen that which represents, the object that which is represented and the interpretant the process of interpretation (Figure 3.4). And it is stated that the diagram should be read as saying that only the unity between the three components represent a sign, i.e., that signs are identified as such only through their representation and that as soon as we interpret a sign, we become part of it for the time of that interpretation. The functions of a sign are also evident in these representations. The function of sign Sign is defined as semiotics as science of representation, semiotics as science of expression and semiotics as science of knowledge in literature (Figure 3.5). Semiotic levels at which sign processes (semioses) take place, levels that became familiar and important in design is depicted as:

Syntax: the relation between signs, how signs are constituted

Semantic: the relation between sign and object, what the signs are conveying

Pragmatic: the relation between signs and the user, what for signs are used.
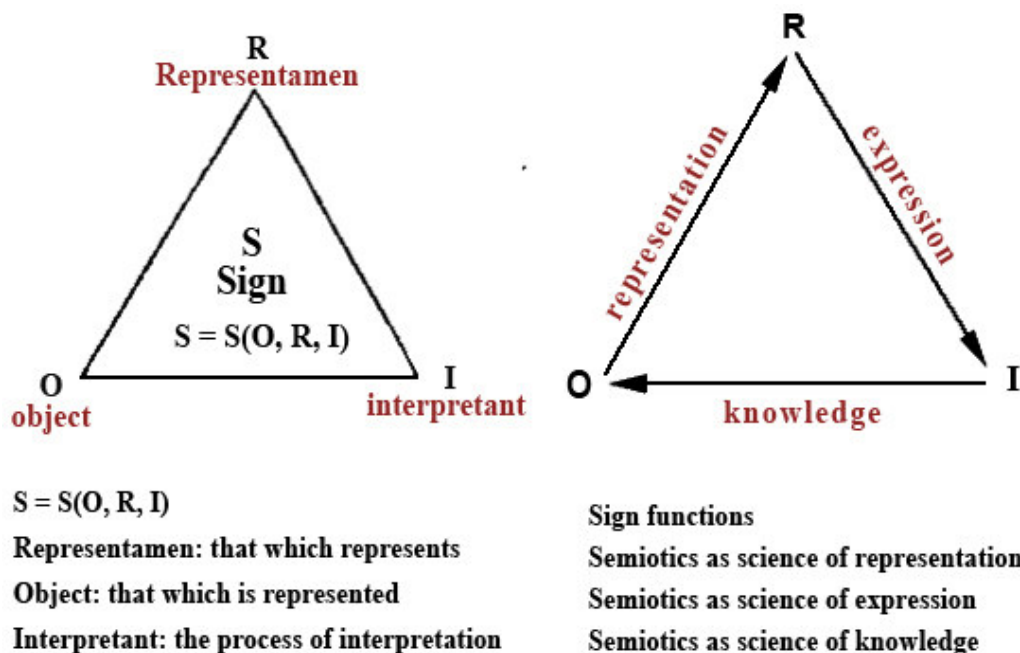
Figure 3. 5. The general definitions in contents of semiostics.
(Source: Adapted from Pierce 1969 and Morris 1971)

In this context, product design , its specific elements , functions as a replica that embodies specific signs, or representations, that convey an idea, feeling, or 'hard fact'

about a thing to a perceiver's mind. Following the semiotic tradition of Charles S. Peirce and the analysis of product design qualities as accomplished by Vihma, it may be distinguished iconic, indexical, and symbolic references (or signs) in design language (Vihma 1995). Of these, symbolic references are most strongly connected to product differentiation through design. Symbolic signs communicated through design references can only refer to qualities that are socially or culturally defined, based on common conventions. The semantic dimension of a product is seen as important in design because it has to do with development of a distinct product message on the producer side and an 'attractiveness' on the user side, which includes aspects like self-evidency, cultural meaning and character, all being aspects of subjective or inter-subjective nature. Not only functions and properties of use are important product characteristics, but also added values, which do not have to do with its functions, but are nevertheless seen as important.

Based upon an original division by Peirce of the sign into three interrelated aspects, Vihma describes these theoretical categorical concepts as central in all semiotic relations; the representamen (R) or sign vehicle which is the appearance made possible through materials and technology, the object (O) or sign meaning which signifies cultural phenomena, categories and principles and the interpretant (I) or sign in the mind representing the effect of the sign (its significance for individuals) when the sign carrier is connected to something. A material thing can carry signs of certain significations, which are not only cultural, but also resulting from materiality, the way it can be produced and exists as reality. Materiality has its own way of being exposed; it has its own object. The product's object is seen as that which the form represents, its content as experienced through our senses, and thereby it includes the product's ability to communicate cultural meaning. When a sign carrier (or appearance form) and an object (or that which it represents) together cause an effect in individuals or groups, then this result is termed the interpretant. This landscape is called product semiotics.

3.2.1. Semiotic Sign

Design is a uniquely human endeavor and is broadly applied in realization of artifacts that help people fulfill their needs in their day to day lifestyles. It is an iterative process incorporating the senses, perception, intuition, experience and education. In this

context, solutions evolve by moving along these different aspects and cognitive leaps appear when translation to a respective aspect can contribute to the process of creation. The outcome is the artifact and during the process various representations are made of the ideas that objectify properties of the artifact so that it can be perceived.

This interaction between convention, objectification, perception and representation is the foundation of a semiotic perspective of design, which refers to the model grounded on philosophy of Charles S. Pierce who proposed that the signs are something that stands to somebody for something in some respect or capacity as discussed in the previous section. Therefore the semiotic approach to visual images stresses the idea that images are a collection of signs that are linked together in some way by the viewer. These communications, as signs, are constructed on three principle dimensions that follow the fundamental work of American semiotician and philosopher Charles W. Morris (Morris 1964). The semiotician and pragmatic philosopher Charles Morris divides the study of semiotics into three branches; pragmatic, semantic and syntactic. Morris defines pragmatic as the relation between the vehicles of a sign and the concepts, ideas and principles they constitute through objectification, semantic as the relations of sign and their objectification in a selected context and syntactic is the relations of sign vehicles to other sign vehicles as illustrated in Figure 3.6 (Morris 1993).
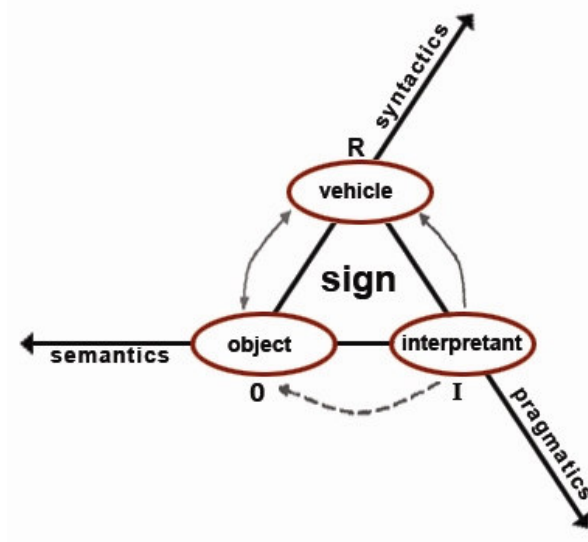
Figure 3. 6. Semiotic sign model.

(Source: Adapted from Pierce 1969 and Morris 1971)

The entry point of this semiotic model is along the pragmatic dimension. From this dimension, an interpretant (i.e. in the mind of designer) make use of conventions (i.e. spoken and written language as well as formal languages) that allow semantic objectification (i.e. labeled artifact), which are effected by a perception of a syntactic vehicle (i.e. sense-able artifact). The result is sign communicated.

Morris's approach to semiotics divided the subject into syntax, semantics and pragmatics. He proposed a threefold division of a sign into a sign vehicle, designatum (object), and interpreter; this trichotomy first appeared in his book 'Foundations of the Theory of Signs' (Morris 1964). A semiotics structured in this manner would appear to owe much to Charles Peirce. Yet some Peirceans have accused Morris of reading Peirce superficially, through the distorting lens of Morris's behaviorism. While Peirce envisioned a semiotic philosophy based on universal categories of perception and the assumption that 'every thought is a sign', Morris wanted to develop a science of signs 'on a biological basis and specifically with the framework of the science of behavior'.

As Figure 3.7 shows, Morris introduces a representation in order to present the distinction of the three semiotic levels, and help to show how these levels are defined, and in which respect this approach actually betrays Peirce's semiotic conception, as well as the fundamental aspect of his pragmatism In the mentioned diagram, the triadic structure of Peirce's semiotic is reduced to a representation of the sign (Morris 1971). The need to place pragmatism in a semiotic frame implies the reassessment of Peirce's semiotic systems, Peirce's sign conception, first of all, since this necessarily relates to pragmatism (Morris 1971).
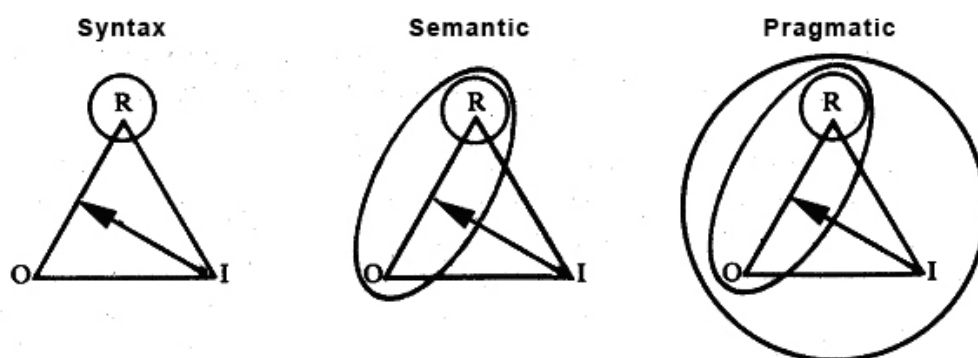
Figure 3. 7. Semiotic levels as distinguished by Morris, but identified in connection with the sign definition (Source: Adapted from Morris 1971)

As understood from this that no sign can be considered independently of its relation (s) to other signs, be these similar (such as words in a given language) or different (words, images, sensory perceptions, etc.). The interdisciplinary of design is the consequence of the fact that sign processes are heterogeneous by their condition and that in order to understand how different kinds of signs constitute design. It has to become acquainted with each different kind, as well as with the principles governing human or even machine interpretation of design. Representation of an object and the consequent interpretation of such a representation can take three different forms. Morris launched the use of icon, index, and symbol as types of signs, not as particular ways of representation, as Peirce repeatedly defined them (Morris 1971). Morris states that an object can be represented; iconically (representation based on likeness), indexically (representation causally influenced by the object, such as a mark of the object), symbolically (representation based on convention) as illustrated in the Figure 3.8. Morris launched the use of icon, index, and symbol as types of signs not as particular ways of representation as Pierce. According to Charles W. Morris, an object can be represented; iconically, indexically and representation and symbolically (Morris 1971).
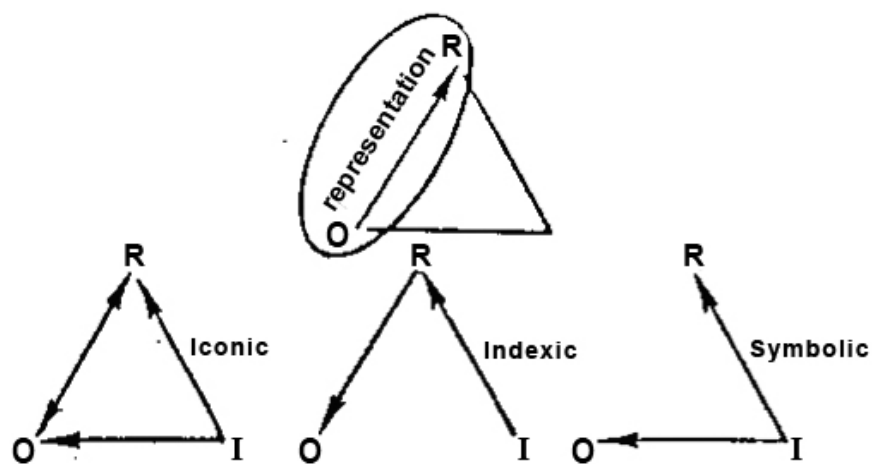
Figure 3. 8. Forms of representation. An object can be represented; iconically, indexically and symbolically. (Source: Adapted from Morris 1971)

From the semiotic perspective, based on Morris's (models of sign semiotics) and Pierce's sign model, several authors generally define the three dimensions of semiotics as the semantical dimension (O-I relation), the pragmatic dimension (R-I) relation, the syntactical dimension (O-R) relation of sign.
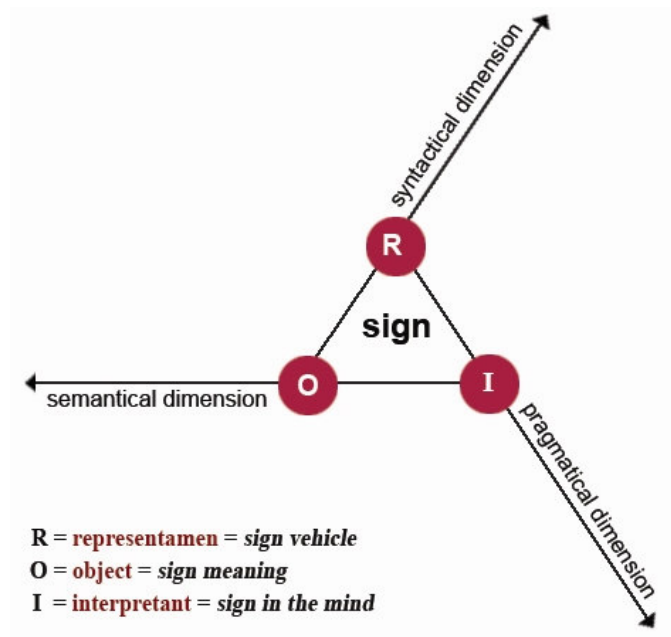
Figure 3. 9. The three dimentions of semiotics

(Source: Adapted from Morris 1971, Warell 2001, Karjalainen 2004)

Vihma defines; the sign consists of the relationship between the representamen R, the object O, and the interpretant I. The representamen R, which is also called the 'sign vehicle', is the form the sign takes. The object O is what the sign 'stands for', what it denotes. O can be another thing, action, fact, event, quality, or the like (Vihma 1995). The interpretant I is the understanding engendered by the sign, how we interpret it. Related to an everyday example such as the classic street cross-walk sign, the representamen is the square blue metal plate illustrating a walking person, the object is the zebra pattern in the street (the cross-walk), and the interpretant is our understanding that this is a 'safe zone' we can use to get over to the other side of the street (Vihma 1995). Based on the work of Morris, semiotics includes three dimensions of sign study; semantics, the study of the sign's message (the meaning of the sign); syntax, the study of the sign's relation to other signs and the way it interacts in compilations of signs; and pragmatics, the study of the sign's use in different cultures and contexts (Monö 1997). Based on the work of Morris and Pierce, syntactics is defined as the study of the structure of images; the ways signs are combined with each other to form complex messages (Monö 1997). Semantics is defined as an area of semiotics in which the researchers attempt to determine the significance of signs within and throughout various cultures, trying to describe the meaning of image. Pragmatics is defined as the study of

the origin, common uses and communicative effects of signs, describing the effect of image.

After this fragmentary introduction to the semiotic world follows a review of the applications of semiotics in product design which are of interest for this study.

3.2.2. Semiotic Dimensions of a Product

Within the context of communication, products can be regarded as signs carrying meanings. Vihma identifies the basic dimensions for a design product and conceives a product as consisting of the following four interrelated dimensions; material, syntactic, pragmatic, and semantic dimensions (Vihma 1995). The sign's message and relations to other signs and cultural contexts are central aspects, in Vihma's division of a product into hylectic (material qualities), syntactic (technical functioning), semantic (formal expression) and pragmatic (use aspects) dimensions. Sless and Vihma have modified the Charles Morris's vision (a generic context of semiotic) and added the material dimension to the framework, since it is a fundamental aspect in the product design contexts (Sless 2002, Vihma 1995). The syntactic dimension covers the product structure (various visual details) and technical functioning (includes an analysis of the product's technical construction). The material dimension deals with the product's material qualities. The pragmatic dimension relates to the use of the product (is analyzed from the perspective of product use). The pragmatic dimension embraces the other dimensions and concerns the use aspects of the product and includes its meaning and intentionality. Finally, product semantics focuses on the representational product qualities and the semantic dimension covers what the product represents, how the purpose of the product is expressed or presented, and in what kind of environment the product seems to belong (Vihma 1995). This frame is presented in Figure 3.10.
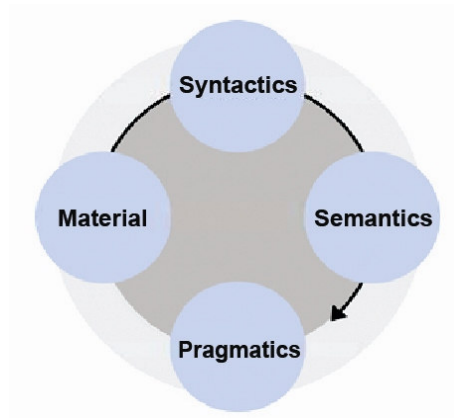
Figure 3. 10. The four dimensions of a designed product. The arrow highlights the importance of the semantic dimension. (Source: Vihma 1995)

Sless states that these dimensions must be considered to define relationships, not objects (Sless 2002). In the original formulation of this framework by Morris, the three relationships (pragmatics, syntactics and semantics) are treated as having the same ontological statues. They are treated as three aspects of communication, but are seen through different approaches and methods (Sless 2002). The viewpoint of semantics is necessary to the concept of product, while it seems to connect the syntactic dimension to pragmatics (Kutschinski-Schuster 1990). As illustrated in Figure 3.10, these dimensions are closely interlinked. The arrow highlights the importance of the semantic dimension, as without it, material and syntactic dimensions would have no pragmatic value. Syntactic qualities cannot be associated with the use of the product (pragmatics) without a semantic framework. Pragmatics presupposes both syntax and semantics (Kutschinski-Schuster 1990). Similarly, it could be argued that semantics and syntax have no existence outside pragmatics, while any semantic or syntactic analysis is a pragmatic invention. Semantics and syntax are thus constructed through pragmatics (Sless 2002).

Product semantics focus on the representational product qualities. The semantic dimension emphasizes the aspects of products as symbolic communication. Product semantics refers to the product itself and the way it communicates its origin, purpose, use, context, and properties. It is related to design semiotics in the sense that this type of communication is carried by signs that are perceived and interpreted by the user (Monö 1992). Product semantics deals with the issue of how meaning is formed and mediated as signs embodied in products. Semantic aspects refer to the representational product

domain and thus regard products as symbolic communication. Motivated by linguistic semiotics, products can be partially comprehended in a manner similar to that of verbal language.

Product semantics relies on an alphabet of signs and symbols, e.g., line, colour, texture, shape, and form. By manipulating this visual alphabet, the designer repeats a similar process to the one found in the written or spoken language (Giard 1990). Product semantics may be seen as the application of the theories on information messaging to product design (Karjalainen 2004). The process of communication and the concept of signal messaging is a crucial aspect of product design. The term product semantics was pioneered by Butter and Krippendorff who defined it as '…a study of the symbolic qualities of man-made forms in the cognitive and social context of their use and application of knowledge gained to objects of industrial design' (Butter and Krippendorff 1984). Furthermore, Butter and Krippendorff state that 'the symbolic meanings of forms, shapers and texture are the most characteristic concern of product semantics' (Butter and Krippendorff 1984). According to Butter the use of product semantics contributes to make the use of products self-evident, helps to make products culturally meaningful, and supplies product a distinct character (Butter 1987).

According to Vihma, the syntactic dimension includes both the analysis of the technical construction and an analysis of visual details of the product's appearance, features of visual composition (Vihma 1995). Such features include simplicity and complexity of the overall form, symmetry, balance, dynamics and rhythm. These are visual effects of form composition, which is related to the laws of gestalt perception. One detail of the form can influence other visual details, as well as the overall form. The same applies to color; one color can affect other colors in a composition, as well as the visual impression of size and the dynamics of form.

For the work of this thesis, the syntactic dimension of a product form can thus be viewed from at least two perspectives: the syntactic dimension from the point of view of semiotics, and the syntactic dimension from the point of view of aesthetics. From the viewpoint of semiotics, the form is, as a representamen R (semiotic sign vehicle), a means for our interpretation of the product viewed as a semiotic sign. The form refers to something else that is its object O. For example, it might be identified a specific form of a product, such as a characteristic curve on audio product, as being a typical 'Bang & Olufsen's curve'. It refers to 'typical' Bang & Olufsen forms. This is the semiotic interpretation of the O-R relation. From the point of view of aesthetics, the

perception of the same form requires no interpretation. We simply perceive the curve without attributing any semiotic meaning or reference to it. The observation of the curve is dictated by our pure visual experience; we might appreciate it as being elegant and appealing, we might sense that it visually balances other forms of the product, and we might enjoy its thematic repetition in other parts of the product body which gives us a harmonious feeling of a well held together, whole form.

The pragmatic dimension includes the analysis of the product from its point of use, e.g., from an ergonomic or sociological point of view, as well as the whole life-cycle of the product from planning to recycling, according to Vihma (Vihma 1990). The pragmatic dimension also allows for seeing other uses for the product than it was originally designed for. The material dimension is related to the product's material and physical constitution and structure.

Each product (either physical or immaterial) has an interface that we can describe broadly as the aggregate of characteristics with which the user initially engages in order to make use of a product (Margolin 1997). The user can interpret and understand the product content, for instance, by looking at the product or touching or otherwise sensing it, through its material representations. From the perspective of interaction (between the product and the user), the product has an appearance. In this regard, Oehlke presents an interesting framework in which the object (product) is regarded on three different levels and from three different perspectives. On the generic product level, a product has a specific appearance within the object-subject relation (interaction). From the subject's (user) perspective, a product manifests a specific concept. On the level of real given structure (syntactic dimension), a product is actualized as an impression within the interaction. The user, in turn, understands this impression as the specific content of the product image and possesses specific knowledge about it. On the level of product information (that is thematically close to the semantic dimension), the expression of appearance that resides within interaction is manifest as product meanings from the viewpoint of the user. From semantic viewpoint, the interest is on the expression of the product's appearance within the interaction between the product and the user. The interaction generates product meanings. The notion of product can be regarded from several viewpoints, depending on the focus and dimension of the analysis based on the framework of Oehlke as illustrated in the Figure 3.11 (Oehlke 1990, Karjalainen 2004).

PRODUCT	INTERACTION	USER
product	product apperance	product concept
syntactic dimention (real given structure)	product impresion	content and knowledge of product image
semantic dimention (product information)	expresion of apperance	product meanings

Figure 3. 11. The notion of product can be regarded from several viewpoints.
(Source: Oehlke 1990, Karjalainen 2004).

3.2.3. Semiotic Approaches to Design

The products are designed by someone to be perceived by some one and they are not simply treated as the embodiment of a function that the selection of the product is a personal statement. This perception is important for the designer to be aware of, especially in the early phases of the products's life. Brand is important in design because it is a means by which consumers to make reasonable selections. As the internet and globalization continue to have a clear impact in shaping new customer and customer behaviors, studying brand and the relationship between properties, products and brands become an essential focus for design science. There is an increasing attempt to introduce an approach to bring these perspectives on brand into the domain of design by introducing a semiotic approach to design. The models produced by design science community are often along the semantics or syntactic dimensions of design to communicate an accurate intended message to a product's target customers. These models make in principle a presentation of transformative and summative image of design in the context of a process, starting with simple, abstract descriptions and moving towards total, concrete specifications of an artifact, these processed are executed under the direct influence of a designer, development team or organization. In The context of design, there are established processes to support the creation of representations of products that are perceived. These models are built on the premise of modeling cause and then effect.

In semiotic implications for design, important is the understanding that there is no universal answer and that semiotics suggests a very concrete analysis of the context for which an appropriate design is created. For designers to apply semiotics does not mean to design with a treatise of semiotics but to consider the semiotic implications of whatever they design. What matters is the understanding that the designer has to know for whom he designs to establish a semiotic system with precise, appropriate, consistent rules. The use of semiotic means of analysis and evaluation implies the need to integrate a signage system into the broader system of visual communication, making sure that it will perform according to its basic functions expressiveness, precision, user-friendliness. Designers need qualified support in the problem-solving aspect of their work. And they are willing to accept it from professionals dealing with how people interpret signs, how people design signs, how signs become part of culture, and how cultural changes occur in our days. Semiotics allows the designer to understand and effectively use optimal means of communication, generate and evaluate various answers to problems solved through design, choose technological means to solve problems, consider the dynamics characteristic of design.

Karjalainen's semiotic approach to design can be defined as semantic references (brand recognition and associations) in product design. In regard to brands as associative constructions, the emphasis of Karjaleinen's study is placed on the set of associations that function within the triadic relation between the sign, the object of reference, and the interpreting subject (Karjalainen 2004). The Peirce's theory modified and extended by Karjalainen to analyze the reference relation between specific design elements and the specific brand identity attribute it represents (inherent references). Karjalainen regards (Karjalainen 2004) the representamen as consisting of a specific design element (or feature) that functions as a replica of the sign through its characteristics (form). The object 'O' is regarded as the specific brand identity attribute, the brand message that the product should transmit, the representamen 'R' is the representation of O in the physical world, in other words the design reference element in the product (spesific replicas and their forms) and 'I' is the interpretant that interprets the message from O that is communicated through R. The object of reference is related to an attribute 'brand attribute' with which the design element has a reference relation. Interpretation is connected to the interpreter (for instance, the target customer or designer) within the semiotic process and thus involves subjective interpretation that occurs within a certain context. This construction generates meaning in the product-

perceiver relationship and thus evokes brand specific associations in the mind of the perceiver. The conceptualization of Karjaleinen in terms of the study of brand manifestations from the viewpoint of semantic references (brand recognition) that stems from the semiotic tradition of Charles S. Pierce is illustrated in Figure 3.12. (Karjalainen 2004).
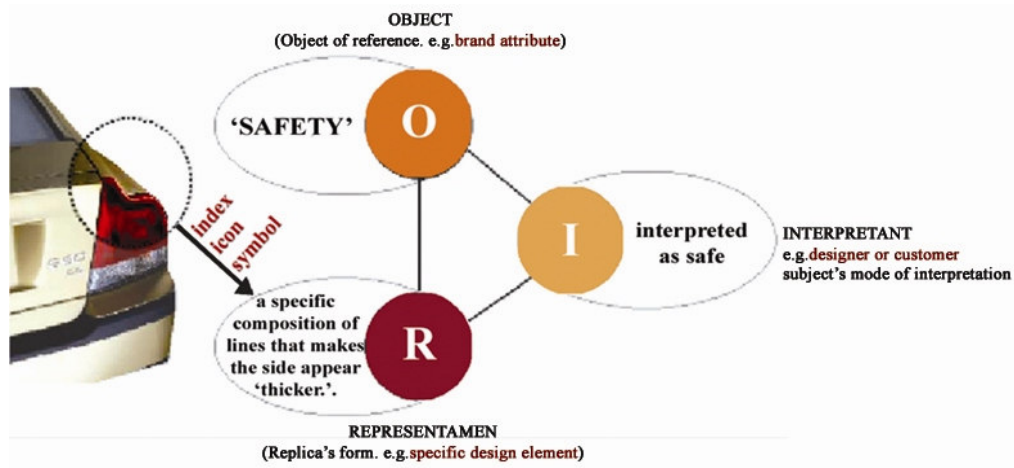
Figure 3. 12. The semantic references (brand recognition and association) in Volvo model that stems from the semiotic tradition of Charles S. Pierce. (Source: Karjalainen 2004)

Peirce talks about a genuine symbol, although on a more general level: genuine symbol is 'a symbol that has a general meaning', a symbol that generates the same meaning for most perceivers that generality may come close to universality. According to Karjalainen brand associations in a product can embody genuine reference that means the direct reference relation (the first association that comes to mind). Karjaleinen gives an example from one of the case study of his study Nokia. The strategic identity of Nokia is simply aligned like personalization by Karjalainen as the brand slogan is 'connecting people'. Karjalainen illustrates an application of triadic sign in the case of the Nokia 7650 and says the specific design elements of Nokia 7650 arguably embody iconic and symbolic references to a smiling mouth and these elements may evoke (mostly subconscious) direct associations of a friendly and personal product (Figure 3.13).
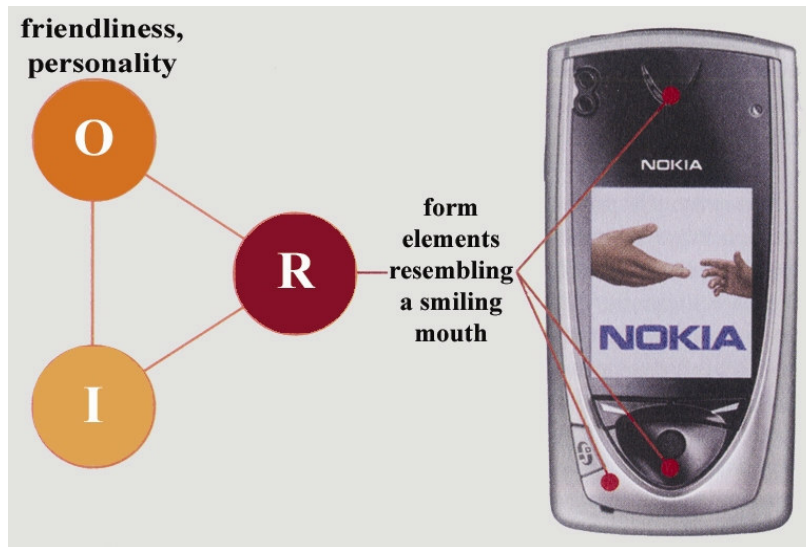
Figure 3. 13. An application of triadic sign in the case of the Nokia 7650.
(Source: Karjalainen 2004)

But besides these examples, Karjalainen stresses that the reference relation between the product and the brand is predominantly constructed through associations. An encounter that the perceiver (customer or designer) experiences with the product triggers associations that relate to earlier experiences with the product and or the brand so the complexity of associations is increased by the fact that the relation between the sign and the object of reference is bidirectional. Associations created by the identity references of design are connected to specific brand identity attributes, but simultaneously, the existent set of brand identity attributes and its historical representation affects the interpretation of design, and thus adds provisional biases to the process of signification (Karjalainen 2004). He states that the reference relation between the object (brand) and the representament (product elements) is merely constructed through semantic strings and coupled associations that are constantly created in the interaction and can be far from the 'genuine' relation that is represented in figure 3.12 and 3.13 (Figure 3.14). The certain associations and meanings between product elements and the brand potentially generate new associations and meanings when interpreted (Karjalainen 2004). Karjalainen underlines the notion of genuine association is conceptual and to trace down the 'original' reference relation is not possible; hardly does it exist as an individual idea. There is probably no one specific relation that exists first (in terms of time), instead the process of entanglement is continuous as illustrated in Figure 3.14 (Karjalainen 2004). The Karjalainen's conceptualization of semantic strings suggest that instead of involving one (genuine)

reference, the relation between R and O consists of complex strings and associations as illustrated in the Figure 3.14 (Karjaleinen 2004).
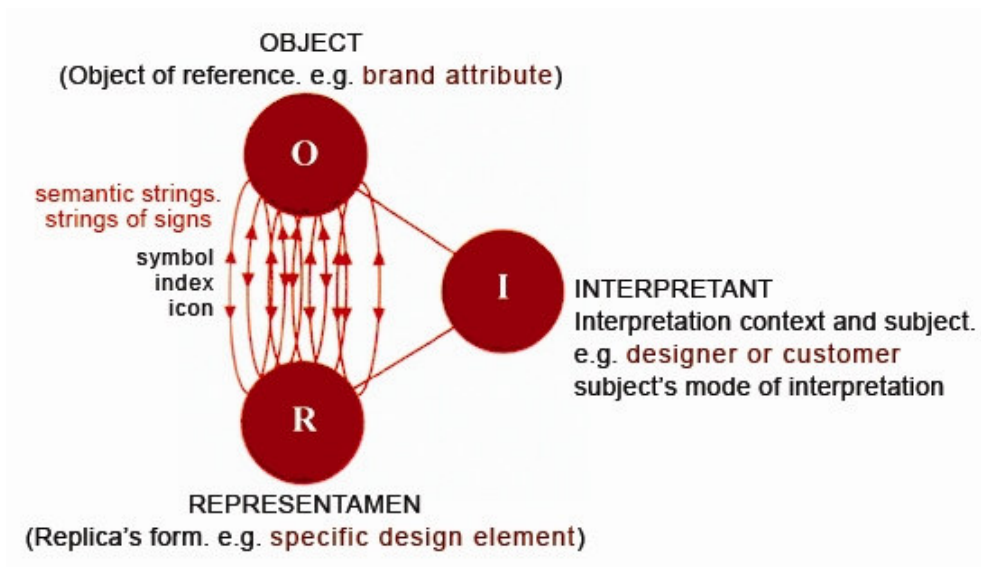
Figure 3. 14. The conceptualisation of semantic strings.

(Source Karjaleinen 2004)

In his study, Karjalainen uses the word pair denotation and connotation with regard to genuineness of references and their entanglement. Denotation is a direct reference relation between R and 0, connotation, in turn, often involves a complexity of stringed and coupled associations. The interpretation of denotation is straight forward as indexical and iconic references imply a strong denotative character. Connotations involve associations that have their origins outside the genuine relation where denotation refers directly, without associations (Karjaleinen 2004). Consequently, most brand references in product design are connotations, because the reference relation between the product and the brand is predominantly constructed through associations. Nonetheless, as proposed in the Nokia 7650 example, connotations can involve denotative references. Thus, brand associations in a product can also embody genuine references (Karjaleinen 2004).

CHAPTER 4

CREATING BRAND RECOGNITION AND AWARNESS
THROUGH PRODUCT DESIGN
FROM THE PERSPECTIVE OF COMPANIES

4.1. Brand Specific Design Language as a Strategic Tool

Symbolic product functions have become increasingly emphasized as a result of the equalizing of technical performance in products. In literature there is a general stress on the need for the development of a proper strategic design language for the brand's products as a consequence of this. This language is the ultimate manifestation of brand identity and value. The brand specific design language aims at evoking specific associations in the minds of the customers, reflecting the brands identity and core values with a strong emphasis on the product portfolio perspective. According to the product portfolio perspective which specific design elements are systematically used in all of a brand's products to reinforce consistent brand identity (Warell 2001, Karjalainen 2004).

In literature there appear few theories around the issue of brand specific design language. McCormac and Cagan propose the method of shape grammar for encoding the key elements of a brand into a repeatable language (McCormac and Cagan 2004). In their paper they look at the American car brand Buick and come up with 63 different rules that can be combined for creating the new Buick. By combining these rules they claim results in creating new Buicks. The view of shape-grammar presents an interesting analytical tool that seems to be a good basic design exploration at first, however it involves two-dimensional analysis in historical perspective some close to Warell's analysis. Also Karjalainen advocates the view that the existence of such elements and rules may be good for analytical purposes, but the method does not explain why designers have ended up with such solutions where this explanation is important in terms of semantic transformation (Karjalainen 2004). And the method does not show how to distinguish elements that have been historically used only by Buick and not by other brands. In summary, the view of shape grammars or other similar

mechanistic approaches see design elements as a grammar and only partly explain the basis of brand-specific design. The design does not evoke meanings in a manner similar to that of verbal language that the perception and interpretation is more holistic and subjective, as it is suggested in literature semiotics in product design is different from semiotics in linguistics where there do not appear to be similar rules and grammar. Dumas describes a totem building method about how to build sophisticated metaphors that helps define the products identity and evaluate concepts along the design process (Dumas 1999). Vihma (Vihma 1995) looks into how design products can be analyzed semantically, and presents specifications of different references embodied in certain product features. She does however not bring in the dimension of brand. Akner-Kohler (1994 provides a three-dimensional visual analysis of product forms in general (Akner-Kohler 1994).Ravasi and Lojacono suggest a method for managing design and designers for strategic renewal (Ravasi and Lojacono 2005). However, after scanning existing literature, the two most important authors found are Andres Warell and Toni-Matti Karjalainen (Warell 2001, Karjalainen 2004). Warell proposes a method called Design Format concerning the development of a design language and Toni-Matti Karjalainen has investigated how semantic transformation in relation to brand occurs in product design (Warell 2001, Karjalainen 2004). These two theories will be reviewed in the next sections.

The main purpose of this thesis is the strategic use of product design in transmiting predefined meanings (strategic messages, intentional brand specific meanings) to customers from the perspective of Bang & Olufsen. Thus the purpose is to describe how Bang & Olufsen seem to comprehend its strategic identity and how the product design is used to promote it. In order to maintain theorical bases and conceptual framework to find out right answers to the case specific questions concerning strategic brand communication in product design, two Phd thesis of specific interest in the field 'Semantic Transformation in Design' by Toni-Matti Karjalainen, and 'Design Syntactics: A Functional Approach to Visual Product Form' are taken as references (Warell 2001, Karjalainen 2004). It is aimed to maintain a powerful tool and framework in analyzing the Bang & Olufsen process of creating products communicating brand identity and value by using a combination of the design format principle of Warell and Karjalainen's discussions about semantic transformation.

In short, the 'Semantic Transformation' refers to a framework for a setup in which the strategically defined orientations of the company's brand are actualized

through product design. Through Karjalainen's perspective (semantic transformation), recognition in multiple products of a certain brand is created through similar connotations and consistent messages interpreted so that the idea behind brand-specific cues is their intentional and consistent use within a product portfolio and their links to strategic brand associations. From the perspective of product development, the key challenge is to transform the brand identity into individual products and, at the same time, keeping in mind the overall strategic objectives of the brand (Karjalainen 2004). From Warell's formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues, thus, denoting the structure and nature of visual elements which enables recognition through visual similarity within the same brand, in other words, which carries the semantic content and creates recognition through visual resemblance.

The both approach include some similarities and dissimilarities in terms of the key aspects of strategic brand communication in product design. The contents of these theories will be discussed and mentioned throughout this chapter in order to determine the structure and ingredients of analysis in case company Bang & Olufsen.

4.1.1. The Similarities and Dissimilarities in between the Design Format Method of Warell and Karjalainen's Discussions about Semantic Transformation

Both theories are in common that the products of the brand play a primary role within strategic communication and stress the importance of maintaining a recognizable 'style', a brand specific design language across the product portfolio of the brand to support consistent brand identity and to avoid shape ambiguity in terms of brand recognition. Karjaleinen points out that the recognition in multiple products of a certain brand is created through similar connotations and consistent messages interpreted and defines the behind brand-specific cues as their intentional and consistent use within a product portfolio and their links to strategic brand associations. Warell discusses about the visual product identity of a brand based on sharing a consistent set of common design elements which enables recognition through visual similarity within the same brand by creating products with a coherent design language. Warell points out the design must 'speak a coherent design language' so that the customers recognize

products from the company when new models or generations are introduced on the market. So both theories say that 'If consistently used across the entire product line of the company, specific design characteristics may contribute to stronger (Warell talks about recognizable and consistent, Karjalainen talks about recognizable, distinctive and consistent) brand identity. Emphasis in both theories is on analysing existing products to discover brand-specific elements, and hence create a brand-specific design language for development of new products. They both support the view that emphasises the impact of internal identity (company design history, heritage and core values) on formation of brand specific design language as a strategic tool in terms of consistent brand recognition through products but reflect this knowledge to company's communication strategy in a different manner.

Besides these similarities there are main differences in the way they handle the brand specific design language as a communication tool.

1- Warell has suggested the design format method, although Karjalainen has not really suggested a method but rather a discussion around the theme of semantic transformation (Warell 2001, Karjalainen 2004).

2- One of the main differences between Warell's and Karjalainen's approaches is that Karjalainen handles the analysis of brand-specific design elements across the brand product portfolio not only in terms of the syntactic (visual-aesthetic, structural) aspect of design language but also embodied brand specific meanings in products reflecting brand identity (linguistic definitions of their semantic references to brand identity attribute - brand identity definitions). Warell focuses on recognizable and consistent brand specific design language, Karjalainen focuses on both recognizable, consistent and also distinctive brand specific design language so brand identity through products (Warell 2001, Karjalainen 2004).

3- Through Karjalainen's perspective (semantic transformation), the idea behind brand-specific cues is their intentional and consistent use within a product portfolio and their links to strategic brand associations (brand specific meanings- competence associations- core identity attributes). From Warell's formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues, which enables recognition through visual similarity within the same brand.

4- The model suggested by Warell (the design format method) is too static and far from complete where it concerns the syntactic aspects of product design, and is mainly based around how to locate explicit design cues (forms, colors, materials) used

in the existing product portfolio. The message behind the explicit design cues in order to use these in a meaningful way is not considered in Warell´s method. But Karjalainen discusses about the brand specific product characteristics that support the core identity of the brand which can only be verbally described. So where Warell focuses on traceable design elements and provides an analysis tool for identifying merely explicit design references, Karjalainen also emphasizes the importance of the non-traceable elements (can not be trace back to specific physical design element or the physical elements that are not truly consistent across the product portfolio by having radical changes and novelty) that identifies the brand (Warell 2001, Karjalainen 2004). For instance it may be able to agree that a certain design look B&O-like, but can not necessarily state explicitly why, could not pinpoint what exactly made it look that way.

5- They both the view emphasises the importance of maintaining a recognizable 'style' across the product portfolio of the brand to support consistent brand identity and brand recognition and also the impact of internal identity and external influences on changes in design style of the company. But Karjalainen includes these aspects in company's strategic objectives and decisions that reflect on product design development and states that novelty versus continuity aspect depends on company's strategic decisions in product portfolio management, where Warell connects changes in design style to the simultaneously aspect involved in design process (Warell 2001, Karjalainen 2004) .

6- When analysing existing products of the company to discover brand-specific elements, Warell focuses mainly on the syntactic aspect of design language, while Karjalainen emphasises the semantics (Warell 2001, Karjalainen 2004). In Warell's design format analysis, products are analyzed according to which shapes and styling features that are repeated over the product portfolio and only addressing formal-aesthetic structure of the brand's product, but he says little about what these elements communicate. The methodology of his analysis seems to be too static. Karjalainen provides a more in depth theory on semantic transformation and focuses more on the meaning of the design elements, what the brand-specific elements actually communicate (Karjalainen 2004). Karjalainen's approach is a gradation of Warell's framework. He includes the design format methodology in his approach to create a brand specific design language that functions like a communication tool. Karjalainen does not provide an as clear framework for the construction of a brand specific design language as Warell

does, however, he discusses the brand specific references more in depth on how and where they occur, how they can be identified and what they communicate.

4.1.2. Design Syntactics as a Strategic Tool: 'Design Syntactics: A Functional Approach to Visual Product Form' by Anders Warell

The PhD thesis 'Design Syntactics: A Functional Approach to Visual Product Form' by Anders Warell provides a framework called Design Format to develop and communicate a coherent design language supporting brand identity. Warell contributes to enhance cross-disciplinary understanding of the nature and workings of the visual product form and that the proposed methods will assist designers and design management in the development of products which are successful from technical as well as aesthetical points of view (Warell 2001). As a strategic tool, Warell's Design Format model supports brand recognition for customers through product design by visual familiarity and the company builds identity through likeness and repetition, strengthening the position on the market through visual similarity.

'Design Format Modeling' methodology of Anders Warell is generally about analysing the visual appearance of the product portfolio of the brand (product or/and product range or/and entire product portfolio) in syntactic level to identify the most visually characteristic design elements of product portfolio (or product). From Warel's formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues, thus, denoting the structure and nature of visual elements which enables recognition through visual similarity within the same brand, in other words which carries the semantic content and creates recognition through visual resemblance. The approach of Design Format Analysis (DFA) developed by Warell (2001) is of a qualitative nature and allows for flexible applications. As indicated in literature, 'The Design Format Analysis' is predominantly a reactive analysis method but can also be proactively used. The method offers the strongest contribution when used for communication purposes. The method provides collaboration between disciplines such as the managers, individual designer and design team by offering the strongest contribution when used for communication purposes, thus instead of using the abstract language of a design philosophy, design objectives can be more efficiently communicated when planning the future product portfolio strategy of a certain brand.

The collected visual appearance of the company's image in the mind of the customer can be defined by studying the visual appearance of the products through the method of design formatting. Warell's design format model is in danger of bringing along design elements or styling features which get a high score in the analysis into the brand-specific design language without them being manifested in brand values. In this thesis, the qualitative nature of Design Format Analysis and its potentially biased results are tried to be diminished and reliability of the results are tried to be increased by scanning the audio product portfolio of Bang & Olufsen deeply through brand's design history in terms of their 2D and 3D appearance with the thoughts and intentions of the designers (and also brand) behind the scanned products and not only the syntactic level and also both semantic levels and pragmatic level (that influence syntactic grammar so semantic interpretation) of design language (product identity) are taken into consideration. In this thesis, the audio product portfolio of Bang & Olufsen scanned visually through the brand's design history, specific design elements and characteristics used in every product of the portfolio are analyzed to identify brand specific design language that support company brand identity and strategy. to create products with a design language supporting a coherent visual brand identity.

Warell's provide a means for defining the specific design identity of the company's products that construct the visual recognition. In summary, the Design Format modeling is a part of Warell's Design Syntactic framework which provides a model for how a brand-specific design language can be created and maintained that concerns the content of the visual form of a product; what form elements are present and how are they used to create products with a design language supporting a coherent visual brand identity. Searching for typical brand style in terms of visual coherency in product portfolio of the brand with regard to the construction of a brand's visual recognition that explores the occurrence of selected design features among a variety of products (explicit brand design cues) is used as the main visual method in this thesis case analysis. Warell suggests a step by step analysis methodology for identifying explicit design references in the products (in both single products and product families) in order to use this identification as a tool to communicate within the company at both strategic and operative level and develop new products reinforcing brand identity. Warell uses the notion of 'design format' to describe the collection of form elements that are consistently used on company or product family level. Design format relates

form to pragmatics and design philosophy on corporate level. In Warell's design format analysis, products are analyzed according to which shapes and styling features that are repeated over the product portfolio. The Design format modeling can be described as a dynamic template for form ingredients of company's products and rules for their use. It provides ways to capture and describe the visual styling content of products. So it provides a means for defining the specific design identity of the company's products in order to give company possibility of using this knowledge managing design development processes and having a strategic tool to further develop the form content of their products. From Warell's formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues, which enables recognition through visual similarity within the same brand. So that Warell's the design format model methodology concerns the content of creating products with a coherent design language to support company brand identity. Warell states that his model is valuable on two levels of product development, the operative and the strategic. On the operative level Design format provides the design team with a tool for discussing and evaluating form design in relation to other aspects of product development that the designer can develop, explain and motivate design solutions (Warell 2001). Warell emphasises that the design format method can be used as a tool internally to communicate within the design team and to evaluate concepts. On the strategic, managerial level, design format provides a tool to describe product design related to corporate or brand identity and to plan future innovation and design evolution (Warell 2001). Management prioritizations and decisions are also important for how well design is integrated into the product development process. Finally, in design format modeling he suggests how the framework can be applied to the design management perspective of a company by integrating corporate design philosophy and coherent form language and identity (Figure 4.3).

The study considers only factors of visual aesthetic form as the exterior form of a product is considered to be the most fundamental characteristic of a product. The ingredients of design format include the syntactic structure (formal and aesthetic structure) and the most prominent visual elements that are considered most characteristic for the overall visual appearance of the products representing the brand. The visual elements must be both identified on basis of their legibility, i.e. how clear they are in the product gestalt, how easily they are detected by visual and also on the

basis of their typicality. The term 'typicality' refers to how representative a certain visual element is for all models of a certain brand. Typicality is based on the occurrence of visual elements as that a higher degree of occurrence of a certain element across models results in a higher 'typicality' value. Typicality is a way of determining the visual coherence of a number of different products (Warell 2001). This provides an initial framework for the concept of product identity of the brand related to design characteristics of the visual product form and presents a method for assessing visual elements with respect to their relative importance within and across product ranges. And so these tools comprise the building blocks of the Design Syntactics Methodology and create the backbone of a complete design procedure. It is a 'designer's toolbox' consists of a number of tools supporting activities of specification, analysis, evaluation and synthesis during the form design process. In new product development the designer of the brand makes several different choices regarding visual characteristics of product portfolio of the brand (syntactic dimension) such as geometrical shape, scale, dimensions, compositional structure, surface characteristics (e.g., reflectivity, color, materials, ornamentation, texture, graphics etc.), visual details (e.g., joints, openings, holes, form crossings etc.), tempo and proportion. Warell describes the form of the product by the content of the design format which can be employed when designing a new product. The relation between design format and the product is illustrated in Figure 4.1. The influence of design format to the form design of a new product and the feedback of new variations, form ideas that develops the content of the design format is dhown in the figure (Warell 2001).
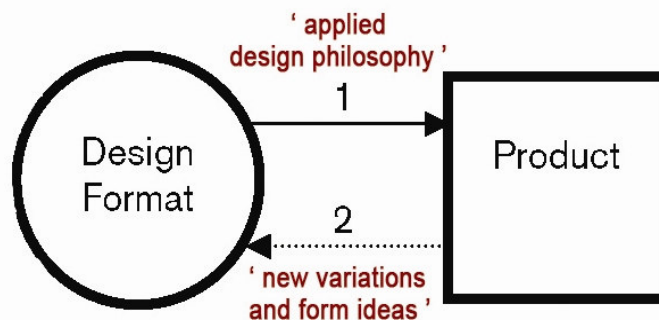
Figure 4. 1. The relation between design format and the product.
(Source: Warell 2001)

During design, the contents of the design format influence and to some degree stipulate, the form of the new product. As shown in Figure 4.1, a design format describes and influences the form design of a product as shown in relation 1 (Warell 2001). To some degree, the design format also evolves simultaneously with the design of the product, since new variations and form ideas arise during the design process. Thus, the emerging product form also contributes to the content of the design format. In the design process, the form evolution of the emerging product also feeds back and further develops the content of the design format as shown in relation 2 (Figure 4.1).

A design format directs the development of the product in a specified direction. It can thus be seen both as a 'filter', reducing the number of possible choices during product development and as a 'driver', since it navigates the search for possible solutions (Warell 2004). Warell points out that for form development purposes on the operative level, formats are particularly useful, as they provide a way to efficiently capture information related to industrial design aspects such as visual form, color, material, surface structure, composition, basic product sign, etc. In design projects involving a large number of people, a design format on the strategic level would be very valuable for communicating and embodying the design intent across design disciplines. The design format can be specified beforehand during the planning for a product design project, but is also developed and refined as a result of ongoing work (Warell 2001).

Warell states that a design format needs to contain a certain degree of company or brand history in order to express a coherent identity. Companies often use styling influences from earlier models when they design new products so it becomes possible to develop the form according to current styles and trends in combination with form ingredients that refer back to previous designs. Warell points out that form elements from previous models are developed and interpreted in a more or less different manner depending on current influences. Thus, the new product will be perceived as new and recognizable at the same time, thus attaining a coherence in time and a recognition of the brand while a model which is only incrementally different from the previous one will not be perceived as a new product by the customers. So Warell divides the influencing factors on the design format into internal and external as illustrated in Figure 4.2 (Warell 2001).
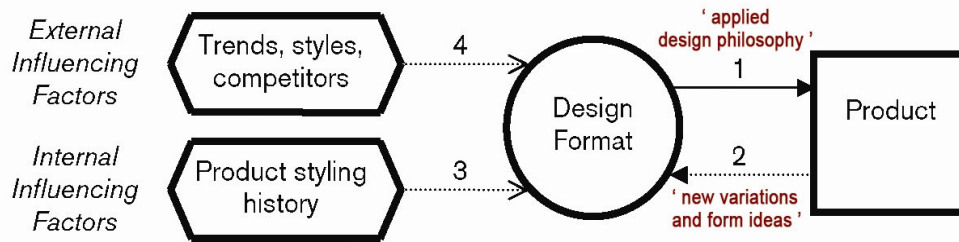
Figure 4. 2. External and internal influencing factors on the design format of a brand.
(Source: Warell 2001)

Warell defines the styling history of previous generations of models as 'company internal' factor which influences the design of new products as indicated by arrow 3 in Figure 4.2. Warell includes the company history, heritage and their core values as internal influencing factors but only focus on product styling history as a brand specific source that the company can employ in product design to develop the design format of a new product. And the other factors such as, contemporary styles, trends in design, what the competitors are doing and the changing values and trends in society also influence the current design format as illustrated by arrow 4 in Figure 4.2. These are called as 'company external factors', in the meaning that they are not specific property of one company but available for all product designing companies to take part of and employ in product design (Warell 2001). External factors also influence the design of a new product and give rise to form evolution from one product generation to the other so that company can use for enhancing contemporary characteristics of new product design (Warell 2001) .

Warell points out that the 'Design Format Modeling' can be deployed directly on a product of product family (Figure 4.3). A number of products such as a model range of a certain brand can also be described by a design format, which in that case captures the essential visual elements of the entire model range (Warell 2001). It is important to consider the design of the products and the product family together in order to maintain a clear and unambiguous identity on the market (Warell 2001). According to Warell if the range of products in a product family employs styling features from a common design format, they will all be perceived as referring to each other, and the product family is more efficiently communicated visually (Warell 2001).
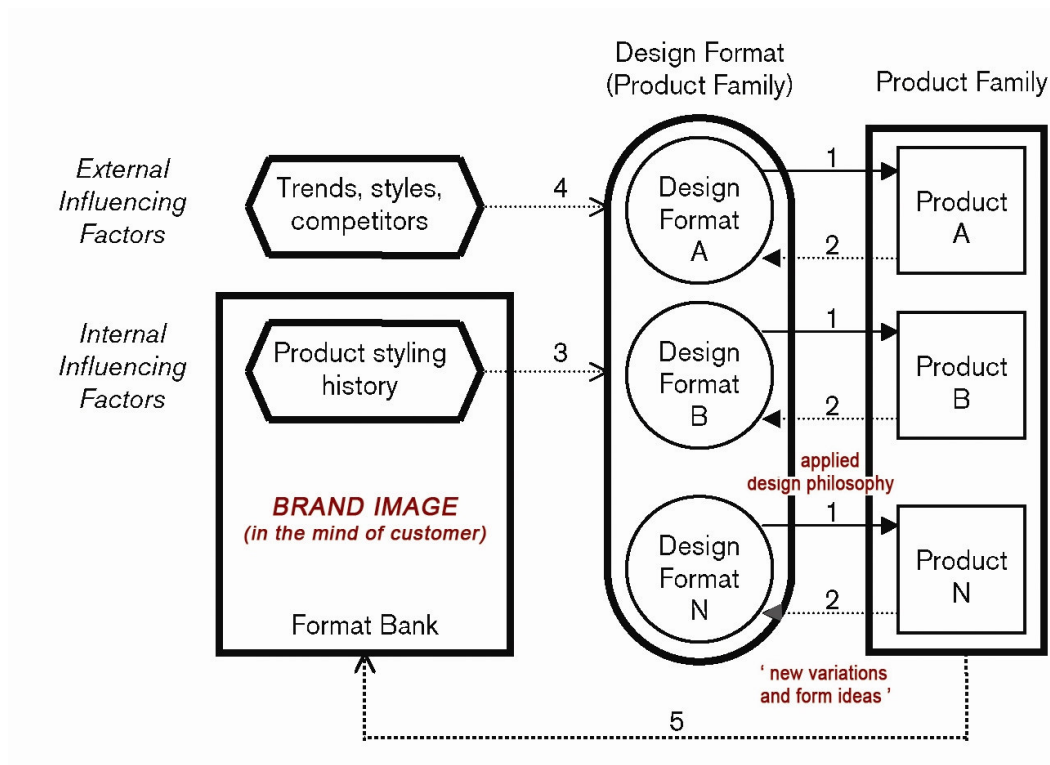
Figure 4. 3. Design Format as a strategic tool.

(Source: Adapted from Warell 2001)

In a product family consisting of N individual products, each product deploys a unique design format, but the styling features of each individual product are part of the common design format of the product family, employed in different combinations in different products (Warell 2001). The products or product families, which are designed based on design formats, will directly influence the format bank of the company. The format bank of the company is defined as the collected visual appearance of the company's image in the mind of the customer by Warell (Warell 2001). Here, the importance of historical recognition is crucial; how much visual 'knowledge' or awareness do customers hold, i.e. how much of the visual heritage do they recognize as part of the 'format bank' of the visual brand identity. The brand image might change independently of the company and brand wishes. Warell points out that if a company wants to change its image, it can only do so by introducing new products, or by presenting design concepts with the aim of changing the public image of the company or prepare the market for a change in company niche or product appearance as illustrated in Figure 4.3 by the feedback loop of relation 5 (Warell 2001). This total knowledge of the appearance and characteristics of the company's products, as well as

other ways the company is visible on the market, e.g., through commercials and how the products are exposed and sold, is part of the format bank of the company. The format bank is formed by the products the company makes available to consumers on the market. It can only be indirectly changed through the design of new products. According to Warell, more company internal positioning means, such as corporate identity strategies, company values, and design philosophy, etc., are not directly evident to the ordinary consumer and thus not directly part of the format bank, but are important ingredients of the company's total design management philosophy together with the format bank (Warell 2001).

4.1.3. Design Semantics as a Strategic Tool: 'Semantic Transformation in Design' by Toni Matti Karjalainen

In his research 'Semantic Transformation in Design', Toni-Matti Karjalainen takes a closer look to Nokia and Volvo design strategies and how they are working to transform their identity into products (Karjalainen 2004). The case studies (Nokia and Volvo) taken into concentration by Karjalainen, emphasizes the impact of internal identity on external communication. He considers the relationship between external identity and internal identity of the company as a key dimension so as to create semantic references to products that support the strategic brand identity. According to Karjalainen the process of semantic transformation includes assessing prevailing brand identity and reputation, internalizing the brand identity, business contexts, strategic objectives, defining strategic brand associations and recognizing the physical expressions of the identity. Knowledge of the basis of brand identity, its image and reputation, is what the company and its designers internalize. In other words, they should be able to judge how important brand heritage and design history are for their identity, what are the specific requirements brought by product category dynamics and how these aspects should be included in the current design approach of the brand. According to Karjalainen, the process of assessing brand recognition in terms of image and reputation, internalizing the brand identity, defining strategic associations and contemplating the expressions of the core identity is a continuous circle between the external and internal dimensions of brand identity. The Figure 4.4 below shows the conceptualization of Karjaleinen about the mutual relationship between external and

internal identity. According to Karjalainen the process of semantic transformation includes assessing prevailing brand identity and reputation, internalizing the brand identity, defining strategic brand associations and recognizing the physical expressions of the identity as illustrated in Figure 4.4 (Karjalainen 2004).
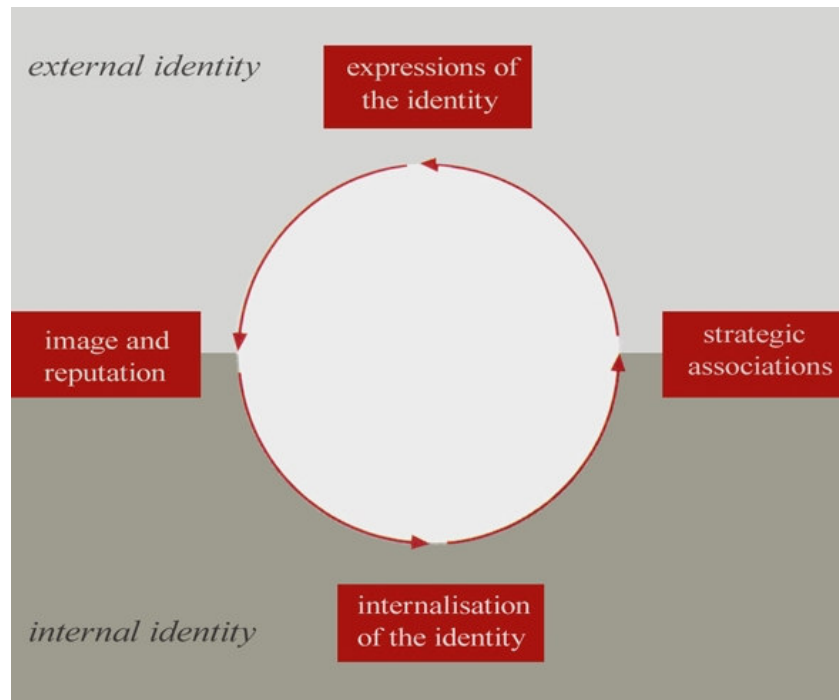
Figure 4. 4. The mutual relationship between external and internal identity.
(Source: Karjaleinen 2004)

According to Karjalainen the explicit level of internal identity can be called as the strategic brand identity that includes concentrations of the product category in which the brand operates, the brand's heritage, its design history, and its core identity attributes. A company can explicitly decide the degree to which these aspects are utilized in strategic terms in new product development. In the concept of transmitting meaning that reflects the brand's core competencies embodied in products in order to reinforce strategic brand intention, Karjalainen's discussion around semantic transformation is constructed of four main interrelated aspects (Figure 4.5). The main components of the framework represent the focal issues of semantic transformation, aspects that are important in terms of strategic brand communication. These are the basis of strategic brand identity, visual communication and product portfolio management, design as brand manifestation and semantic transformation in the design process (Figure 4.5).
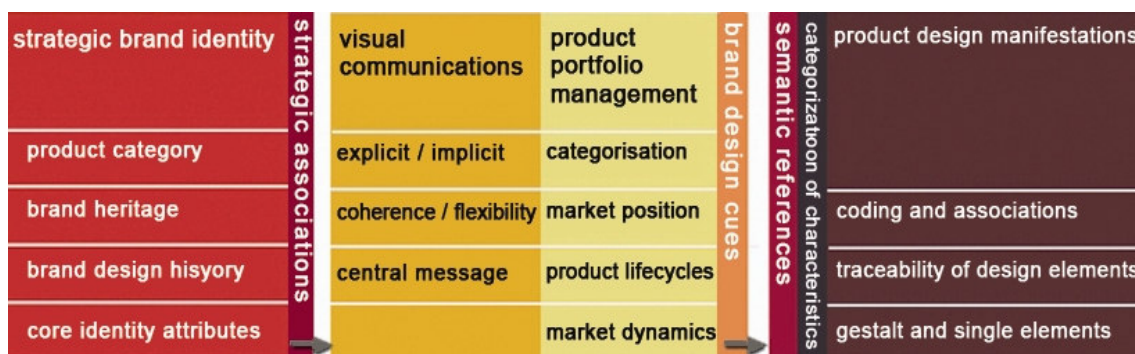
Figure 4. 5. A descriptive framework for the semantic transformation.

(Source: Karjalainen 2004)

4.1.3.1. Strategic Product Portfolio Managament

Karjalainen explains the differences in portfolio management by four main factors. As illustrated in Figure 4.6, according to Karjalainen the product life cycles (the length of the lifecycle of a single product), the traditions of the product category (extend of product categorization, the product category that the brand belongs), market position of the company (brand) and market dynamics are important issues that causes differences (affect the possibilities) in utilising product design as a means of differentiation, in other words, the strategic choice of a company (brand) in handling product design as a startegic tool in terms of creating differentiation and recognition through design (Karjalainen 2004). Karjalainen states that every brand is a specific case in its own characteristics influenced by internal and external aspects, so needs to be assessed separately. Karjalainen stresses the importance of a long-term product portfolio strategy in order to maintain consistent brand identity and the importance of considering brand management for the whole portfolio not only with regard to single products for a company (Karjalainen 2004).
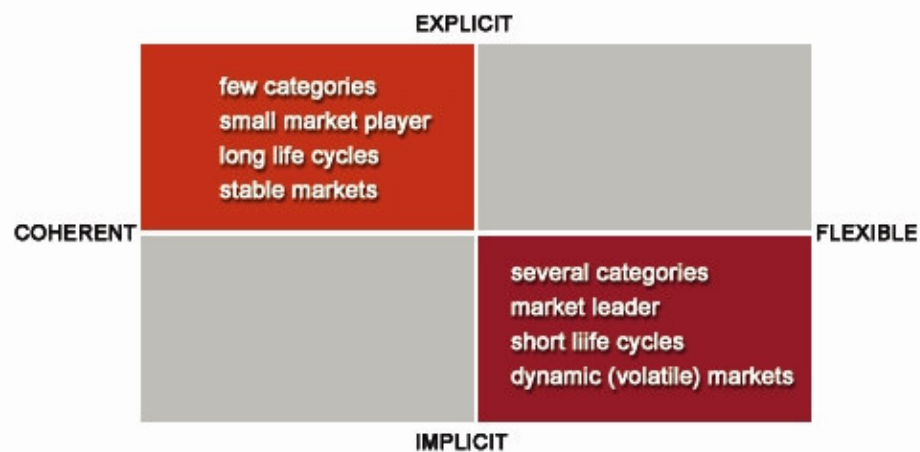
Figure 4. 6. The four main aspects explaining the differences in product portfolio management.
(Source: Karjalainen 2004)

The design management perspective considers product identity from a number of viewpoints, including brand recognition, consistency over time and distinctiveness among market competitors (Karjalainen 2001). By giving references to literature Karjalainen suggests that there are three requirements for corporate identity as the central character of the identity, its distinctiveness (differentiation) and its continuity (coherence) are represented through specific characteristics and features of the company and its products. As illustrated in Figure 4.7 below, the central character of the company (the key aspects of company identity) involves features that are considered 'the essence' of the company (central message or messages, core identity attributes of the company) which are typical for the brand (distinctiveness) and entail temporal continuity that exhibit sameness overtime (Karjalainen 2004). Firstly, corporate identity is associated with the claimed central character of the company. This requirement involves features that are considered 'the essence' of the company. Secondly, claimed distinctiveness (features that distinguish the company) is an important notion since it refers to differentiation. Thirdly, corporate identity also entails claimed temporal continuity that exhibit sameness over time. Karjalainen defines the central questions concerning communication strategy of a brand as follows; what is the central message to be communicated?, what is the appropriate balance between coherency and flexibility in communicating the central message (with decisions concerns the degree of coherence and flexibility that is used in the design of different products)?. And in relation to the coherence and flexibility of communication is the emphasis on explicit or on implicit

communication? In other words, are the messages explicitly or implicitly transmitted through products?.
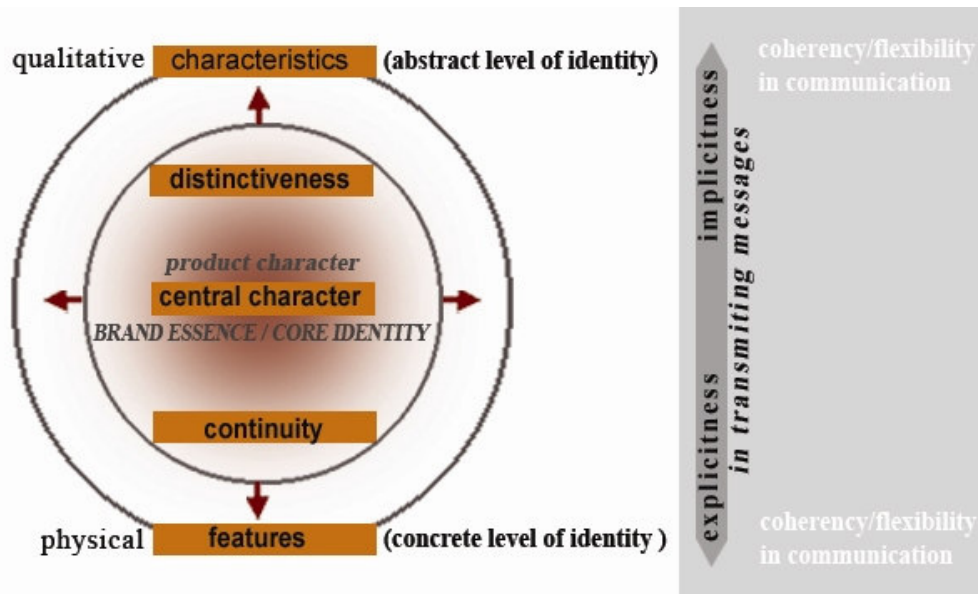
Figure 4. 7. The central character of the company and the key aspects in communication of this character. (Source: Adapted from Karjalainen 2001, 2003, 2004).

If it is summarized what Karjalainen indicates, the key concerns in utilizing product design as a means of differentiation are familiarity (consistency) and novelty (flexibility) in design features and characteristics of products through brand portfolio and choosing between static, evolutionary and revolutionary design approaches. The design approach of a brand in between static, evolutionary and revolutionary approaches in single product level influences the consistency and flexibility character of the product portfolio of the brand. The degree of design novelty in the design process of single products and the time interval between the pace of design revolutions, so the shorter or longer evolution period influence the degree of consistency (consistency 'or', 'and' flexibility) in whole product portfolio. As illustrated in the Figure 4.8, according to market dynamics specific strategies in new product development with regard to the overall portfolio development across time occur in a manner that can be characterized by-slow evolution or revolutions balancing between novelty and continuity (Karjalainen 2004). Revolution (novelty) in design is defined by Karjalainen as a radical change in existing design elements or the introduction of totally new elements that become dominant in terms of perception (Figure 4.8).
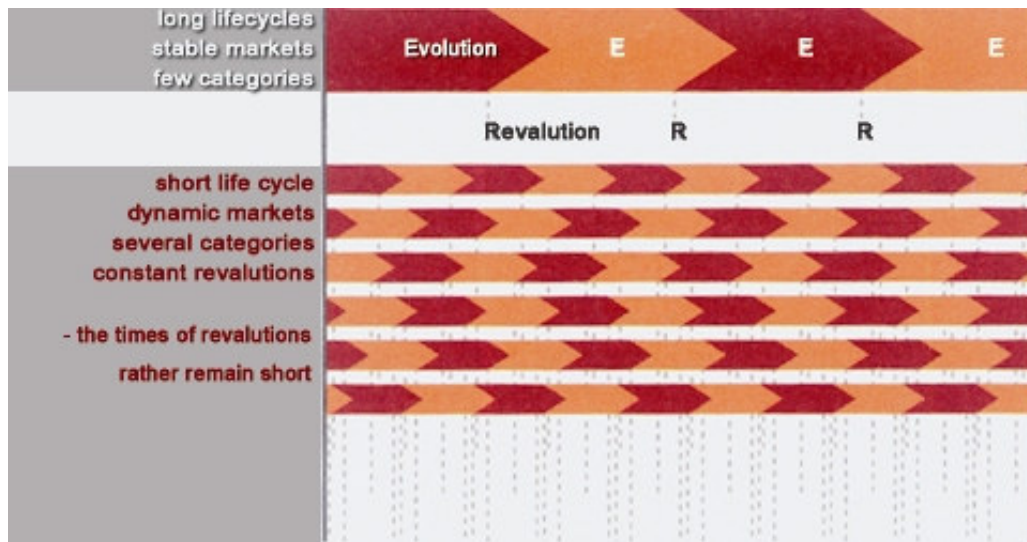
Figure 4. 8. Differences in market dynamics explains the differences in the pace of design revolutions in design. 'R' refers to revolution, E refers to evolution. (Source: Karjalainen 2004)

If the product portfolio of the brand consistent in design features and characteristics, the visual appearance of the product (or products) gives existence to brand recognition through family resemblance (similarity, familiarity) by the pervious experiences of the users with brand. If the degree of coherence in the design of different products is high, the central message of the brand that is intended to transmit to the target customers and embedded in brand typical design features can be explicitly transmitted through products. But, it is important to add that it is not guaranteed that such codes (strategically defined brand specific messages encoded in products) are interpreted in accordance with the message the companies and designers have encoded. People outside the target segment may not recognize the apparent symbolic signs or interpret them in a wrong way (in other words create unexpected meanings from them) as a consequence of (among other things) the user's weak experience in curtain product category and brand, inconsistent supporting information or differences in cultural and social contexts that the users belong. The degree of brand recognition and distinction embodied in product and range of products is relevant to brand specific decisions in terms of strategic portfolio management of the brand. Although the degree of coherency and flexibility is a case specific issue, if the brand use specifically defined features and characteristics of the products continuously to some degree by a long-term strategic portfolio management, it is accepted that, the intended messages would be transmitted

to costumers in the way that the brand (designer) intents, in other words, it may decrease the possibility of interpreting unexpected meanings from them.

Karjalainen proposes that the company need to be more innovative by having revolutionary design approach experiencing constant revolutions in design and remaining the evolution times rather shorter, so the flexibility in communication would be the most feasible strategy to create brand recognition and distinction through product design if the company (brand) aims at being market leader (the company's market position) in a newer and faster changing market (market dynamics), and life cycle of a single product is short (the life cycle dynamics) that highly dependent on social trends and has several product categories (the traditions of the product category) and wide product portfolio aiming at a wide audience and large sales thus assuring a larger acceptance such as Nokia which is the case company of Karjalainen' s research. So the products of the company may be more dissimilar within the range (weaker visual family resemblance) as well as less typical compared to competitors with their segments of the market. Other wise a company may positions itself in opposite side of spectrum. If the company is in stable market, long industry life cycles, small market player with low number of produced units, with relatively low sales numbers, few categories, then, a large degree of visual coherence in the product portfolio may be desirable. For a brand like Volvo that aims at creating a certain differentiation and instant recognition, the company may build identity through likeness and repetition and strengthening the position on the market through visual similarity. The design features and characteristics of the products may be in coherence through the product portfolio. The visual product identity (brand specific design language) may makes a product or product range typical for that brand but they may look largely like other products in the market do in general and be necessarily as distinctive.
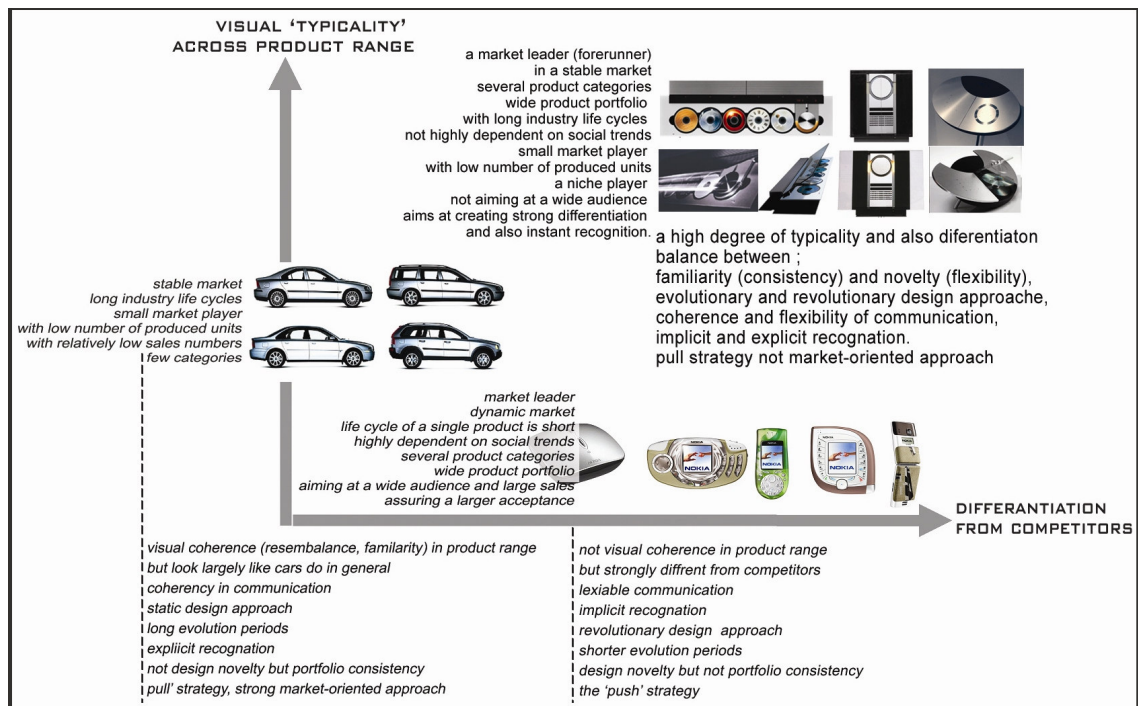
Figure 4. 9. The effects of differences in strategic portfolio management of Volvo, Nokia and Bang & Olufsen on visual product range of the companies. (Source: Adapted from Warell 2001, Karjalainen 2004)

4.1.4. Designing for a Brand

The main aim of this thesis to search for brand identity of Bang & Olufsen, their process in evaluating their brands and product portfolio in creating brand specific design language (strategic design language) in order to transform their strategic brand identity (intended brand specific messages) through products to the target customer as much as coherence in the way that is intended and create new products that communicate the brand. The content of the question 'How can products carry strategic messages and hence create brand recognition' concerns (within the context of communication) that the products in general as well as individual design elements (product characteristics and physical features) can function as signs and leads to the viewpoint of products as signs carrying meanings (on the generic view of Pierce) hence manifestations of brand identity by evoking certain associations that in an ideal situation are aligned to strategically defined message of the brand. In the context of treating product design as a tool for strategic communication , product design (its gestalt form, characteristic shapes and single elements, reference levels) functions as a replica

embodying specific signs or representations (semantic product functions, semiotic qualities of products) that convey brand associations to a perceiver's mind.

The ingredients of the process (meaning creation, interpretation and associations; representation, expression and knowledge), the brand design element (R: the object of reference, signifier, the design cues of the brand, product-brand-properties) that act as identifiers of brand (O: object, brand identity attribute, the brand message, sign meaning, processes, values, ideas, designer) and the interpretant (I: people, target customer, designer as a customer) that interprets the message from brand (O) that is communicated through the character of product (R) make the process complex in reality. This complexity is being stressed in literature by authors. Every brand is a specific case in its own influenced by internal and external aspects as well as every designer has his or her personal way of working as the design process is a creative, individual process and they should not be interrupted or circumscribed by a guideline. It is also important to be aware that good (brand-specific) design is not totally measurable in the sense of certain elements and rules. The designers always contribute with their creative, aesthetic talent, and hence it is important that there is room for this talent to be expressed / applied. The brand-specific design elements are also individual, appear on different levels and have very different characteristics, there is no simple, universal method on how to find a brands strategic design language and apply this in the development of new products for that brand. Brand identity can be reflected through different aspects of the products. A specific design element can be interpreted in various ways so as an object can have various representations and a specific brand attribute can be refered to through different replicas. Further more, interpreting subjects with different backgrounds affected also by cultural factors can end up with a consistent interpretation of different replicas and objects. Interpretation can involve various reference relations and a replica such as design element, instead of a single sign, includes several references that can be conceptualized as a pattern of signs (Karjalainen 2004). The interpretation of symbolic references varies between cultural and social contexts that they are regarded as being based on socially and culturally agreed conventions and terms. The brand specific associations and meanings are constantly regenerate and reshape (for the brand, designer and customer) that are fused in dynamic mutual interaction. And also it is not guaranteed that the codes are interpreted in accordance with the message the companies and designers have encoded.

Besides all these aspects, Karjalainen research (as the main reference of this thesis) suggests rather a discussion around the theme of semantic transformation (not a method) in terms of understanding how the visual and communicative design qualities of products actually communicate and represent brand identity and evaluating a brand and its specific design language to bring this on in the process of designing new products that communicates the brand identity. Karjalainen presents a more of a general guideline that has to be individually tailored in each specific case, not a universal method (Karjalainen 2004). His guideline is meant to point out relevant issues that it is important to be aware of and one should take into consideration when designing for a brand. One of the advantages of his guideline is that it takes all aspects reflecting brand identity into consideration.
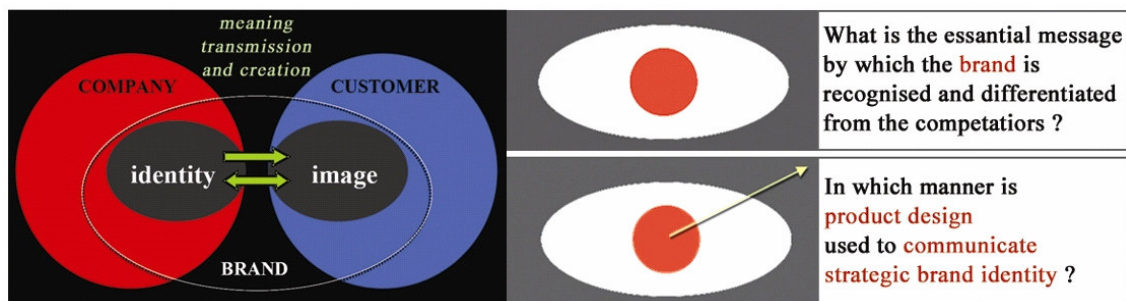
Figure 4. 10. The relationship between identity and image.

(Source: Karjalainen 2003)

Karjalainen guideline is divided in two main sections. The first is brand analysis, the second is brand transformation where brand communication is viewed both as meaning transformation from company to customer and as a shared meaning creation within the interaction. In this situation brand is about the relationship between identity and image (Karjalainen 2003). The company may send predefined messages that grow and change as the customers interprets them. Image again, affects the identity of the company. In an ideal situation the image equals the identity (Karjalainen 2004).

When analyzing a brand, this can be divided in two stages. Firstly strategic brand identity should be search for and secondly visual product identity should be analyzed (brand specific design cues). It is obviously important to know who and what the brand is and to know the strategic brand identity, and hence what associations one (brand- designer) wishes to evoke to be able design products as manifestations of brand identity (products as signs carrying meanings evoking certain associations that in an

ideal situation are aligned to strategically defined message of the brand) and also related to the content of this thesis to be able to search for how the brand handles product design as a strategic tool in terms of transmitting strategically defined messages. As discussed in the previous section, according to Karjalainen and Warell, core identity, target customers, brand positioning and brand heritage are important themes and aspects of interest when analyzing strategic brand identity (Warell 2001, Karjalainen 2004). In terms of analyzing visual product identity, product typologies, differentiating aspects, product aspects reflecting brand identity (explicit features, verbal description of key characteristics, implicit features) and visual analysis of portfolio should be relevant issues of focus. The different strategies used in terms of which brand specific design elements companies use depend on strategic portfolio management of the brand that usually somewhat controls the amount of either explicit or implicit design cues, and also how flexible or coherent these are. As discussed previously, Karjalainen suggests the extent of product categorization (product typology level), brand market position, product lifecycle, and market dynamics as the aspects explaining the difference in portfolio management (Karjalainen 2004).

The question of 'what makes a audio product look like a Bang & Olufsen or Phillips?' is an individual case and must therefore be considered individually in every specific brand situation. Brand identity can be reflected through different aspects of the product. According to Warell and Karjalainen, these three aspects are explicit design cues, product characteristics and implicit design cues (Warell and Karjalainen 2005). However, it is of relevance to be aware of what levels these elements may appear on, and what their different characteristics are as Karjalainen points out. When looking at a product and all its design representation only a very few of these actually acts as identifiers of the core identity attributes of the brand. When considering the brand-specific design cues, firstly, Karjalainen stresses the importance of trying to understand these in relation to how they actually represent brand identity (Karjalainen 2001, 2002, 2003, 2004). Because they may actually communicate something that is totally different from the brand's identity without knowing how they represent brand identity or implementing (the explicit) brand design cues in a 'wrong' way. As discussed previously , this is the most important aspect that differentiated Karjalainen's discussions about designing for a brand from the other relatively static approaches such as Warell' s Design Format Method and Mc Cormack and Cagan 's Shape Grammar Method (Mc Cormack and Cagan 2004).

Consequently in order to distil and analyze brand specific design elements (analysing visual product identity of the brand) the relevant stages are:

a-) Product Typologies:

Firstly, basic categorization of product qualities helps to characterize on what product typology level the brands products differentiate from its competitors (is it on the super-ordinate, basic or sub-ordinate level?) which gives starting point on where one should start looking for brand specific design elements and also where it is appropriate to imply them later on in new designs in transformation process.

b-) Brand Reference Levels (The Differentiating Aspects of The Products):

Secondly, asking what is it that distinguishes product of this brand from other products? A brands design language does not consist only of single elements, instead holistic compositions (characteristic shapes) and gestalt design can also embody design references. In terms of traceable and non-traceable elements (Karjalainen 2004) brand typicality can be found (Warell 2001, Karjalainen 2004)) and brand references can be identified (Karjalainen 2004) at different levels such as gestalt, higher order, lower order and fifth elements (Warell 2001). According to Karjalainen at this stage a verbal description of key characteristics is a relevant start with keeping in mind to distinguish temporal characteristics, especially stylistic trends, from the prevalent ones and specific interest should lie in distinguishing those aspects with high semantic relevance that as only a few design elements actually work as manifestation of brand identity (Karjalainen 2003). It is helpful to be aware of which elements one (brand- designer) wishes to keep constant and which are subject to modification or change in transformation process however it is not possible to present a framework on how this transformation actually should take place, as the design process is very much individual to each designer (Karjalainen 2003).

c-) Identifying Product Aspects Reflecting Brand Identity:

When the differentiating aspects of products are found one should start categorizing the product aspects that reflect brand identity (into explicit features, verbal description and implicit features). Brand identity can be reflected through explicit (explicit design cues), linguistic (verbal description of product characteristics) and implicit (implicit design cues) aspects (features) of the product. This process offers a basis for understanding how one can use products as manifestation of brand identity and helps understanding these aspects better, may uncover new ones, and may also help in understanding what aspects it would be appropriate to use in new designs. When

designing new products that communicate the brand identity, emphasise should be put on seeking design features that cleverly communicate the identity, not only transferring explicit design cues which is referring to the product aspects (explicit, verbal and implicit) and the understanding on how these actually represent brand identity (Karjalainen and Warell 2005).

d-) Visual Analysis of Portfolio:

It concerns searching for the design features and characteristics that are typical for a brand (brand specific design cues) that provides brand specific associations (brand awareness, distinction, recognition) in terms of the degree of coherence (repeated references, traceable design elements, explicit design cues, evolutions) or flexibility (non traceable design elements, novelty, revolution, implicit design cues) aspects and also the degree of genuine and stringed associations (subconscious recognition) that the products embody. It is the strategic decision of the brand whether the intended messages will be explicitly or implicitly transmitted through products to the customers. The degree of existence of recognized likeness (coherency / flexibility) together with the genuineness of references and the partiality of characteristics (stringed associations) embodied (encoded by the designer-brand) in design elements and characteristics through the product portfolio of the brand provides brand specific associations (brand awareness, distinction, recognition) through explicit (familiarity) recognition or a more implicit recognition. The emphasis of strategic choice may be on explicit or implicit communication in relation to the coherence and flexibility of communication for the company in terms of product portfolio management.

4.1.4.1. Product Aspects Reflecting Brand Identity

According to Karjalainen and Warell, the strategic identities of brands (core identity attributes of the brand, brand identity) can be reflected by the visual product characteristics of the product portfolio of the brand through three product aspects (Karjalainen and Warell 2005).

- Explicit Design Cues (Traceable design elements),
- Linguistic Descriptions (Qualitative characteristics, Verbal description of the key characteristics),
- Implicit Design Cues (Non- traceable design elements).

Products can be designed to carry explicit and implicit references or simply called as explicit and implicit design cues (Karjalainen 2005). A critical strategic choice concerns the decision on which of these levels the brand recognition should be created in explicit or implicit level. As indicated by Warell and Karjalainen, if that is the chosen strategy, companies can simply repeat explicit cues (that are embedded in the design features designers implement with the intention to be immediately perceived and recognized) from a product to another to create recognition, however, as indicated by Karjalainen too much repetition can result in undesirable outcomes and choosing between static, evolutionary and revolutionary design approaches are key concerns (Karjalainen and Warell 2005). This division is mainly related to the product identity which is largely constructed through visual recognition and brand-specific associations. Brand identity can be seen as carried by the visual form of the product in two distinctively different ways. The syntactic level of product identity involves the recognition of something perceived previously. The semantic level of identity involves an identity creation related to the interpretation of meaning associated with brand messages, carried by the visual product form. In other words; the crucial components in understanding how visual product identity is created and conveyed through product design are the visual recognition through formal syntactics (recognition related mainly to the syntactic level) and the creation of meaning through semantic transformation (recognition related mainly to the semantic level). By the combination of Warell's model and Karjalainen's discussions, the product identity is created through two main modes related to the design of the product within the design process. Through 'semantic transformation' which refers to the transference of the company's brand strategy and other semiotic messages to the visual product form (Karjalainen 2004). Thus, 'semantic transformation' denotes the company-specific interpretation of messages carried by product design cues, and the process of utilizing and evolving such design cues into visual elements employed in the design of new products. Through semantic transformation, recognition in multiple products of a certain brand is created through similar connotations and consistent messages interpreted (Karjalainen and Warell 2005). Through 'formal syntactics' perspective, the structure and nature of visual elements carry the semantic content and create recognition through visual resemblance (Karjalainen and Warell 2005). From a formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues, which

enables recognition through visual similarity within the same brand (Karjalainen and Warell 2005)
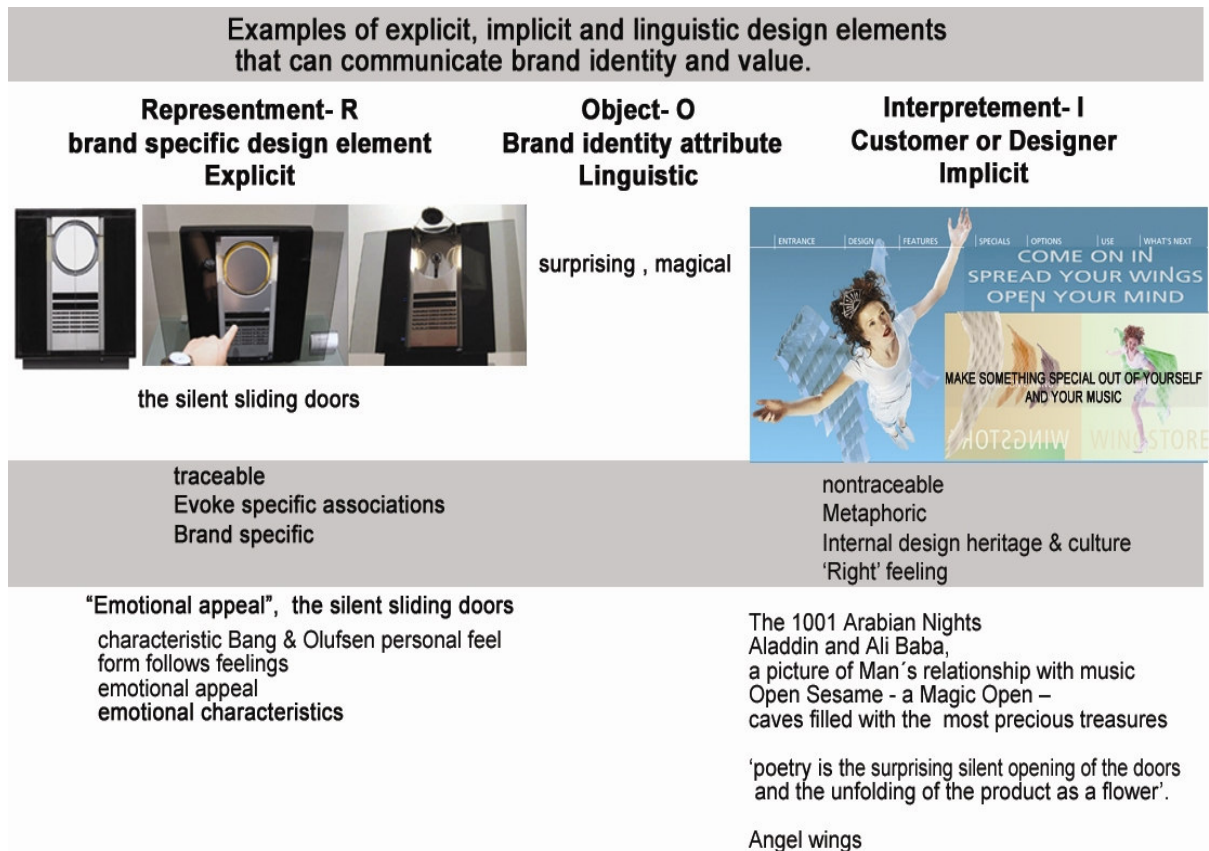
Figure 4. 11. Examples of explicit, implicit and linguistic design elements embedded in the audio product of B& O that communicate brand identity and value.

4.1.4.1.1. Explicit Design Cues

Karjakainen states that the notion of explicit design cues in brand specific design language is characterized as availability of the brand product to be reduced to specific design elements (stylistic attributes) and characteristics that reflects the brand core values even though they change in form from one product to the next and continuously use of these elements and characteristics across the product portfolio of the brand (Karjalainen 2001). If same shapes are repeatedly used in the brand's products, they become explicit cues and build visually consistent portfolios. Explicit visual references are embedded in the design features designers implement with the intention to be immediately perceived and recognized. According to the categorization of Karjalainen (that refers to Warell's design format model), the explicit design elements (eg., specific

form elements, typical shapes joining relationships, detail treatments, surface treating, colors, materials, color treatments, textures, etc.) are related mainly to the syntactic level that refers to Warell's Design Format Model (Warell 2001). They are specific elements are precisely definable elements that are fully revealed and expressed without vagueness and also are consistently used across the whole product portfolio of the brand to communicate brand identity (embody brand-specific associations). Warell uses the notion of 'design format' to describe the collection of form elements that are consistently used on company or product family level (Warell 2001). Karjalainen assumes the explicit design elements (that may cover a 'design bank' of the brand as they may be written into the brand's design guidelines and systematically used across the entire product portfolio of the brand) embody brand specific associations. Warell also suggests, such physical form elements can be analyzed on various levels, from the general 'gestalt' form to individual details (Warell 2001). Even in the physical contact with the product, the user's initial perception is visual. Nonetheless, this is not to underestimate the tactile qualities that have a great significance on perception and interpretation. The first encounter between the product and the user takes place through visual representations in advertisements, magazines, or shop displays. In effect, some visual cues incorporate direct references to tactile qualities. For example, visual cues about the used material (e.g., brushed aluminum) evoke specific associations even without physical contact.

4.1.4.1.2. Qualitative Characteristics

The specific characteristics and features functions as the expressions of core identity can be described by qualitative characteristics that are connected with the product. In specific when consistent design cues seem to be missing the identity domain of products (visual product characteristics) that support the core identity of the brand may be described by linguistic (qualitative) descriptions in order to define the 'design language' of the brand (Karjalainen and Warell 2005). As Karjalainen states this type of cues refers to the recognition (and differentiation) through elements that are not directly manifested through specific design features, but rather through the expression of brand values on the semantic level (representational - semantic- product qualities). In other words, the design language of the brand may also be described by qualitative

characteristics that may take different physical forms but are connected to specific brand associations. There may appear various physical manifestations of the underlying identity across the product history of the brand, in specific, it is important to distinguish temporal characteristics, especially those related to stylistic trends, from the prevalent ones, as well as the complete characteristics, if they appear, from partial ones (Karjalainen 2004). For example, Bang & Olufsen utilizes certain visual features to communicate some of its core identity attributes; uniqueness, inventiveness, originality, desirability, 'Scandinavian' values etc. This type of recognition is mainly related to the semantic level, involving identity creation through sign interpretation that is dependent on the ability of the perceiver to decode specific messages, a capability which is 'learned' and 'inherited' through a certain socio-cultural context (Karjalainen and Warell 2005).

4.1.4.1.3. Implicit Design Cues

Third, brand recognition involves an implicit aspect. All brand recognition involves the implicit aspect (Karjalainen 2004). This concerns also product design, which suggests that the brand identity cannot be entirely reduced to explicit elements or describing linguistic (qualitative characteristics) descriptions. This is the most important difference between Karjalainen's approach and Warell's approach to brand specific design cues. The implicit cues comprise references that cannot be distinguished but, when used 'make sense', where as the explicit cues embody references that everyone can see (Karjalainen 2007). The design cues of the brand may involve merely inherent associations (core values) embedded in a variety of different features for example in the generic 'design philosophy' of the brand even though they may change in from one product to the next. Karjalainen defines these cues as implicit cues (Karjalainen 2004). The implicit brand design cues that communicate the general character of brand can become explicit cues to build visually consistent portfolios, if they are repeatedly used in the brand's products (Karjalainen 2004). The implicit recognition may involve metaphorical associations or subconscious associations (Karjalainen 2001, 2004). The significance of implicit experimental knowledge may be embedded in brand culture. Implicit design cues refer to elements that contribute to a recognizable 'style' or 'form language' on the level of characteristic elements. Elements of this type are more easily

transferable, since they are not inherently connected to a specific product category (Karjalainen and Warell 2005). (e.g., Bauhaus inspired, Scandinavian style, Form Follows Feelings, Less is more, aerodynamic design, stylistic (characteristic) features such as rectangular forms sharp cuttings, centralized alignment, tiny radius in plane joint, straight cut parting lines and polished surface treatment, the uncluttered surfaces and sharp edges of the ' X Brand' style, the double-curved, organic 'Y Brand' style, Coca-Cola and Absolute bottles etc.) The brand-specific design language cannot be wholly or explicitly reduced to specific product characteristics or design elements which suggest that semantic transformation (encoding intended messages to products) is explicable only to a certain degree (Karjalainen 2004). There may often exits the implicit knowledge of brand-specific design language within the brand (company) which typically signals (brand) design heritage and culture. It may be able to agree on that a specific product has a 'B&O or Phillips character' but can not necessarily state in an explicit manner what makes it look like that. Material symbolic meanings may get us close to lived experience, but they cannot easily be articulated, it builds up an implicit knowledge about the associations and evocations of particular artifacts or styles. It can be said that something 'looks good', 'works well', or 'is stylish' but they cannot easily be articulated and it would be at lost to say what it 'means' because the item does not mean rather, it is embedded in a set of practices that include class, status, goals, aesthetics (Karjalainen 2004). The significance of implicit experiential knowledge embedded in brand culture may vary between different brand cases, by working for the brand, an individual designer (or other employee) gains individual experience of the brand's identity and appropriate design language (Karjalainen 2004).

CHAPTER 5

STRATEGIC BRAND IDENTITY AND STRATEGIC BRAND COMMUNICATION THROUGH AUDIO PRODUCT RANGE OF BANG & OLUFSEN

5.1. Contents of Internal and External Brand Identity and General Framework for the Case Analyze

The organisations have a factual identity, internal company characteristics, that is then communicated to publics (corporate identity management). Corporate communication is seen as representing the 'essential' identity or personality of an organization to which the content of communication must correspond. In this thesis, the question of concern is about the correspondence between specifically 'defined' identity (in terms of explicit characteristics) and its intentional communication through product design. Hence, this thesis regard brand identity primarily as a strategic concept that fundamentally involves the aspect of intentional actions and place the main emphasis on discussing the central means of product design within the message transmission. The emphasis will be put on understanding how the products actually communicate brand identity. As Karjalainen states, the creation and management of brand's design language is eventually an utterly case-specific issue (Karjalainen 2004). The differences in brands' heritages and cultures, industrial environments, as well as companies' business and product strategies may result in quite different approaches to the use of symbolic design cues in terms of their embodied semantic references that support strategic brand identity.

Throughout this chapter it is aimed to describe and analyze various representations of brand identity of Bang & Olufsen, clarify what constitutes brand identity by the underlying factors such as the inherent impact of brand culture, heritage and reputation on aligning the strategic identity; business contexts, strategic objectives and identify different mental and emotional factors of a company, such as its business idea, goals, mission, character, strengths/capabilities and values. The 'brand as product'

calls for the importance of product scope, attributes, quality/value, uses, users in defining brand identity and further a distinctive value proposition by offering functional, emotional, and self expressive benefits for customers. Consequently, while analyzing the most important elements of the brand's strategic identity ('competence associations', 'core identity' of the brand), the products under scrutiny and, in specific, their design features (as they occur) have been analyzed in order to find out how the transformation from brand attributes to physical design cues actually takes place by also taking care of the insights of the design process as experienced and described by designers themselves.

The inherent (and not only conscious) impact of brand culture, heritage, and reputation is important on aligning the strategic identity. The notion of strategic identity also emphasizes the intentional decision to include or exclude the references in the contemporary product design to the brand's history (Karjalainen 2004). By definition, the concept of brand, while concerning the idea of awareness and recognition, involves familiarity, which suggests that some consistency of identity references is always evoked in product design. If a product would not be recognized as the product of a specific brand on some level, there would not be point in branding that product. Karjalainen states that the creation of strategic design language requires not only firm knowledge (company's viewpoint) but also abilities of designers to judge whether a specific solution is coherent to the brand's identity (Karjalainen 2001, 2002, 2003, 2004). The designers of a company possess a specific body of knowledge of the brand heritage and culture and reflect this knowledge on their work by internalizing the brand knowledge (Karjalainen 2003). The accumulation of insights, processes, practices, and methods utilised and experienced prior to a specific design process forms the body of experiential knowledge which is linked to the past reputation, heritage and culture of the company or brand in question (Karjalainen 2004). Karjalainen talks about the experiential knowledge (internalizing the brand heritage and culture by designers) and strategic knowledge (stems from the recognition and internalization of the company's strategic objectives) together with the identity domain of the brand such as brand heritage, culture, past reputation and strategic identity such as business idea, goals, mission, values, etc. (Karjalainen 2003). He adds that fundamentally, it may often be difficult to distinguish the nature of strategic identity from the underlying identity domain, similarly as it is difficult to distinguish strategic knowledge from experiential knowledge that is is because strategic identity always involves the influence of the past.

As Karjalainen states, the 'existent' identity domain of the brand may have less or more significant influence on the formation and definition of the strategic identity. The organizational identity, culture, values and manners are critical aspects that in many cases are part of the interaction process between the brand and its customer, thus having impact on brand perception and image formation. Consequently, the smaller the deviance between the identity domain (what the brand is and has been known for) and the strategic identity (the message the brand wishes the customer to believe), the more believable the transformed message is (Karjalainen 2004). From the perspective of the strategic management of new product development, the key challenge is to transform the brand identity into individual products and, at the same time, keeping in mind the overall strategic objectives of the brand (Karjalainen 2004). Bang & Olufsen's different realities and approaches towards strategic brand communication in design are also relevant to strategic management of new product development and the way strategic brand identity become manifest in product design and the way predefined intentions 'transformed' to product design during the design process. Then, the critical question concern is the correspondence between identity domain and strategic identity to clarify the strategic use of product design. On this merely intentional level, Karjalainen characterise the prior concerns of identity management through the communicative aspects of product design by two conscious decisions which will be also discussed further in the remaining chapters.

1- Bang & Olufsen does or not, in the first place, consciously use design references that are linked to the identity domain of the brand (thus, utilising the past experience of consumers with the brand in order to provide them with appropriate 'codes' for interpretation of design cues through familiarity and recognition).

2- Bang & Olufsen does or not, strive for a product 'familiarity' through the consistent use of traceable design elements, or for a more implicit recognition on the level of characterising attributes or subconscious associations.

Consequently, the general framework of analysis of Bang & Olufsen consumer Electronics Company in terms of the strategic communication in product design that will be discussed further in the remaining chapters is illustrated in the tables below (Table 5.1, Table 5.2).

Table 5. 1. The general framework of analysis of Bang & Olufsen consumer electronics company in terms of the strategic communication in product design.
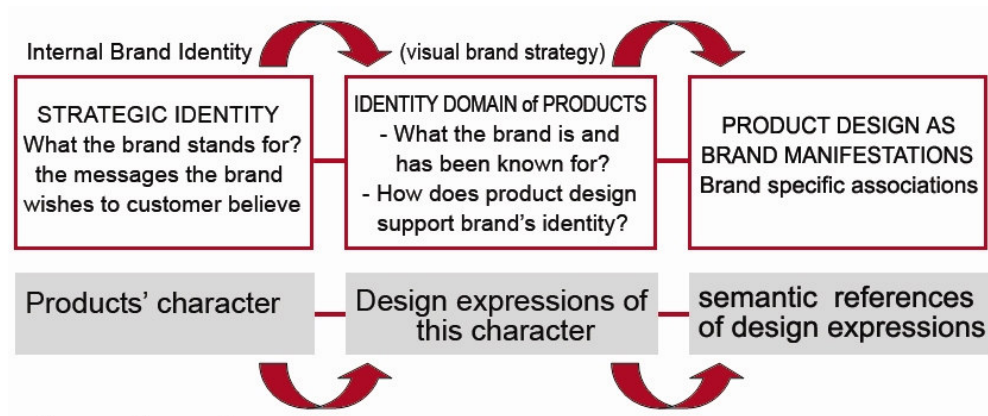
Table 5. 2. The general framework of analysis of Bang & Olufsen consumer electronics company in terms of the strategic communication in product design.
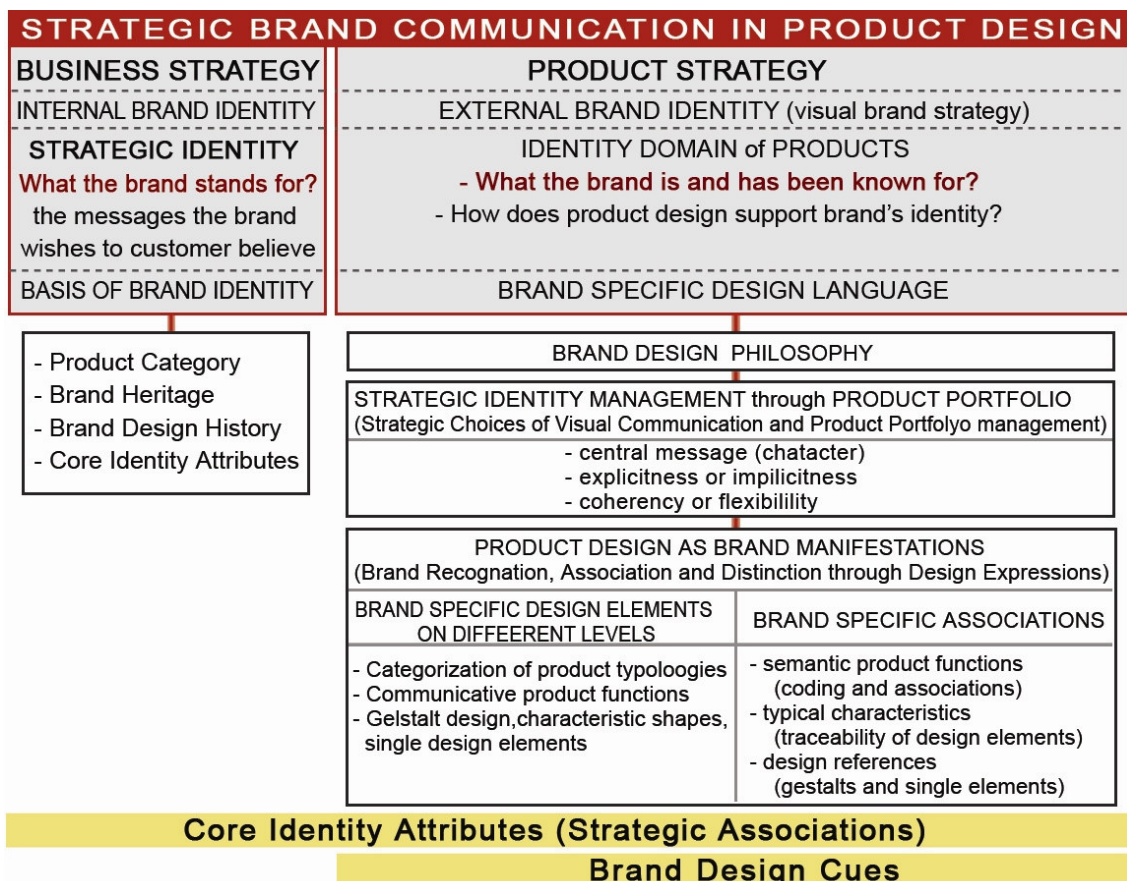
When analyzing B&O it is divided in two stages. Firstly, the strategic brand identity and secondly visual product identity of the brand will be analyzed. The impact of internal identity on external communications (visual brand strategy) and the degree of correspondence between them (in other words the link between brand characteristics and design features or products) are important. The basis of strategic identity is made explicit through the core identity attributes and further through strategic associations. According to Karjalainen the central questions concerning communication strategy in a company include; 'What is the central message to be communicated?', 'What is the appropriate balance between coherency and flexibility?', 'Is the emphasis on explicit or implicit communication?' (Karjalainen 2004). The explicit level of internal identity, (strategic identity) covers the themes of brand's core identity attributes, product category, target customers, brand positioning, brand heritage, brand's design history which strategic brand associations are defined on this basis. All these aspects are closely connected. The core identity (linked to all the latter) is a brands values and messages that stay constant in the entire product portfolio and over different user groups. Target customers are who the brand primarily wants to sell to. Brand positioning refers to the brand in the context of the market and its competitors. Brand heritage refers to the history of the brand and its products, and should always influence new designs (Warell 2001). The heritage of the brand may have strong implications on the strategic identity. In specific, the more established is the brand reputation, the more difficult it is to change. With regard to visual recognition, the brand's design history is an aspect that may have an important role in strategic communication. Each product category has its own characteristics, principles and traditions regarding the fundamentals of product design. The product portfolio needs to consist of products that at least to a certain degree incorporate common characteristics. In order to support brand identity so that it is important to consider brand management through the whole portfolio, not only with regard to single products. It is important to consider the entire product portfolio in terms of how flexible or coherent the design cues are when considering the brand-specific design cues. The issues of coherence/ flexibility and implicitness/ explicitness should be actualised in the practices of product portfolio management (Karjalainen 2004). It is highly relevant to try to understand these cues in relation to how they actually represent brand identity. In terms of analyzing visual product identity, relevant issues of focus are product typologies, differentiating aspects, product aspects reflecting brand identity

(explicit design cues, verbal description of key characteristics and implicit design cues), and visual analysis of portfolio.

5.2. Strategic Brand Identity of Bang & Olufsen

The internal brand identity, the messages that B&O wishes the customers believe will be determined to find out the strategically predefined (indented) meanings that the company wants to transmit to the target customers through product design. And also strategic identity management process of Bang & Olufsen across the brand history in terms of responding to constant changes in market demands will be examined as they are relevant to strategic management of new product development. The product life cycles (the length of the lifecycle of a single product), the traditions of the product category (extend of product categorization, the product category that the brand belongs), market position of the company (brand) and market dynamics of Bang & Olufsen are important issues to be examined. Because, all these aspects cause differences (affect the possibilities) in utilising product design as a means of differentiation, in other words, the strategic choice of a company (brand) in handling product design as a strategic tool in terms of creating differentiation and recognition through design. The creation and management of specific brand design language is eventually defined as an utterly case-specific issue and should therefore be considered individually in every specific brand situation. The differences in brands' heritages and cultures, industrial environments, as well as companies' business and product strategies may result in quite different approaches to the use of symbolic design cues in terms of their embodied semantic references that support strategic brand identity.

In this section, the strategic objectives and contents of B&O brand identity are internalized in order to find out the messages that are intended to transmit to the audience. So the question of concern is about what the strategic and inherent dimensions of B&O brand identity are. Because, in the next section, it will be search for when strategic brand decisions are made how they are represented in the product and how Bang & Olufsen systematically deploy a distinct product language to obtain product differentiation and a consistent brand identity through its product portfolio to support its strategy.

The questions of concerns are such as following. Who and what is Bang & Olufsen (the role and position of the brand, target customers, brand heritage, design

history, etc.)?. What is the strategic brand identity in other words the brand specific messages that Bang & Olufsen wishes the customer to believe hence what associations the brand (and also designer) wishes to evoke to be able design products as manifestations of brand identity. What are strategically defined central messages that differentiate the company from the competitors and that are intended to transmit to the target customers?

Toni Matti Karjalainen outlines the main thematic issues and practices of brand communication through design but does not handle managing the design function in a competitive way in order to respond to constant changes in market demands as they are relevant to strategic management of new product development. In this thesis, how the identity-threatening environmental changes induced the case company (Bang& Olufsen) to interrogate themselves on the features that are really central and distinctive to the organization and how they are externalized (mirrored, reflect) to product design and design language of the brand will be under specific security.

5.2.1. Bang & Olufsen's Role and Position within Product Category

Bang & Olufsen is a worldwide producer of high-quality electronics. It is a leading consumer electronics firm and is known throughout the world for a Danish company that produces distinctive range of products. The design of their products has always been an element upon which the company has based its competitive success and Bang & Olufsen's unique design philosophy has differentiated the company from its larger competitors

The company has either built or reinforced excellent competitive positions since 1925 through the competitors include European (notably absent are any significant U.S.) and Japanese based popular brands of consumer electronics, with its strong company culture, brand heritage, design-based brand strategy and ability to turn its national characteristics to global identity. The competitors since they have been mostly eliminated by intense Japanese competition during the 1980s, the main Japanese competitors are Sony, Sanyo, Hitachi, Toshiba, Yamaha, and Matsushita. The three main European competitors are (survivors of an ongoing consolidation process in Europe) Philips, Thomson CSF. The nature of consumer electronics products lends itself to mass production and mass distribution methods. Gaining economics of scale

and scope, while denying these to competitors, is a critical determinant of competitive advantage. However, a few niche companies, such as B&O, manages to survive despite lacking such economies. B&O products have a worldwide reputation for advanced design, ease of use and systems integration. In addition to excellent technical qualities, B&O products are designed to appear as ultramodern furniture pieces. B&O markets its products worldwide through its own sales subsidiaries and independent distributors. Products of Bang & Olufsen are sold all over the world in more than 60 countries. About 77% of B&O's sales are outside of Denmark. Although it has a respectable share of the Danish audio/video market, it has a relatively small share of each of its other geographic markets.

B&O has a small size relative to its large multinational competitors. Because of its small size, B&O does not compete across the board in consumer electronics, but rather followed a niche strategy. This emphasizes outstanding design, systems solutions, and rapid response to changing customer tastes. Despite heavy emphasis on research and development, it is becoming increasingly difficult to get new products to market in a timely manner. Since B&O needs to cover heavy investments in research and development with relatively modest sales volume, its products are always high-priced compared to the competition. Although in global terms Bang & Olufsen' s size is modest, the company has achieved world renown for its spectacular, idea-based, quality products within the fields of audio/video products and telephony. The company is a niche player in an industry dominated by major international electronics businesses. The company differentiates itself in terms of design, quality and innovation. 'For those who consider design and quality before price,' and to this end their products have unified design, engineering and user interaction to appeal to a smaller, 'premium' segment that demands unique design and special technical features.. The combination of innovative products and a dedicated distribution has positioned the company as a supplier of luxury goods rather than exclusively audio/video products. In an increasingly complex world Denmark's Bang & Olufsen has claimed a place for itself among the world's finest lifestyle companies, with powerful trademarks and simple designs which bring an inviting, simple look to most items of technology. As a company, B&O is driven by a vision: 'Courage to break new ground in creating experiences which surprise and become lasting memories.' B&O makes its living by knowing its customers and taking them seriously. It is a vital aspect of its branding not only to accumulate an in depth knowledge of the market and future technologies but also to select the right

technological solutions and apply them in a way that acknowledges the customer and the customer's needs. Many years of unswerving focus on quality, simplicity, intuitive use and classic design has helped B&O develop an unseen pact between its consumers and its products. B&O customers do more than simply buy a product. They buy everything the company stands for its values and vision. And they buy on the basis of quality, design, innovation and not least communication. The company sees all its communication as an extension of the values B&O stands for. That's why B&O maintains a constant dialogue with the outside world. B&O regards its customers as well-informed people who enjoy economic freedom but also a freedom of attitude to make an individual choice. Acquiring a B&O product is more than just buying a piece of audio equipment and technology; it is a matter of lifestyle and attitude. The products of B&O appeal to those who place a high value on lifestyle. Its customers are willing to pay a premium price for high-quality, user-friendly products featuring a futuristic design. B&O have a rather large global share of this narrow product market niche. The company can be affected by economic trends in the countries, where the Group's products are sold, as well as by new technological initiatives by the industry's main players. In order to comply with the commercial challenges, substantial investments are made by the company in product development and flexible production. Bang and Olufsen has a worldwide reputation for cutting-edge performance and design. Maintaining this reputation requires constant improvement in design methods and technologies. With elegant new products, B&O is certainly considered an innovator, yet has no in-house designers. Instead B&O depends on five outside professionals to do this work.

5.2.2. Brand Heritage of Bang & Olufsen

The heritage of the Bang & Olufsen needs to be discussed since it has a important role in the current strategic approach of Bang & Olufsen design. The Bang & Olufsen's design history is an aspect that has an important role in strategic communication with regard to visual recognition. They are always aware of cultural heritage and distinctive practices. Bang & Olufsen has a strong brand heritage and culture dates back to 1925 when the company was founded by Peter Bang and Svend Olufsen in Struer, Danmark. The Danish company Bang & Olufsen started a small

enterprise based on innovation in technology, mostly radio technology at that time, and the high-quality craftsmanship that became traditional in Danish culture. Ever since the company's founding in 1925, Bang & Olufsen has been dedicated to the highest standards of technology and design and very early on in the life of the company, significant technological innovations and use of unusual components established an excellent reputation for the company. Thus Peter Bang and Svend Olufsen created a corporate culture which, through their own attitudes, imbued the staff with self-confidence and initiative so that the creative urge and desire to grow continued. This corporate culture was sufficiently strong to inspire the work of generations. The culture and its visible results attracted talented people from across the world. The desire for continuous renewal and creativity and the awareness of the danger of complacency became so ingrained that, long after the deaths of the two founders, these qualities continued to generate new initiatives for Bang & Olufsen's development and growth.

For decades, a unique design philosophy has differentiated Bang & Olufsen from its larger competitors. The company represents a singular force in the consumer electronics industry and today it is the only European company that produces a complete range of integrated audio-video systems (WEB_1 2006). It is a leading consumer electronics firm that is known throughout the world for its distinctive range of consumer electronic products manufacturing a complete line of technologically sophisticated, sleekly designed, a unique range of televisions, music systems, loudspeakers, telephones, medico and multimedia products that excite all the senses and gives emotional experience in use.

- The slogans of the company through years were such as following; (Bang and Palshoj 2000)
- 'Danish Hallmark of Quality, The concepts of idea, quality and form' in 1932,
- 'Bang & Olufsen is for people who prefer quality to price and for people who prefer to set quality very high.' In 1968 the company bored the slogan: 'Bang & Olufsen, for those who discuss design and quality before price',
- 'Bang & Olufsen: we think differently' in 1972,
- 'The best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal' in 1993,

Bang & Olufsen is the only company left in Denmark which produces radio and television products. In the '30s the small community growing up around Bang & Olufsen was called Bang & Olufsen town. In the early 1960s there were as many as 27 of these electronics companies. Bang & Olufsen, Hede Nielsen (Arena), Linnet og Laursen (LL), Rasmus Rudholt (To-R) and Philips were large factories of those. However, by the 1970's Bang & Olufsen, Eltra and Arena were the only radio and television factories left. And by 1980 the only factory that remained was the one which Radio Magazine referred to in stating that it takes courage to set up a radio factory so far away from the capital - namely Bang & Olufsen of Struer. By the early '90s, Bang & Olufsen town comprised the whole town of Struer itself, and indeed the entire municipality of Struer. In referring to the company everybody in Struer agrees that 'there is no limit to what they can do!'. The company still attracts consumers who identify with its highprofile, high-tech and unique-looking products. (WEB_1 2006)

> 'The reason why Bang & Olufsen, as one of a few among more than 1000 radio factories in the western word, has survived as an independent company lies in the company's culture – and in the guilding principle behind the working lives of Peter Bang and Svend Olufsen: A never failing will to want to create the best and find new ways.', Jens Bang (Bang and Palshoj 2000).

The Bang & Olufsen history is a series of technological and design firsts that are the result of a company culture and philosophy rooted in the desire to create products that are out of the ordinary and challenge existing perceptions. Tradition of innovation in design continues since the company founded in 1925. From 1925, Bang and Olufsen has developed an enviable reputation for innovative, high-end audio and video products with a unique style. It all started when Peter Bang & Svend Olufsen sold their first Eliminator in 1925. Their idea of using the mains to provide a more convenient power source for a radio was revolutionary. Since then, whenever the company has introduced a new product it has caused a similar stir. Bang & Olufsen today remains true to its heritage. The main factories are still in Struer which creativity, inventiveness and technological breakthroughs are demonstrated since 1925. For over 70 years, Bang & Olufsen has been creating high quality, distinctive, home entertainment products. Bang & Olufsen over the years, has become famous for not only its stylish products but for their 'feel' and looks. The company is renowned for its attention to design and leading-edge technology, utilising both visual and technological design to create innovative

products that enrich the lives of users. The company continues to set themselves apart from other manufacturers by providing an alternative to run-of-the-mill 'black box' audio products while other brands focus on exotic techniques and components in their products. The company saw its natural target as the very high end, style-conscious segment of the global electronics market. The company seeks customers with money and good taste who own a nice home and car and are willing to spend money to achieve the same quality for their audio and video equipment, long before design-widescreen TVs became fashionable (WEB_1 2006).

> 'The reason for B&O's success in the 1970' and 1980s was the management's willingness to aim at and realise risk-filled, pioneering strategy as was shown by the 18 products conserved at the Museum of Modern Art in New York and the numerous national and international awards received'(Bang and Palshoj 2000).

The Museum of Modern Art (MoMA) in New York is known as one of the leading museum in the world. The museum has departments in related areas such as architecture and design along with art. The point is to document the design that was characteristic of the 20th century. In 1972, MoMA chosed seven Bang & Olufsen products all designed by Bang & Olufsens designer Jacob Jensen to be included in their permanent Design Collection as being striking examples of the museum's criteria for quality and historical importance; designs in fact, which had influenced the twentieth century (Figure 5.1).

> ' Jacob Jensen's works can be seen as … sophisticated extracts of 20th century design….Mr. Jensen has provided the design world with both revolutionary innovation and a quiet beauty in his now-familiar products.' Christian Holmsted Olesen, the curator at The Danish Museum of Art & Design (WEB _3 2006).

> 'In a thousand years, the 'Design Collection', we hope, will be an invaluable treasure composed of some of the most beautiful cultural examples of our time. Many of them rival in beauty and importance with the best of what has survived from earlier civilizations.' Arther Drexler, Former Director for MoMA (WEB_3 2006).
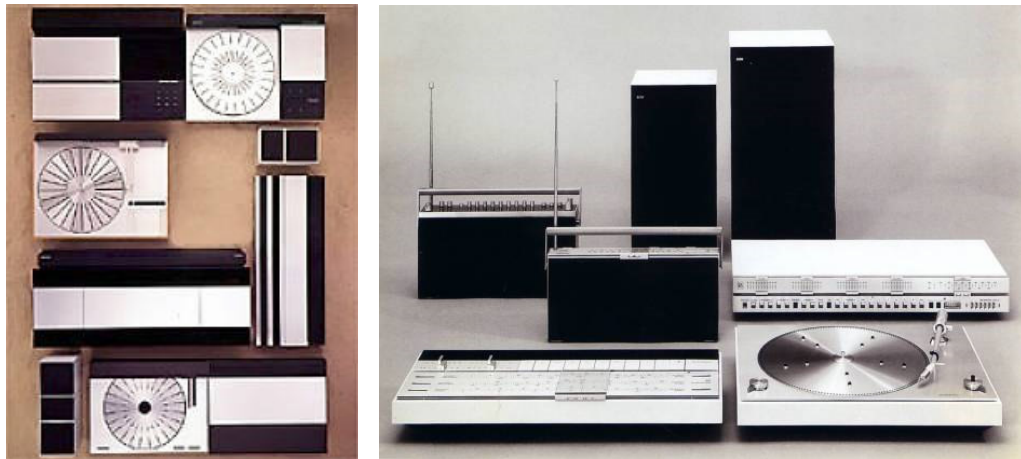
Figure 5. 1. The seven audio products of Bang & Olufsen in Design Collection of Museum of Modern Art, 1972. (Source: WEB_3 2006)

5.2.3. Seven Corporate Identity Components of Bang & Olufsen

The Seven Corporate Identity Components (CIC) originated from Bang & Olufsen's re-examination of itself in 1971. They set out the company's mission statement and include aims and objectives which have remained Bang & Olufsen's philosophy for the past thirty years. The Seven Corporate Identity Components (The Seven CIC) formulated in 1971 was an attempt to respond to such questions as 'Who are we?', 'What values do we embody?' demanded a clarification of the company's identity and self-perception. The Seven CIC was not to lay a new foundation for design and communication strategies, but simply to interpret 'existing, but unexpressed attitudes' in order to facilitate coordination among designers, advertisers and dealers and provide a reference point for product development as well as market communication and sales (Bang and Palshoj 2000). Consequently, the core design principles guiding design and communication policies codified in the Seven Corporate Identity Components were: Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Inventiveness and Selectivity (Figure 5.2). These seven components are originated from the values expressed in previous designs. Although the design was basically new, it became evident that the values were firmly rooted in the company. The Seven CIC became an expression of the company's self-perception for many years to come that these values are expressed in the design of future products.

Figure 5. 2. The poster of Seven Corporate Identity Components (The Seven CIC) of Bang & Olufsen.
(Source: WEB_4 2006)

5.2.3.1. Identity Threats at Bang & Olufsen in between 1972- 1998

The environmental changes induce managers to interrogate themselves on the features that are really central and distinctive to the organizations for three times in between 1972 and 1998 at Bang & Olufsen (Table 5.3, Table 5.4). The questions as what the organization really about, what makes them different from (or similar to) other organizations and how the organization is perceived and represented externally, how the organization wants to be perceived and represented externally and internally lead the company the revision of formal identity claims. B&O's first attempt to clarify core elements of their identity in order to promote a unitary and consistent image dates back to 1972 and the revision of formal identity claims have occurred at B&O along the three periods (Bang and Palshoj 2000).

- THE SEVEN CIC (1972): The Seven Corporate Identity Components
- BREAK POINT '93: The New Vision
- BANG & OLUFSEN UNITED (1998): Fundamental Values For Future Growth

Table 5. 3. The revision of identity claims at Bang & Olufsen in between 1972- 1998

Revision of Identity Claims at Bang & Olufsen in between 1972-1998		
Seven Corporate Identity Components: The Seven CIC (1972)	Break-Point (1993) Program	B & O United (1998) Program
Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Individuality, Inventiveness	The best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal.	- Excellence, - Synthesis, - Poetry.
Corporate slogans: - 1932 , 'Danish Hallmark of Quality, The concepts of idea, quality and form. For people who prefer quality to price, for people who prefer to set quality very high', - 1960's, 'For those who discuss taste and quality before price' - 1972, 'Bang & Olufsen: we think differently', - 1998, 'A Life Less Ordinary'.		

The way managers at B&O responded to identity-threatening environmental changes in different periods of time revealed similar patterns of behavior. The revised claims are never presented as radically new, but rather as a rediscovery of values and attitudes that were already part of the collective heritage of the organization to identify and describe the company's goals and personality. While re-evaluating and formalizing what really makes the company (and hence its products) different from the competitors, the focus is largely on product design and development practices and on their visible outcome on product features and the heritage of the company. The company has always taken references from their heritage and reflected in new product development and communication (Bang and Palshoj 2000).

'The task was not to lay a new foundation, but to formulate values and concepts which were already part of Bang & Olufsen's identity (...) The definitions aimed at interpreting existing, but unexpressed attitudes.. The Seven CIC grew out of the design philosophy that emerged during the sixties.' for 1972's strategic identity management program (Bang & Palshoj 2000).

'B&O has a strong and desirable identity which has been created over a number of years… Bang & Olufsen have a reputation for creating audio-visual products with an appealing aesthetic design…never lost touch with its heritage rooted in the Bauhaus-inspired combinations between design, aesthetics and technology. Values must be found within the company, not defined (...) Our values cannot be discussed: they are there where we have found them.' It is equally important that the company maintains its basic identity and is aware of its heritage amid all these changes....B&O has a strong and desirable identity which has been created over a number

of years…The identity is what we are. What we come from. Our heritage….It is just as important that all our communication activities express the same identity. Because, a company can have only one identity…. We know that a lot of people have strong feelings about B&O, and that they have great expectations of our products. We must always meet these expectations and never accept a compromise as to 'the best of both worlds', neither in our research and development, nor in our communication activities.' for 1993's strategic identity management program (Bang and Palshoj 2000).

'We have a history, we are more than a name…There is only one Bang & Olufsen. We are not a 'rule company'.. Personally, I believe much more in common values than in rules' the CEO of Bang & Olufsen for 1998's strategic identity management program (Bang and Palshoj 2000).

At the heart of this concerted effort is an explicit attempt to re-focus the organization on what has constituted the essence of its identity and the distinctiveness of its products and its spirit. The products have always been central to the culture of the organization. Furthermore, when comparing B&O with its competitors, the originality of the company's products makes them one of the most evident elements of differentiation. In this respect, identity-related reflections converge around design and development practices of the organizational culture which members considered as distinctive traits of their organization. The questions of concern are always about what the essential message is by which B&O is recognized and differentiated from competitors and in which manner the product design is used to communicate strategic brand or segment identity? (Bang and Palshoj 2000).

'Our products are the strongest means of communication, and as any other kind of communication. They should reflect our identity.... The identity of B&O is closely connected with its products which are and always have been the company's strongest means of communication…We are aware of the product design's importance for our identity. People recognize our products wherever displayed because of the products' characteristic features, such as the dynamic mechanics, our choice of materials, their finish and their user-friendly operation.', for 1993's strategic identity management program (Bang and Palshoj 2000)

'Bang & Olufsen to create products that are perceived as unique by most people which give the company a differentiation advantage…..Bang & Olufsen over the years, has become famous for not only its stylish products but for their 'feel' and looks.', CEO of Bang & Olufsen (WEB_1 2006).

Table 5. 4. The process of strategic decision making practices of B&O and transmitting strategic intentions in new product development.

REVISION OF IDENTITY CLAIMS AT BANG & OLUFSEN IN BETWEEN 1972-1998

• What does the brand stand for? 'Who are we?', 'What values do we embody?'

ENVIRONMENTAL IDENTITY THREATS

Disrupting external changes

Discrepant external claims

' How is the organisation perceived and represented externally? '

MAKING SENSE OF IDENTITY
'What is this organisation *really* about?'

' What makes us different (or similar to) from other organisations?'.

REVISED IDENTITY CLAIMS

' How do we want this organisation to be perceived and represented externally and internally? '

GIVING SENSE OF IDENTITY
' This is what this organisation is *really* about? '

' How can we maintain a collective sense of self amid changes? '

REVISED IDENTITY CLAIMS

STRATEGIC DECISION-MAKING PRACTICES

BUSINESS STRATEGY

Internal Brand identity

Investigating Cultural Heritage — Mirroring External Perceptions

Selection

CULTURE — IDENTITY — IMAGE

Raising awarness of Core Values — Projecting Core Values to External Stakeholders

The Seven CIC (1972)	Break-Point (1993)	B & O United(1998)
Core values: Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Individuality, Inventiveness	Vision: 'The best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal.'	Core values: Excellence, Synthesis, Poetry.

• How does product design support brand's identity?
'Does the product make a difference?','Is it new and exciting? Will it stand the test of time?'
- 'FORM FOLLOWS FEELINGS' bringing curiosity and excitement into Bauhaus tradition
- Modernism's Abstract and Reductionist Idiom in use as in apperance.
- consumer-oriented MAYA principle (distinctive, memorable, and evocative designs)
: "Most Advanced Yet Acceptable ", "Different but not Strange" - DESIGNING NON-FAMILIAR PRODUCTS

- enriching " the emotional side of the product ", accomplishing emotional experience in use
' MAGIC OPEN ' , Over all gelstalt appearance change in use
- changing all established ideas about how a receiver should look
FLOATING FORMS IN HORIZANTAL DESIGN PROFILE, PLAIN BLANK SURFACES, DEPRESSED KNOBS TRULY FLUSH WITH SURFACE, OPERATION FROM THE TOP

transforming strategic intentions to product design in new product development

PRODUCT STRATEGY

External Brand image

5.2.3.1.1. 1972 Identity Management Program in B&O; the Seven CIC

In 1972, CEO Ebbe Mansted's decision to stimulate reflections on core and distinctive features of the company was urged by the increasing competition of Japanese producers, who had entered the European markets with low-price, high-volume strategy, and by rising dealers' pressures to be 'more like the Japanese' to alter product design to conform to Japanese spreading standards (modular squared shapes, traditional knobs, hi-fi performance, etc.).The rise of Japanese competitors raised questions about the

sustainability of an expensive niche strategy, expressed in the corporate motto: 'Bang & Olufsen: for those who discuss design and quality before price' (Bang and Palshoj 2000). However, B&O managers doubted that imitating Japanese competitors would have been good for the company, if possible at all. Furthermore, they felt that conformity to external expectations would have meant the loss of B&O unique design philosophy. Nevertheless, in order to address external changes and expectations, they felt the need to re-evaluate and formalize what really made the company (and hence its products) different from the Japanese.

> 'External recognition reinforces confidence in the corporate design philosophy. Dealers were asking us to be more like the Japanese…Japanese products are used as a negative term of comparison. Identity is defined in terms of design principles and practices. The task was not to lay a new foundation, but to formulate values that were already part of Bang & Olufsen's identity and then select the strongest elements for the company's international future. The definitions aimed at interpreting existing, but unexpressed attitudes. Selected images of an organizational past – the Bauhaus heritage, the legacy of the founders, milestones products, and excerpts from old advertising campaigns – were used to give new sense to the organizational present and substantiate future aspirations….Values are defined primarily in terms of the way products are traditionafly designed, the design philosophy of the company... The Seven CIC grew out of the design philosophy that emerged during the sixties' (Bang and Palshoj 2000).

The Seven CIC was meant to identify and describe 'the company's goals and personality'. Their starting point, however, was the set of principles that characterized product design at B&O expressed as Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Individuality and Inventiveness. In the eye of the group members, these set of features had helped to differentiate the company and B&O products from the rest of the main-stream audio-video producers. Although initially intended for communication policy purpose, these claims soon came to be considered the basic components of B&O's identity.

> 'Today you would call [The Seven CIC] an attempt to make one coherent brand. Each single component was used in advertisements, brochures, at exhibitions and in shop design, such that the Seven CIC formed an overall and coherent picture of the company's objective, goal and special character…. The definitive new graphic style (…) together with the product design, communicated the company's new identity (…) The Seven CIC] were drummed into our heads.We heard about it and we were tested on it' (Bang and Palshoj 2000).

Conscious and consistent efforts to communicate the essence of the product were considered as important as technical quality in differentiating B&O in the marketplace. The perceived uniqueness of the company was reflected in the new slogan 'We think differently' and expressed in detail in a little manual and a poster, later to become a corporate icon, which explained in detail the practical implications of the Seven CIC (Bang and Palshoj 2000). In this respect, the Seven CIC was meant to influence external perceptions mainly through their impact on design and communication, following the belief that the product is B&O's primary means of communication.

> 'In order to diffuse the Seven CIC, we printed what later came to be known as The Little Red Book… Identity is illustrated in terms of design principles and established practices...Identity is diffused in the organization through the manual, posters, internal seminars, etc.' (Bang and Palshoj 2000)

In early 1972, the group interpreted the task as a 'reflection on what we were doing', and found in product design, the most visible element of differentiation between B&O and its competitors, a natural starting point for their investigation. A review of recently developed products helped members surface the principles that had guided design choices as chief-designer Jacob Jensen retrospectively observed:

> 'B&O was about simplicity and understandable products. They had no buttons, but were flat and horizontal opposed to the Japanese verticalism. The product had to enrich the experience by having a surprising feature. Products should be self-explanatory and communicate by themselves' Jacob Jensen Chief Designerof B&O, annual reports (Bang and Palshoj 2000).

In 1972, the decision to resist external pressures found support in widespread external recognition that was manifested in design awards and the praise of the critics. A tangible sign came right in 1972, when the Museum of Modern Art in New York acquired seven products for its permanent collection.

All the Seven CIC, were described in terms of design and communication practices. For instance, Audiovisuality referred explicitly to how products should be designed in order to be self-explanatory to the user (Bang and Palshoj 2000). Similarly, Authenticity was illustrated by the decision to test the quality of sound and image

reproduction on trained panels of viewers and listeners rather than on sophisticated technological measurement tool (Bang and Palshoj 2000). Simplicity and essentiality was perceived as having inspired milestones like audio system Beomaster (a radio receiver and amplifier launched in 1976) and one-thumb integrated remote control Beolink 1000 that was connecting all the video and audio sources in the house (WEB_4 2006). One of the breakthroughs during this decade was Beomaster 1900 that design and operation were differed the product dramatically from other contemporary products (WEB_4 2006). The receiver won the ID Award in 1976 and was acquired by museums across the world almost before it had reached full production.

> 'The fact that Beomaster 1900 became Bang & Olufsen's best selling product over the next 20 years clearly demonstrated that the time had finally come to kill off the hi-fi format which originated with American FM stations in the 1950s. Once Bang & Olufsen had accepted that High-Fidelity was dead, it was decided to market the company's products as an alternative to the technically dominated Japanese brands… The essence of the product was considered as important as technical quality in differentiating B&O in the marketplace (…). For the rest of the century, these significant innovations, i.e. movement and highly sophisticated mode of operation, remained a hallmark of B&O's products. More than anything else, they differentiated the company from other players in the market' (Bang and Palshoj 2000).

The product development and communication followed 'The Seven CIC' throughout the 1970s. Over time members' understandings seemed to drift as expressed in product and market strategies in annual reports. In the mid 1980s designers gradually lost touch with values and needs of the customers. Product developers designed increasingly sophisticated and expensive products. The communication was concentrated on luxury symbols to justify the high price of the products and B&O began to be perceived as an expensive luxury brand. The subsidiaries repositioned products as luxury objects and status symbols.

> 'For a time, the company tried to create a survival niche by turning B&O into a Rolls-Royce type company which focused only on exclusivity. Whilst concentrating on outer prestige, the product's idea content and qualities were forgotten' (Bang and Palshoj 2000).

With the collapse of the yuppie culture and the sudden economic decline in the late 1980s, luxury symbols lost their value and the potential market for these products contracted. A sudden decline in the sales volume indicated that changes in the product

line and the communication policies were needed in order to reconnect with the market. In 1990, however, economic recession and the end of the yuppie culture, which had spurred sales of B&O products during the '80s, abruptly halted the tacit drift towards luxury and led the company into severe financial trouble. The sudden decline in sales combined with research revealing that a large number of retailers portrayed B&O as a producer of beautiful boxes with average technical quality brought managers to conclude that changes in the product line and communication policies required a convergence around a new understanding of what Bang & Olufsen was about. What followed was a substantial revision of the core values of the company, aimed at re-orienting attitudes and practices in the headquarters and among the subsidiaries and the dealers, which went under the name of Break Point '93 (Bang and Palshoj 2000).

5.2.3.1.2. 1993 Identity Management Program in Bang &Olufsen; Break Point' 93, "The New Vision"

In 1993, new CEO Anders Knutsen initiated a strategic change program aimed at redefining the identity of the company in order to regain consistency with market expectations and to ensure that actions at every level supported the corporate image and brand. Europe still tended to emphasize merely the aesthetic aspects of the products, reinforcing the idea, diffused among some customers and reflected in press articles that 'inside, they are all the same', and 'what you really pay for is just a beautiful box'. An article entitled 'A pretty face is not enough' was a further symptom of the widespread tendency to downplay the true quality of the products and the distinctive competencies behind (Bang and Palshoj 2000). Although B&O began to be perceived as an expensive luxury brand, marketing simpler and less expensive products under the same name might have blurred the image of the company and its products. The new models needed to share the same basic elements and distinctive features of Bang & Olufsen products and the same consistency had to be kept in corporate communication without harming the exclusive corporate image. B&O managers agreed that in the long run the impact of the Seven CIC was significant on both employees and dealers across the world. As a manager recalled:

'There was a general acceptance of the fact that the Seven CIC expressed a vision and provided an operational management tool which gave individual efforts a meaning and a purpose' (Bang and Palshoj 2000).

While not denying the importance of 'The Seven CIC', however, the company purposefully tried 'to go deeper' into the 'essence', the 'spirit' of the company to produce a statement that expressed more clearly what was unique about the company and its people.

'We knew we were different from Pioneer, from Sony. We knew we were something else. We started wondering what was so special about us, about the way we do things, about our products, which made us different from them' (Bang and Palshoj 2000).

'Every single word was subject to an obsessive search and long discussions. We started with B&O, the artist in audio-video; our attention was focused of the artistic-emotional aspects, and we were leaving the technological dimension to a definition of our field of activity (audio-video). But this was not enough: it was necessary to give more emphasis to the technological aspects. (...) What we came out with in the end was a statement of 'what B&O is.' We chose it because it is true and because none else can say the same.' (Bang and Palshoj 2000).

An international field survey indicated that Bang & Olufsen was widely regarded as a company that creates harmony between aesthetics and technology. Meanwhile a project team was assigned the task of reflecting upon and defining the company's 'brand essence'. It came out with what would later be called the New Vision, the formula used to convey the new strategic intent and the essence of the brand: 'the best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal.' The new motto highlighted the historical foundation of the company's competitive advantage. It clarified and projected the core values that were meaningful to the customers and then used them as a point of reference for strategic change. The new 'vision' which was presented and promoted as the synthesis of B&O' s identity was not only a result of the past, but also a guiding principle for future product design, advertising, communication, etc. 'The New Vision' became the formula used to convey the essence of the organizational identity (Bang and Palshoj 2000) .

'Large scale production of radio receivers requires a great deal - first and foremost, of course, a factory, the right workforce, the right colleagues, the best materials, etc. Yet this is not enough. What is also needed is what one could call: enterprising creativity a never-failing will to create only the best, persistently to find new ways, improvements - everything which enhances the name's reputation and creates respect for the radio receivers supplied to the world under the Bang & Olufsen brand name. 'the best of the best' both in respect of the interior and exterior.' (Bang and Palshoj 2000).

B&O' s communication efforts were first addressed to the international network of retailers that affected in a substantial way how products were perceived by the customers. In 1994 more than 600 dealers visited the headquarters participating in training courses, which demonstrated new products and explained the selection and rejection of functions in the development of B&O' s product concepts in terms of core values and competencies, aimed at aligning dealers' perceptions with the intention of the new top managers. Seminars illustrated attributes of the desired image (using B&O's terminology, the 'brand essence' expressed in the New Vision) in terms of product features, design choices and technological competencies. The importance of a 'loyal support to a uniform international message.' was repeatedly stressed in the training seminars (Bang and Palshoj 2000).

Communication campaigns were emphasizing once again key aspects of the underlying philosophy such as individuality, domesticity and essentiality. Development efforts were refocused around the capabilities that underpinned the core attributes of the brand and the values were defined in terms of distinctive competencies. The company condensed their understandings about the features that made the company unique into an identity statement and synthesized the distinctive competencies (eg., sound-image integration, mechanical micro-movements, choice of materials, human-system interface and design) that served as the foundation for the new strategy (Bang and Palshoj 2000). The explicit aim was to publicly emphasize the technological competencies (quality of sound reproduction, reliability, high performance, advanced research, etc.) of the company and the emotional side of the products. For instance, the concept of 'Emotional Appeal' was linked to distinctive features of the products such as the silent sliding doors of CD player B&O 2500 that rested on distinctive capabilities (design and mechanical micro-movements) (WEB_4 2006).

**5.2.3.1.3. 1998 Identity Management Program in Bang & Olufsen; B& O United',
     Fundamental Values for Future Growth**

In 1996, the high growth rates of the early 90's began to stagnate. The competitors enhance the design content of their products and the open threat of imitation by competitors like Thomson and Sony had been occurred. The unique position of the company was threatened. An occasional restyling of one of its products by well-known designer Philippe Starcke led low-cost producer Thomson to enthusiastically declare that they would soon compete in the same league with B&O (Bang and Palshoj 2000). The managers felt the need to formulate new plans to counter imitative attempts and support growth on a global scale. And the leading international brand experts saw B&O as corresponding with 'Balmain, Chateau Margoux, Dior, Mercedes, etc.'. The company was still associated B&O to other international luxury labels regardless of recent efforts on the company's side. 'Exclusive' indicated that the company's products were intended only for the specially selected, as opposed to the inclusive and accommodating image the company wanted to have. These perceptions were based in a mistaken understanding of the company's past, and did not reflect its desired future according to the company. In 1998, a new strategic plan was meant to support global growth through strengthening of the brand, the creation of a new retail concept and the introduction of new product lines and accessories (Bang and Palshoj 2000). As part of the new strategy, the company focused on 'restating and debating the fundamental values' of the company and aimed at further reviewing and clarifying internally and externally the identity of the company. These values were meant 'to provide the foundation for strategic change.' This further change effort was labeled 'Bang & Olufsen United' by the company. A new set of identity claims were Excellence, Synthesis and Poetry which were defined as the three fundamental values and were expected to support B&O future strategy. Also, a change in market communication followed as the company attempted to indirectly project its revised identity to its customers: an international campaign, under the slogan 'A Life Less Ordinary' (Bang and Palshoj 2000).

The managers discussed the implications of the internationalization process. Volvo (the Swedish carmaker) was used as an example of a company that lost what

once was a distinct Swedish identity associated with safety, family-values and soundness in its eagerness to become international. By contrast, reflections on the cultural heritage of the company brought top managers to see the road to market leadership in terms of a distinct combination of design, emotion and technology, associated with the Bauhaus tradition. Although, the supported aggressive growth in the international marketplace, top managers repeated several times that B&O was not and should not become an international company. As a member of the top management team said:

> 'B&O is not an international company. It is and it will always be a Danish and Scandinavian company. We must never change our identity into an international identity' (Bang and Palshoj 2000).

One of methodological principles of the company was that fundamental values could not be 'constructed, claimed or copied' but should be 'found, discovered and revealed'. The starting point was again an investigation of the far and recent history of B&O. They explicitly positioned the company's heritage in opposition to what was described as the 'drift into an international look-a-like luxury brand', which occurred in the mid eighties (Bang and Palshoj 2000) . Team members observed how during the 80's the company had 'lost touch with its heritage'. The drift towards 'exclusivity' was seen as a move away from the company's heritage embedded, according to the group, in the Bauhaus tradition reflected in the motto 'better products for a better world'. Instances of the Bauhaus tradition were explicitly traced in early products, like bakelite cabinet radio Beolit 39, and in the sober elegance of the first Bauhaus-inspired trademark, readopted in 1994 as part of the Break Point program. The company identified a fundamental challenge in revitalizing B&O' s heritage (rooted in the Bauhaus-inspired combinations between design, aesthetics and technology) and observed that the Bauhaus tradition was still alive in B&O as a tradition that sought to combine ultimate efforts of technology with the best artistic minds of its time, driven by the vision: 'If you create a better product you create a better world'. Reference to the Bauhaus tradition brought managers to associate excellence to 'simplicity and modesty', the company's ability to make choices on the basis of patience and persistence, honesty and decency (Bang and Palshoj 2000). Excellence was contrasted with the image of 'exclusivity' that was equated with snobbery, opulence, lavishness and fashion. In the

words of a manager: 'Aluminum is Excellence, Gold is Exclusive' (Bang and Palshoj 2000). 'Excellence' was compared with 'the design of an egg or a nail; the excellent is lean and functional, it's about making the right choices at the right time, patience and persistence' (Bang and Palshoj 2000). The second value, 'Synthesis' was explicitly related to the working practices at B&O. Synthesis was seen as an expression of the ways in which the people of B&O go back and forth between different ways of operating until they reach a point beyond compromise that point is synthesis. 'Synthesis' was associated innovation and the ability to realize ideas that initially seemed unachievable (Bang and Palshoj 2000). The process of 'synthesis' was driven by debate, persistence and insistence as opposed to 'compromise' which was defined as 'the sexless conciliation achieved by mutual concessions (Bang and Palshoj 2000). The third value of poetry emphasized the personal excitement and emotion that customers (and employees) experienced in relation to B&O' s products and design (Bang and Palshoj 2000). In the fundamental values report, 'text' was used as 'a metaphor for the dialogue between the company and the customer.' As stated in a internal report of the task force:

> 'The manifest expression of the dialogue is the product, which, metaphorically speaking, has its ideal model in literary texts, e.g. the poem, which facilitates the continuing dialogue between the writer and the reader regarding the poet's vision' (WEB_1 2006).

In the video of company's official web site, the value of 'Poetry' was defined as the difference between the products of B&O and the products of SONY and Philips. A manager explicitly referred poetry to the way products were designed as he observed how 'poetry is the surprising silent opening of the doors and the unfolding of the product as a flower' (WEB_1 2006).

5.2.4. Design Philosophy of Bang & Olufsen

The most important slogan of Bang & Olufsen as the essence of company that differentiates it from the competitors is 'best of both: 'Bang & Olufsen, the unique combination of technological excellence and emotional appeal' (Bang and Palshoj 2000). This design focus is reflected not only in their products, but also their strategy and the way their values are expressed through products. The application of technology

(unique patented B&O technology: competitive advantage) within the Bang & Olufsen (aesthetically pleasing, clean, sculpted designs: competitive advantage) product range always based upon the experience that it can accomplish for the user (creating a unique user experience, personal feel, emotional experience: competitive advantage) so the core competence of Bang & Olufsen's products are in three areas ; the product's aesthetic appearance, styling ('aesthetics', is referred to as the formal-aesthetical function of products), the product's functional and innovative performance (practical functions; operation and technology, performance, ease of use, ease of understanding), the product's experience (semantic -sign- functions; emotional appeal and feel in use, its meaning such as affection for the product, the product's importance for the user's self identity and the company's brand identity); that three of those are uniquely combined in harmony and all have an individual innovative character (Table 5.5).

'Bang & Olufsen's approach to product development focuses on both tradition and constant renewal, where we never forget that technology should work for people, not the other way around. We utilise only tried and tested technologies, innovatively integrated into products that offer viewing and listening experiences beyond expectations, that are a pleasure to use, and that invite you to approach, touch and look at, even when it is turned off' (WEB_4 2006).

'Today, Jacob Jensen Design works according to the same methods as those used since its establishment under the leadership (…) the components applied every time are: perspective, creativity, innovation, understanding and basically an almost infinite reworking. This intense work takes place in an atmosphere of creative dialogue which covers the technical as well as the psychological aspects. During this process the design manifests itself so evidently that the user recognizes the idea and function of the creation on sight.' the authors say (WEB_2 2006).

The company vision is development of technology and carefully regard to all aspects (shape, material, mechanical movements etc.) that contribute to customer's sensory and emotional experiences; making well designed aesthetically pleasing product that make advanced technology easy to live with and accomplish emotional experience in use. The ideas behind the company's design philosophy are for years are 'Does the product make a difference? Is it new and exciting? Will it stand the test of time?' (WEB_4 2006).

'Uniquely designing products almost for 80 years (…).Many manufacturers seem to focus on making products that are fashionable, which they know will sell well. Thus, they end up copying each other, making safe, marketable look-alikes destined to give great economic returns. The result is products that are similar in ideas, functions and appearance. Products lack individual characteristics. Our approach to product development starts by asking questions about the product's functions and features: what should a particular product be able to do? How should it function at home? What quality and reliability levels should I have? What about technical service and repairs? Answers to these and many other questions form the development basis for every Bang & Olufsen product. We take pride in pooling the resources and insights of individuals in order to create products which express values and ideas that are worthy of us, and the way we want to live. When these ideas are authentic, other individuals will respond to them, appreciating the thoughts and work behind our products and the qualities they offer. To us, this process is more than money changing hands. We accept that ours is not a mass market. For example, we have to say goodbye to those who prefer to see their technology 'on display'. To those who are willing to manipulate five or six buttons to get music, when one is enough. To those who are happy with anonymous stereotypes. But then our goal has never been to please everyone.' from Bang & Olufsen hi-fi brochure, 1981.

Table 5. 5. The general contents of design philosophy in Bang & Olufsen.

DESIGN PHILOSOPHY OF BANG & OLUFSEN
designing aestheticly pleasing products that make advanced technology easy to live with and accomplish emotional experience in use.
Designing non-familiar (extra-ordinary) products. The ideas behind the company's design philosophy are:
'Does the product make a difference? Is it new and exciting? Will it stand the test of time?'= UNIQUE DESIGNS
  The Aesthetic Value of Products
- Bauhaus Movement (simple,light, harmonious, compact designs in cool, slick, uncluttered, modern appearance)
   Minimalist "Less is More", Modernist "Form follows Function".
- Raymond Loewy's consumer-oriented MAYA principle (distinctive, memorable, and evocative designs):
   "Most Advanced Yet Acceptable ". "Different but not Strange"
- Danish neo-classicism (characteristic qualities discerned in shape and colour)
- Scandinavian style (lightness, cleanness and elegance)
- Classic Design (international recognition for their original, simple & classic design)

  The Practical Value of Products
- modernism's abstract and reductionist idiom in use (as in apperance).
- Function creates design and design creates function. A tight, pure expression with the functionalistic aim of stripping
   away all that is unnecessary and leaving the user with a clear impression of what the product can and should do'
   making technically complex products into something that is easy to understand and use.
   (simple and well considered operation, essential, functional user-friendly, easy to live with)
- Scandinavian conditions: durable, practical, simple and long term products that reflect function
- Design driven innovation strategy
- a unique combination of high technology and intuitive operation. revolutionary innovation:
   (Inventiveness, outstanding technical Performance, durability)
- Core competences: Sound (ICEpower technology, natural sound performance), Steamless System Integration,
User interaction, Mechanics, Materials and Surface Finishes (anodised aluminium)
  The Emotional Value of Products
- Form follows function, compared to B&O, which is more: Form follows feelings
- Forming the Immaterial , 'We do not design products - we create communication', Courage to constantly question the
   orginary in search of suprising, long lasting experience (creating a unique user experience, personal feel.)

Bang & Olufsen has international recognition for their unique designs, original, simple & classic form language. The intention of the company is creating truly design icons both revolutionary innovation and a quiet beauty in their now-familiar products where mostly aesthetic factors have less importance in the case of strictly functional products. In the web site of B&O, the definition of design is such as the following.

'For Bang & Olufsen, design is far more than mere styling of existing products; rather it is the expression of an idea, the concept made conscious. In this sense, design unites aesthetics and function, creating unique, highly differentiated products that are not limited by the time of their creation or the space in which they are placed' Bang & Olufsen's website (WEB_4 2006).

While designing products the company's designers aesthetic intentions are emphasizing the temporally enduring qualities (long lasting products) that are created by a well considered aesthetic solution since the goal of 'prolonged agreeableness' is different from that of the immediate user preferences. In other words, it is important that the intention of designing a product with an aesthetic expression that will not loose its popularity at the first shift of trends and wanting to make something that will not leave the user to discard and replace before that is really necessary. For an artifact which is cheap, lasts short, and is highly symbolic in value, one should perhaps base aesthetic aspects on the immediate user preferences that is called in literature the market driven form. In 'Eco design' classic design is listed as one of the most important factors prolonging the expected lifetime of a given product (Herbert 1997). This implies that an expression (product's aesthetic expression) which is less related to immediate user preferences could retain its validity and popularity over a longer period of time. Bang & Olufsen have a reputation for creating audio-visual products with an appealing aesthetic design and the design of each and every model must therefore meet Bang & Olufsen´s high standard for aesthetic appeal.

'It is not essential to me that people react positively to my designs. However, it is important for me to extend the limits a bit further than anyone think is possible. My philosophy - isn´t why, but why not!' David Lewis, designer of B&O. (Bang and Palshoj 2000)

'As simple as possible in design (...) and as rare and truly beautiful (not only design-y) things come out, people usually know it by instinct. Because instinct is a simple mechanism and that's why is attracted and raised by simple things (...) monumental beauty veiled in the basic shapes of clear and straightforward thinking (...) We must design aesthetically pleasing products that are striking to look at, catch the eye with clean, sculpted designs, compact form factors by creating a total aesthetic experience, where most companies' products are generic-looking boxes (…). Intention to let our industrial objects becomes aesthetic poetry.' Gathered from various interviews with the designers take place in web sources (WEB_1 2006, WEB_2 2006, WEB_3 2006, WEB_4 2006, WEB_5 2006)

For Bang & Olufsen, design is a language; a medium through which is communicated the company's values and vision about technology and concepts B&O has produced ranges of products that were striking to look at, functional and easy to use which were manufactured to the highest standards and excite all the senses (WEB_ 4 2006). In short, the products of the company can be seen, heard and felt which has always been the case with the company, ever since its founding, which all add up to long-term reliability. Bang & Olufsen's products are known for their, outstanding performance, durability, classic design and originality. The company is manufacturing for design rather than design for manufacturing. For the company, innovation challenges are to create a unique balance between, innovation (future) and tradition (past), functionality and aesthetics (opt out), breakthrough and market speed (uptake) (WEB_ 4 2006).

There is an influence of Scandinavian style on design of the company's products but it is not necessarily about finding forms that would (in some sense) be more Scandinavian than others. The tradition of creating products for Scandinavian conditions is emphasized putting priority on durable, practical, simple and long term products that reflect function, lightness, cleanness and elegance (WEB_ 4 2006).

5.2.4.1. The Aesthetic Value of Products:

In the context of design history the form language of B&O in overall (gestalt) appearance (original, slick, modern design, smooth, uncluttered appearance) can be characterized as merging of two main streams in 20th century design; on the one hand the idealistic European Bauhaus tradition, with its minimalist 'Less is More' and its modernist 'Form follows Function', on the other hand, the American design icon

Raymond Loewy's consumer-oriented MAYA principle: 'Most Advanced Yet Acceptable', 'Different but not Strange'(Loewy 2003).

American industrial designer Raymond Loewy (lived in between 1893 - 1986) was a master of what marketing specialists now understand as 'branding' the creation of distinctive, memorable, and evocative designs. Loewy summarizes his design philosophy, the challenging search for balance in designing or choosing technology, with the acronym MAYA 'most advanced, yet acceptable' where a proposal is perfect balanced between being easy to appreciate and yet novel and effective with the proliferation of clean, functional, and dynamic products (Loewy 2003). In design aesthetics, Loewy's principle 'Different but not Strange' comes close to the notions of effects of typicality and novelty on aesthetic preference and principles of pleasure in design. It is to some extent possible to increase the novelty of a design while preserving its typicality where the people tend to prefer products with an optimal combination of both aspects. The customers prefer novel designs as long as the novelty does not affect typicality or phrased differently, they prefer typicality given that this is not to the detriment of novelty.

The inspiration of Bauhaus Functionalism and Aesthetics in design of products is a result of company's aim at designing pure, functional, simple, light, harmonious compact products in cool, slick, uncluttered, modern appearance. Bang & Olufsen's products are aiming to be engineered not only for performance but to create a total aesthetic experience. Bang and Olufsen products are guaranteed to catch the eye with clean, sculpted designs, compact form factors where most companies' products are generic-looking boxes.

For Bang & Olufsen, the design of each and every model must meet Bang & Olufsen´s high standard for aesthetic appeal (WEB_4 2006). Therefore, Bang & Olufsen have a reputation for creating audio-visual products with an appealing aesthetic design which is not just the result of a aesthetic design capability, in fact their products aesthetic design are made by independent designers.

5.2.4.2. The Practical Value of Products

The designers of B&O always aim to create a strong synthesis between a product and the use of that product. The company continues its long legacy of designing and introducing innovative consumer electronics products that are honest and uncomplicated in their communication with end users and make advanced technology easy to live with. In the man-machine relationship with the apparatus, Bang & Olufsen aims at turn control of technology into an experience for the customers. With simple and well-considered, logical and straightforward operation it is imbed by the company which provides uncomplicated access to the many technological features offered by the product in order to make technically complex products into something that is easy to understand and use. The companies design philosophy in designing practical functions of the products can be summarized as 'modernism's abstract and reductionist idiom in appearance and use' and in 'Function creates design and design creates function' principle. The innovation as being the company's most important competitive advantage depends on design driven innovation strategy which provides an important competative advantage for the company (Figure 5.3).
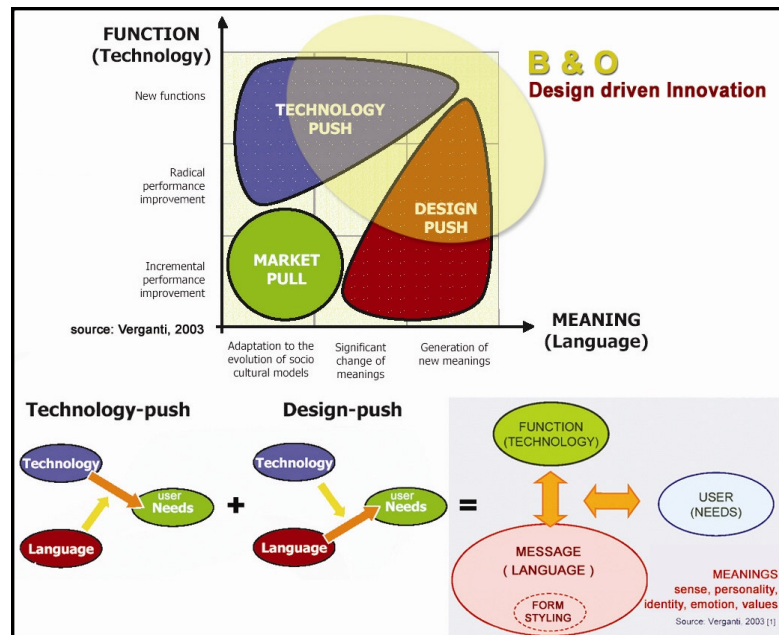
Figure 5. 3. The innovation strategy of B& O in new product development.

(Source: Adapted from Verganti 2003)

The company thinks that the technology in itself is abstraction and the form is on the way to being dissipated on the way to immateriality. They aim at designing products that are in advance of their time and directing technological developments towards less bulk and greater complexity and abstraction. For the company Bauhaus is not merely a style, it is also an attitude to quality, consumer-friendliness and aesthetics. The company' aim is creating design icons by unique combination of technology and aesthetics.

'Nothing you might expect from a very hi-tech piece of audio gear, no fancy lights, no million buttons and definitely no common design! (....) the modernist concept of honesty (…). Avoiding endowing the apparatus with familiar symbolical appearances and shapes, something that many of his contemporary, post-modern colleagues otherwise do (….). Bauhaus is not merely a style, it is also an attitude to quality, consumer-friendliness, and aesthetics (….) Bang & Olufsen products are not only aesthetically pleasing but are also functional and easy to use which were manufactured to the highest standards.' Gathered from various promotional documents of the company.

'For the company, the design is nothing in itself unless it is used to unite form and function in an auto visual entity. Therefore Bang & Olufsen products are not only aesthetically pleasing but are also functional and easy to use. The designers and technicians of work together in close collaboration from the very start of a new product to design products with outstanding technical performance and in a unique combination of high technology and intuitive operation (…) are user-friendly and easy to live with. In design process of the company there is a consideration and a clear conception of what must be visible for the consumer and what is not needed to be shown which all the unnecessary is hidden within the plain surfaces that never the less invite the consumer to closer investigation and use. The principles of 'A tight, pure expression with the functionalistic aim of stripping away all that is unnecessary and leaving the user with a clear impression of what the product can and should do' constitute the basis of design approach' (WEB_1 2006, WEB_3 2006)

a-) Operation, User Interaction:

The company excels at making technically complex products into something that is easy to understand and use. B&O products have always been intuitive to operate, even new and unfamiliar products. Design is a craft that is at the core of everything Bang & Olufsen manufactures. Making well designed electronic products that make advanced technology easy to live with has always been one of the core competencies of Bang & Olufsen. The company has developed a competence in creating a logical and

straightforward operation which provides simple and uncomplicated access to the many technological features offered by the product. Although the products of the company are each design innovations in their right own, operating the new technology simple and easy giving it clear expressions in its product design. The company philosophy is to make technology work in a way that adds value to their products in their everyday use. This is executed through in the choice of advanced components and refined materials, and design of the finished product that facilitates the simple everyday use of B&O products in the homes of their customers. B&O aims at a reputation for creating products, which are a unique combination of high technology and intuitive operation in a product which matches with the home and lifestyle perfectly. As Bang & Olufsen strives for excellence in user experience, ease of the operation is a crucial element in their products together with their aim at making operation of the products an easy, enjoyable and emotional experience.

b-) Inventiveness and Unique Quality:

The company aims at designing non-familiar products that are in both revolutionary innovation and a quiet beauty. Their design principle is manufacturing for design rather than design for manufacturing. For the company, the innovation challenges are to create a unique balance between in these aspects such as 'innovation (future) and tradition (past)', 'functionality and aesthetics', 'breakthrough and market speed'. When applying a carefully selected technology they aim to do it to create a unique user experience and pleasure and it is thus the value for the customer that is the object of applying technology. For B&O, the technology is simply a means to obtain a competitive advantage. Application of technology within the Bang & Olufsen product range always based upon the experience that it can accomplish for the user. The excellence of Bang & Olufsen in user experience relates to different core competences with the most being: Quality, Picture, Sound, Operation, Design, Integration, Elegant mechanical movements and materials with the underlying basic technologies being electronics, acoustics, mechanics and software (WEB_1 2006). Bang & Olufsen products are designed to be not only aesthetically pleasing but also essential and functional and easy to use. The expectations raised by a strikingly individual appearance must be completely fulfilled in terms of high quality sound whenever the system is switched on (WEB_1 2006).
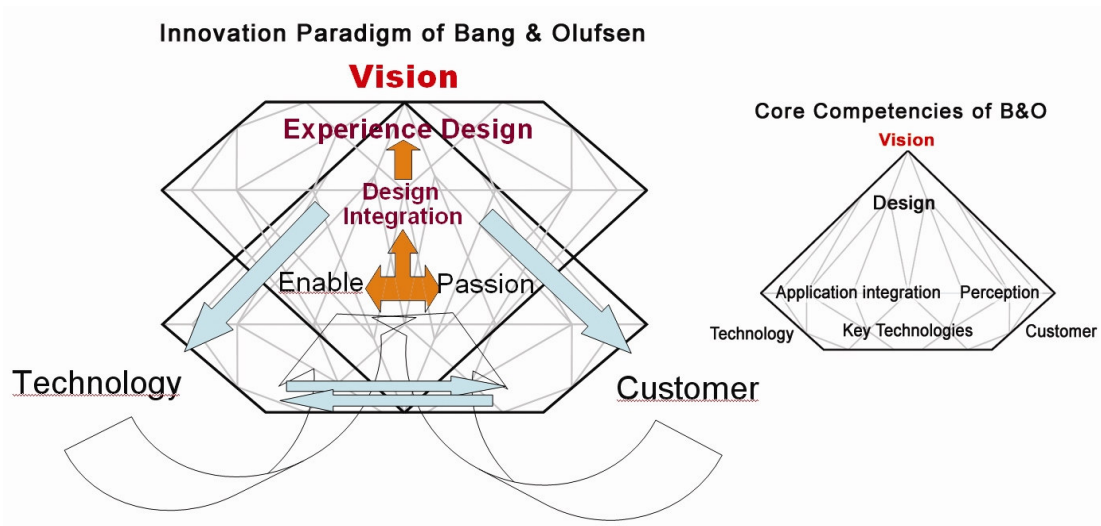
Figure 5. 4. Innovation paradigm of Bang & Olufsen.

(source: WEB_4 2006))

5.2.4.3. The Emotional Value of Products

Bang & Olufsen over the years has become famous for not only its stylish products but for their 'feel'. They aim at not creating products but communication. The products of the company give emotional experience in use as a result of aim of which enriching the experience by having a surprising feature with something inside (inviting the consumer to closer investigation) and giving the consumer a ' saturated experience of value'.

> 'The Simple design with a touch of magic (…). Creating audio concepts that combine brilliantly authentic sound quality, simple yet surprising design and a touch of magic. So that living with it becomes a special pleasure (…) Courage to constantly question the ordinary in search of surprising, longlasting experiences. The company's quest for 'magic' implies an emotional commitment to humanity' (WEB_4 2006).

The company's design philosophy that can be defined as 'forming the immaterial' and 'form follows feelings' principle that brings curiosity and excitement into Bauhaus tradition differentiate the products of the company from competitors. The enriched 'emotional side of the product' is a result of company's focus on the symbolic value attached to the products and designing breathtaking, lively products (that overall appearance change in use which add surprise and magic to products and make the user

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feel like magician). The strategic intention of never designing ordinary looking products and expressing a given purpose in a meaningful and distinctive form resulted in designing a extraordinary product with pure simplicity in appearance and also in use that reflected the core identity values of uniqueness, inventiveness, originality, domesticity, essentiality and selectivity.

5.3. Strategic Identity Management and Brand Specific Design Cues through Audio Product Portfolio of Bang & Olufsen

Bang & Olufsen has a competitive advantage in consumer electronics market through its product designs and internationally recognized for their classic form language and their distinctive, innovative, attractive products in high quality. The main purpose of this thesis is to identify how Bang & Olufsen manages its brand identity by using product design as a strategic tool. The degree of consistency in the product portfolio in terms of product identity and design features that represent the brands' strategic identities (core identity attributes of the brand) so the strategic design approach of the company concerning the balance between familiarity and novelty, in other words the designers's and the company's choices in between static, evolutionary and revolutionary design approaches in order to create a distinctive identity and foster consistent brand specific associations in the minds of the customers in a intended direction through products will be analyzed.

Visual recognition of brands and products has become a central competitive factor within various product categories most importantly in consumer electronics market where technical differences between products are diminishing. So the use of design in terms of not only developing visually attractive designs that can substantially strengthen the company's brand image but also encoding intentional meanings into products that then improve the possibility of target customers interpretation in a favorable manner by managing selected design features strategically and consistently in terms of strategic meaning creation through products is important with regard to developing and maintaining brand recognition and distinction. Bang & Olufsen is an important case that the strong identity of products of the company seem to have a considerable impact on the visual recognition of their brands even though the company mostly prefer the 'push' strategy in strategic design approach resulting from an

innovative design approach and designing differentiating products instead of the 'pull' strategy offered by a strong market-oriented approach.

Through visual scanning by Design Format analysis and visual heritage analysis, the brand specific design cues reflecting brand identity will be searched based on the syntactic, pragmatic and semantic levels of visual product identity of the audio product range considering the brand specific design elements on different levels in terms of the most characteristic visual elements (typical characteristics), their typicality in the category where they belong (the categorization of product characteristics) and design references in gestalt design and single design elements. While analyzing the visual product (features) identity of Bang & Olufsen that represent the brands' strategic identities with regard to the product's potential in carrying distinctive references to the 'character' of the brand (manifest in defined core values), the brand's strategic approach in managing product portfolio in terms of using selected design features reflecting brand's core values in a consistent or a flexible manner in order to substantially impact on the visual recognition of their brands will be under specific security.

In the pervious sections, the strategic objectives and contents of B&O brand identity are internalized in order to find out the messages that are intended to transmit to the audience. And the features and characteristics of audio product portfolio since 1925 were generally analyzed in terms of their significant influence on brand recognition in worldwide and their coherence with company's strategic objectives. So the question of concern was what the strategic and inherent dimensions of B&O brand identity are. Now it is important that, when strategic brand decisions are made how they are represented in the product and how Bang & Olufsen systematically deploy a distinct product language to obtain product differentiation and a consistent brand identity through its product portfolio to support its strategy.

By the guidance of data gained from pervious sections, in this section, the aim is to reveal the brand specific design language (cues) deeply throughout B&O's audio product range. The audio product range in terms of tangible-explicit design elements and characteristics will be analyzed and degree of flexibility and coherency allowed in the use of design cues will be searched to find out the recognizable (typical) and distinctive brand style. This aspect emphasis the product portfolio perspective of Karjalainen that gives references to Warell, according to which specific design elements are systematically used in all of a brand's products to reinforce consistent brand identity. The traceable design elements in single product level and their consistency

across the product portfolio will be analyzed. The use of experiential and strategic product knowledge ultimately concerns deciding the level of flexibility and consistency of brand specific design cues (Karjalainen 2004). Therefore, it will be deliberately focused on clarifying whether there is a true correspondence between brand's 'personality', the inherent organizational identity and external identity. In other words the correspondence between the strategic brand identity (what is the brand known for?, the messages that the brand wishes the customer to believe) and the Identity Domain (what is the brand known for?: brand specific design language) of Bang & Olufsen will be discussed. The external brand identity (visual brand strategy) in terms of product portfolio strategy that correspond to the internal brand identity of Bang & Olufsen, brand core values and brand design philosophy, in between 1925-1996 will be discussed to find out brand specific design cues before analyzing the recognition, perception and interpretation of brand specific design cues with regard to communication of intended brand character through design. A general guideline for analyzing brand specific design cues in single product level and product portfolio level through brand design history is given in the Figure 5.5.
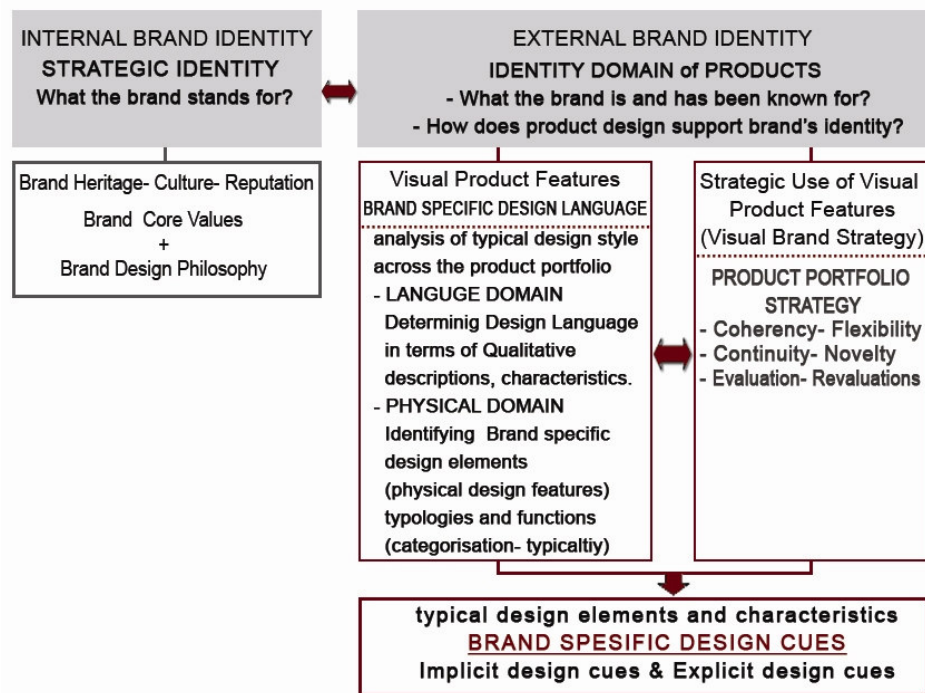
Figure 5. 5. The general guideline for the analysis of brand specific design cues in single product level and product portfolio level through brand design history.

5.3.1. Strategic Intentions of Bang & Olufsen Coherence with Visual Product Portfolio Management in between 1925- 2004

In this section, the strategic intentions of Bang & Olufsen coherence with visual product portfolio management, in other words, flexibility and coherency in communication through product portfolio in between 1925-2004 will be analyzed. The breakthrough products that also influence the design of future products will be mentioned throughout Bang & Olufsen's brand design history. On this base, the 'lead products' that incorporate key identity of the brand and hold a stronger liaison with the core brand than the others do are selected in order to search for the ingredients of brand specific product design language and brand identity references (that are specific 'key' elements, 'design cues' of the brand) across the entire audio product portfolio. According to the evaluations or revaluations in other words balancing between novelty and continuity in visual product identity, B&O's product design language can be separated into constituent parts as four periods with regard to the overall portfolio development across time concerning the changes in company's strategic objectives throughout the brand design history.

- **The '1925 - 1964' period**: The strategic brand identity is not defined in qualitative descriptions. In this period 'Danish Hallmark of Quality, The concepts of idea, quality and form', 'Bang & Olufsen is for people who prefer quality to price and for people who prefer to set quality very high' are company slogans as the brand themes of B&O. In comparison to the other periods, the brand product portfolio of this period consists of less consistent design characteristics. It is not possible to find out explicitly definable brand design cues because of the influence of different external requirements. Bang & Olufsen's strategic objectives are focus on to be innovative and creating brand specific messages through the technological and functional aspects of products.

- **The '1964- 1972' period:** The explicitly definable brand specific design language (that also has an impact on design of future products) is newly started to take shape in this period. Strategic intention is again creating design icons by unique combination of technology and aesthetics, but this time results in the more compact, light designs in slick, uncluttered, modern appearance.

- **The '1972 - 1996' period:** The most important reason that makes this period is the stress on the symbolic value attached to the products as so the most important

renewal in strategic intentions and design language is the focus on the 'the emotional side of the product'. The revision of identity claims is defined in corporate motto as 'Best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal.' The strategic brand identity management through visual communications and brand portfolio management have started to take place clearly after 1972. Strategic intentions that are aimed to transmit to the audience are defined in qualitative descriptions when the core design principles and communication policies are codified by 1972's 'The Seven Corporate Identity Components' program.

• **The '1996 - 2004' period:** Although the contents of brand typical 'flush design concept' is incorporated in the design of new products, the fundamental renewals in B&O's design language that reflected to the visual appearance of products is the enhanced emotional value of the products in this period as a reflection of 'B & O United, 98 program'. The emotional side of the products is truly improved. The overall gestalt appearance of products both resembles the products of other periods but also there are radical changes. The visual portfolio strategy of Bang & Olufsen is again in balance between novelty and continuity. And the brand has still conceived and gave existence to visual brand recognition and also distinction through product design.

5.3.1.1. Flexibility and Coherency in Communication through the '1925- 1964' Period Audio Product Range

In those days, although the concepts of strategic brand identity management; product portfolio management and management of design expressions are not on application, Bang & Olufsen has been focusing on research, development and communication since 1925. The increased use of the concept of 'brand' is associated with the overall development of western societies towards the consumption of experiences and the consequent emphasis on symbolic product attributes. The company slogans as the brand themes of B&O as expressions of concise and strongly established identity are 'Danish Hallmark of Quality, The concepts of idea, quality and form', 'Bang & Olufsen is for people who prefer quality to price and for people who prefer to set quality very high'. The purpose is to strengthen the associations between a manufacturer/owner and a product, making them easier to remember and differentiating products from those of competitors. After 1972, the company definitely handles identity

as business subject but by using today's academical terms, in between 1925- 1964, Bang & Olufsen's strategic objectives are focus on to be innovative and creating brand specific messages through the technological and functional aspects of products in order to obtain product differentiation and stay competitive in the market. The indented central messages that are aim to transmit to the audience through product design were inventiveness (uniqueness, originality) reliability, quality and durability.

a-) Central message, The Core Identity Attributes

In the first period the focus is on the significant technological innovations by which the brand is recognized worldwide. The core brand values of inventiveness (uniqueness, originality) reliability, quality and durability that have been originally associated with the B&O brand are actualized and indented to transmit to the customers first and mostly through the technological innovations, providing functional value for customers. In this period Bang & Olufsen products are known for outstanding performance, durability which all are added up to long-term reliability.

b-) Visual Communications; Product Portfolio Management and Brand-Specific Design Elements

In comparison to the other periods, the brand product portfolio of this period consists of less consistent design characteristics. Similar design elements and characteristics are not used in every product so the product line is not coherent in terms of design. The design elements of the products can not be trace back to explicitly recognizable and definable physical design elements that are consistently used across the product portfolio. As shown in the figure below (Figure 5.6), Even though B&O's design has varied, the specific design elements are not systematically (consistently) used in all of a brand's products, the brand recognition in the 1925-1964 period had remained consistent in terms of Bauhaus inspired designs through implicit (subconscious recognition).

Figure 5. 6. Bauhaus inspired design characteristics of the 1925- 1964 period product range.

Although the influence of different external requirements have made the product line not coherent in terms of design and there are a lack of consistent elements, however, it does not mean that B&O design would be arbitrary in visual terms. Bauhaus inspiration is consciously used as design references that are linked to the identity domain of the brand. The Bauhaus style had a significant influence on overall gestalt form characteristics of the designs of product range. But this explicitly recognizable general style incorporates strategic brand associations on subconscious level. The attributes of Bauhaus inspired character for B&O are directly referable to specific product features but the consistency of the product portfolio with seemingly varying designs is managed through more subtle references, some of which function even on a subconscious level. So the brand manages brand-specific product design in terms of implicit references. The strategic brand associations are supported and strengthened by various means of strategic communications as advertisements, graphics, etc. So the strategic management of product design, decisions regarding visual product communications and product portfolio management, handled in a flexible way in between 1925 -1964. It is not possible to find out explicitly definable brand design cues except overall Bauhaus inspired design language that reflects simplicity in use and appearance. The products to this day are still influenced by Bauhaus Functionalism, an influence that has become highly characteristic of Bang & Olufsen' s design. The inspiration of Bauhaus Functionalism and Aesthetics in general form language can be characterized as the core brand value of pure simplicity that influences the design of future products.

5.3.1.2. Flexibility and Coherency in Communication through the '1964- 1972' Period Audio Product Range

a-) Central message, The Core Identity Attributes

The strategic intention is never designing ordinary looking products and expressing a given purpose in a meaningful and distinctive form resulted in designing a extraordinary product with pure simplicity in appearance and also in use that reflected the core identity values of uniqueness, inventiveness, originality. The strategic design language is again emphasized on the technological, functional and aesthetic aspects of products that expressing the brand core values of inventiveness (uniqueness, originality), reliability, quality and durability. Strategic intention is again creating design icons by unique combination of technology and aesthetics, but this time results in the more compact designs in slick, uncluttered, modern appearance. The authors defined the awarded products of this period as both revolutionary innovation and a quiet beauty in now-familiar products.

b-) Visual Communications; Product Portfolio Management and Brand-Specific Design Elements

Even though there are revaluations that provided a remarkable boost to brand perception, the new design approach is yet another evolutionary phase in the B&O design history and seemed to preserve the Bauhaus inspired brand heritage well thus strongly maintains brand recognition. The brand recognition in terms of physical product design references occurs in an implicit level because the explicitly definable brand specific design language is newly started to take shape in this period.

The long flat cabinet, all the controls being on the top surface (operation from the top), depressed knops that have became flush with the surface as a part of the polished aluminum surface are the characteristic design elements and features of the lead products of this period that have an impact on the overall gestalt appearances of the products and are representing a new styling which would also influence the design of future products. In basic categorization of product qualities of the lead products, brand specific design cues are typical for the super- ordinate level category (solution-typical features; forms as such) and sub-ordinate level (behavior-typical features; use, interaction). Because the pragmatic (content) and syntactic (grammar) features of the product language of the lead products challenges all the established ideas for radio

design. According to these evaluation and revaluation in this period it can be said that the strategic management of product design, decisions regarding visual product communications and product portfolio management, handled in balance between continuity (consistent) and novelty (flexible) to obtain product differentiation and a consistent brand identity.
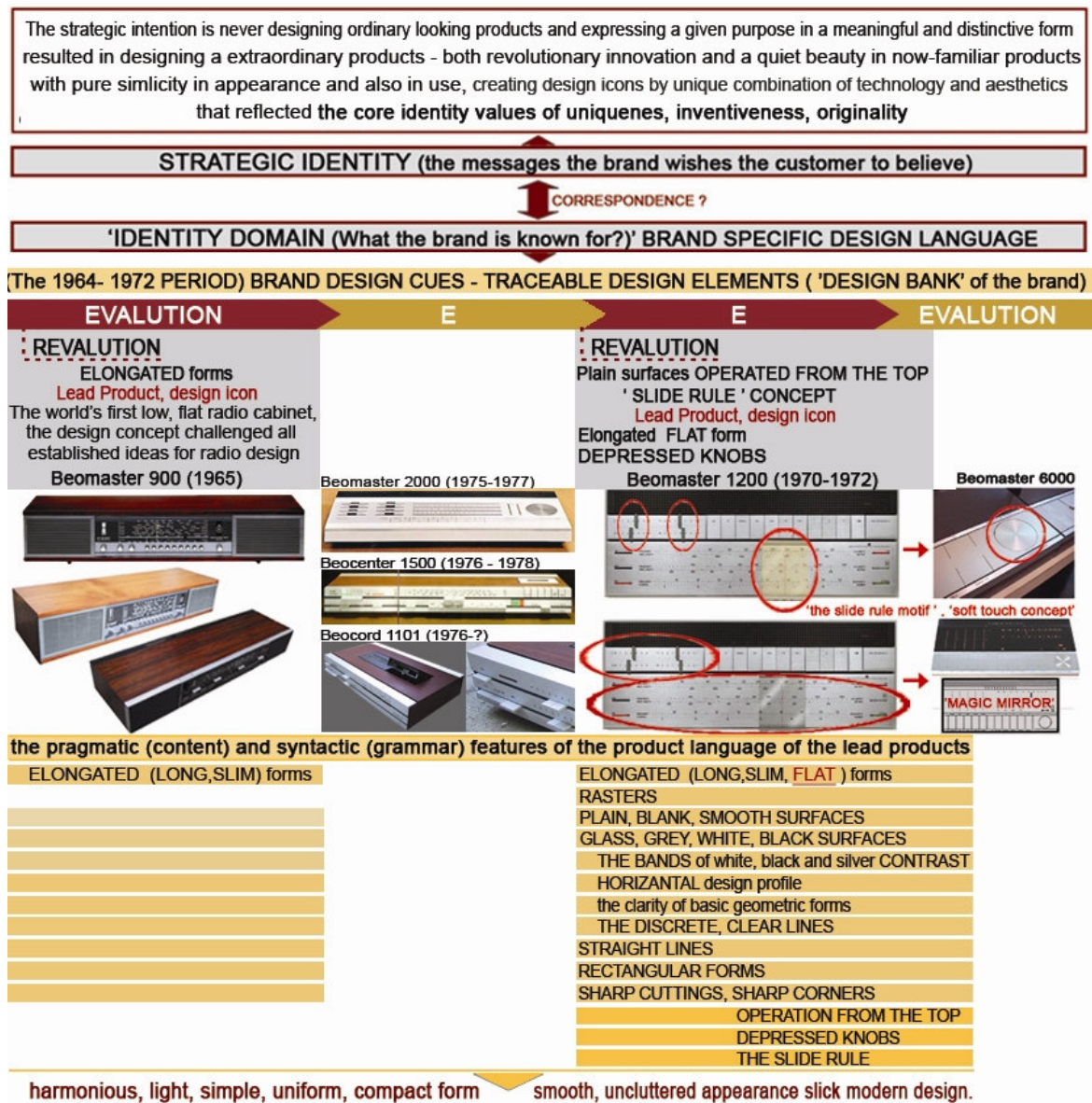
Figure 5. 7. The brand design cues in 1964- 1972 period product range.

The traceable brand design cues that explicitly traced back to the specific product features and characteristics in single product level which are also coherence with core brand values can be found for this period. The characteristic visual design elements in syntactic level are the straight lines and raster, rectangular forms with sharp

cuttings, the bands of white, black, grey and metal surfaces in contrast, smooth cleansed surfaces, plain, blank surfaces and form, elongated (slim, long, flat) forms. A pleasing harmony of shapes, material, finish, color and structure of the form, the clarity of basic geometric forms, just the right amount of 'contrast' between elements (tone, shape, color, line), the use of form elements with strict aesthetic criteria emphasizing a horizontal profile with high functionality make a high sense of 'order' to the design and make the appearance complete in sense that results in harmonious, light ,simple, compact form in appearance. The characteristic product features in pragmatic level that influence the overall product appearance and design of feature products and also overall product character reflecting brand core values are operating the product from the top, depressed knobs and the slide rule motif. And the syntactic features and the pragmatic content of the product form language change the all established ideas about how a receiver should look. So, in basic categorization of product qualities of the products, brand specific design cues reflecting brand identity and distinction are typical for the super- ordinate level category (solution-typical features; forms as such) and sub-ordinate level (behavior-typical features; use, interaction)

The design language of the first product of this period have both explicit and implicit references reflecting brand identity recognition in terms of consistency, identification and distinction. Overall gestalt appearance challenges the all established ideas for radio design and marks a revolution. The company's core values of uniqueness, inventiveness is strongly emphasized by launching the world's first low, flat radio cabinet. Besides its business success it is one of the lead products of Bang & Olufsen's brand-specific design language that will influence the Bang & Olufsen's future designs. Its long, slim rectangular form characteristics expressing the pure simplicity inspired by Bauhaus Functionalism and aesthetics is in coherence with the design language of the first period. And also the visually self-communicating aspect of the product by displaying the features that so many manufacturers try to hide away is expressing the brand core value of authenticity both reflecting brand identity in terms of distinction and consistency.

The other breakthrough and lead product for this period is the Beomaster 1200 (launched in 1969) the format of which is to set the trend in Bang & Olufsen design for many years to come (WEB_4 2006). The design language of product changes the prototypicality (representative of its category) of the radio receiver both in the sense of its appearance and shape and also in purpose and operation. In overall gestalt and

detailed design of the product can be characterized as being a novel aesthetics that is visually differentiated from competition and give the product a strong identity. The strategic design approach is reflecting the core identity values of uniqueness, inventiveness, originality, domesticity, essentiality and selectivity by expressing a given purpose in a meaningful and distinctive form that results in designing extraordinary products looking products with pure simplicity in appearance and also in use. The simplicity concept (in its form and in communication between the unit and the user) is the result of the strategic design philosophy of modernism's abstract and reductionist idiom in use as in appearance of the products -creating a logical and straightforward operation which provides simple and uncomplicated access to the many technological features offered by the product in order to make technically complex products into something that is easy to understand and use. It is the first representative of the model type that later became a trademark for the entire brand. The characteristic design elements and features of the product (the long flat cabinet, all the controls being on the top surface, operation from the top, depressed knops that has became flush with the surface as a part of the polished aluminum surface) are representing a new styling and also typical design elements for B&O that will become increasingly characteristic for the whole brand.

Figure 5. 8. On the top, The audio product examples from B&O's competitors. The traditional style for tuning knobs (affordance, indexical reference) used by competitors. In the middle imitation (left) of B&O tape recorder and receiver (right) in 1960's. At the bottom the typical B&O depressed knobs used in audio product portfolio in between 1960-2004.

The traditional style for tuning knobs is replaced by the slide rule (the depressed adjustment knob) which is considered an innovation in changing the future of radios and amplifiers (Figure 5.8). The 'slide rule' concept symbolizing mechanical precision can be traced back to specific characteristics but the concept is not used same in the product design of other products of the brand portfolio. It is embodied in the design of some future products in a different manner and style.

5.3.1.3. Flexibility and Coherency in Communication through the '1972- 1996' Period Audio Product Range

The most important reason that makes this period the stress on the symbolic value attached to the products so that the most important renewal in strategic intentions and design language is the focus on the 'the emotional side of the product'. And as discussed in revision of identity claims at Bang & Olufsen, by the influence of different external requirements and the increasing competition of mostly Japanese producers the company handles strategic identity management seriously. They feel the need to re-evaluate and formalize what really makes the company and hence its products different by the push of environmental identity threats. The company's main objectives and the core design principles guiding design and communication policies codified in qualitative descriptions by 1972 'The Seven Corporate Identity Components' program and 1993 'Break-Point, the New Vision' program. By the aim of connection of core cultural values to users to create differentiation, the company tries 'to go deeper into the essence', the 'spirit' of the company. The team identifies a fundamental challenge in revitalizing the company's heritage rooted in the Bauhaus-inspired balanced combination among design, aesthetics and technology. The revision of identity claims is defined in corporate motto as 'The best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal' in 'Break-Point, the New Vision' program. The correspondence between the strategic brand identity (what is the brand known for?: the messages that the brand wishes the customer to believe) and the identity domain (what is the brand known for?: brand specific design language) of Bang & Olufsen can be seen clearly in this period (Figure 5.9, Figure 5.10).

a-) Central message, The Core Identity Attributes

By taking reference the core values; Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Inventiveness, Selectivity codified in 1972 and matching them with the 'Break Point 93' plan's main objectives which is the rebirth of Bang & Olufsen through a ' back to basics' program with focus on diligence, prudence and a vision, the company aims to define what the B&O stands for. The new values are defined primarily in terms of the way products are traditionally designed. The essence of the products is considered as important as technical quality in differentiating B&O in

the marketplace. The strategic decision is not conforming Japanese spreading standards (modular squared shapes, traditional knobs, hi-fi performance, etc.) the emotional side of the products is aimed to be enriched to alter product design in order to stay competitive in the market. In this period Bang & Olufsen starts to become famous for not only its stylish products but for their 'feel' and looks to have a competitive advantage over Japanese competitors. According to the strategic intentions of the company as reflected in the new company slogan 'We think differently' which is an expression of concise and strongly established identity. The company focuses on that the products have to enrich the experience by having a surprising feature in them, inviting the consumer to closer investigation and giving the consumer a ' saturated experience of value'. In short, Bang & Olufsen's aim is to make aesthetically pleasing products that make advance technology easy to live with and accomplish emotional experience in use in this period.

b-) Visual Communications; Product Portfolio Management and Brand-Specific Design Elements

The aim is again the coherence with 'function creates design and design creates function' principle creating design icons by unique combination of technology and aesthetics. Addition to this, in this period, the company starts to focus on the symbolic value attached to the products in other words 'the emotional side of the product'. And the company starts to design breathtaking, lively products that the overall product appearance changes in use which add surprise and magic to product make the user feel like magician by brand specific mechanical movements. This characteristics of products the aim of which inviting the consumer to closer investigation, enriching the experience by having a surprising feature with something inside and giving the consumer a 'saturated experience of value' is started to take shape in this period. The design language of products reflect modernism's abstract and reductionist idiom in appearance and use. The products are totally 'elongated flat boxes', nothing in the shape of the device revealed how it works or what it is having a surprise feature inviting the consumer to closer investigation. But this aspect does not that it overlaps with the company's aim in designing user-friendly and visually self-communicating products reflecting the core value of autovisuality. The company aim is never designing ordinary looking products, but it is not in contradiction with regard to universal design language. The products are expressing a given purpose in a meaningful and distinctive form. The

products have no buttons, flat and horizontal opposed to the Japanese verticalism and they are simple and understandable products in high technical quality and performance.
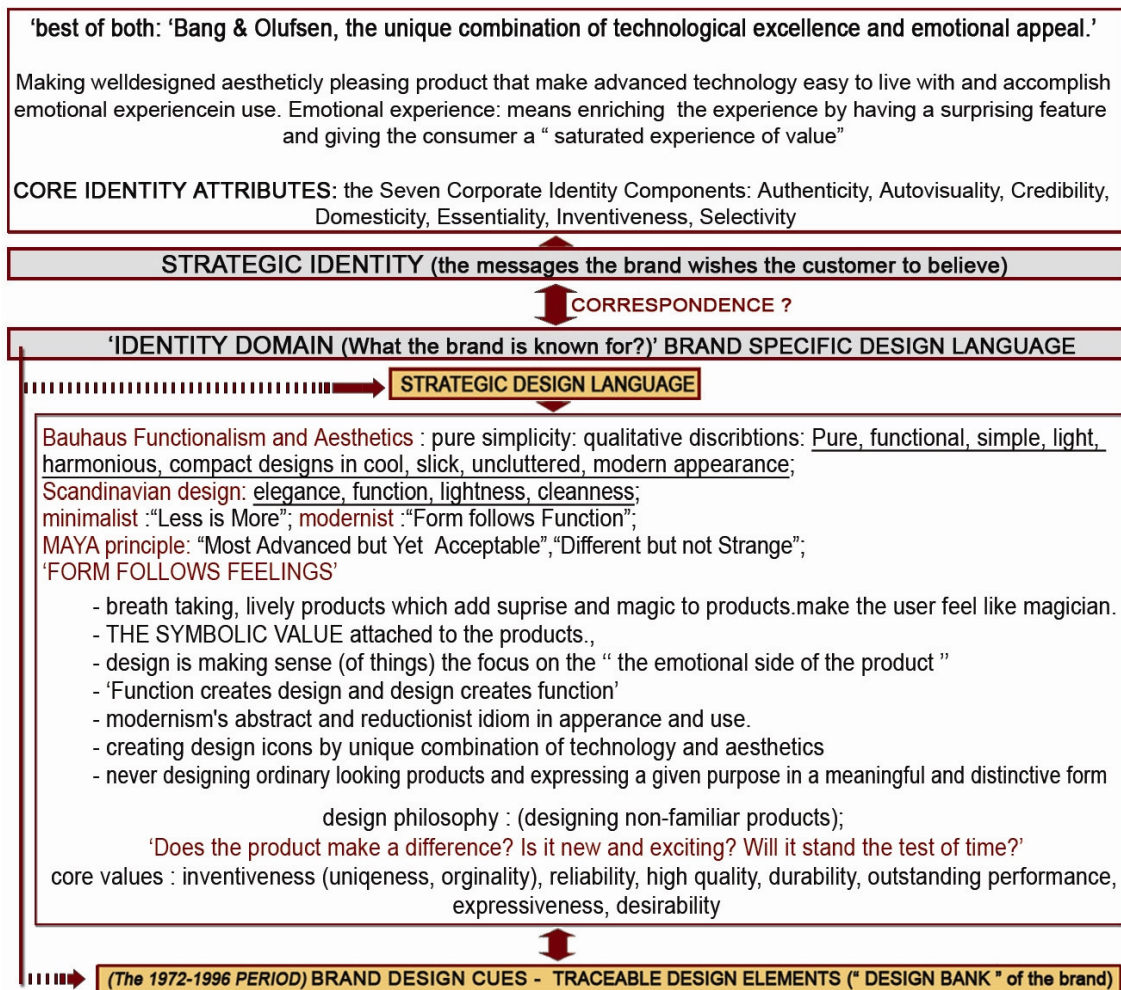
Figure 5. 9. The correspondence between the strategic brand identity and the identity domain.

(The 1972-1996 PERIOD) BRAND DESIGN CUES - TRACEABLE DESIGN ELEMENTS (" DESIGN BANK " of the brand)
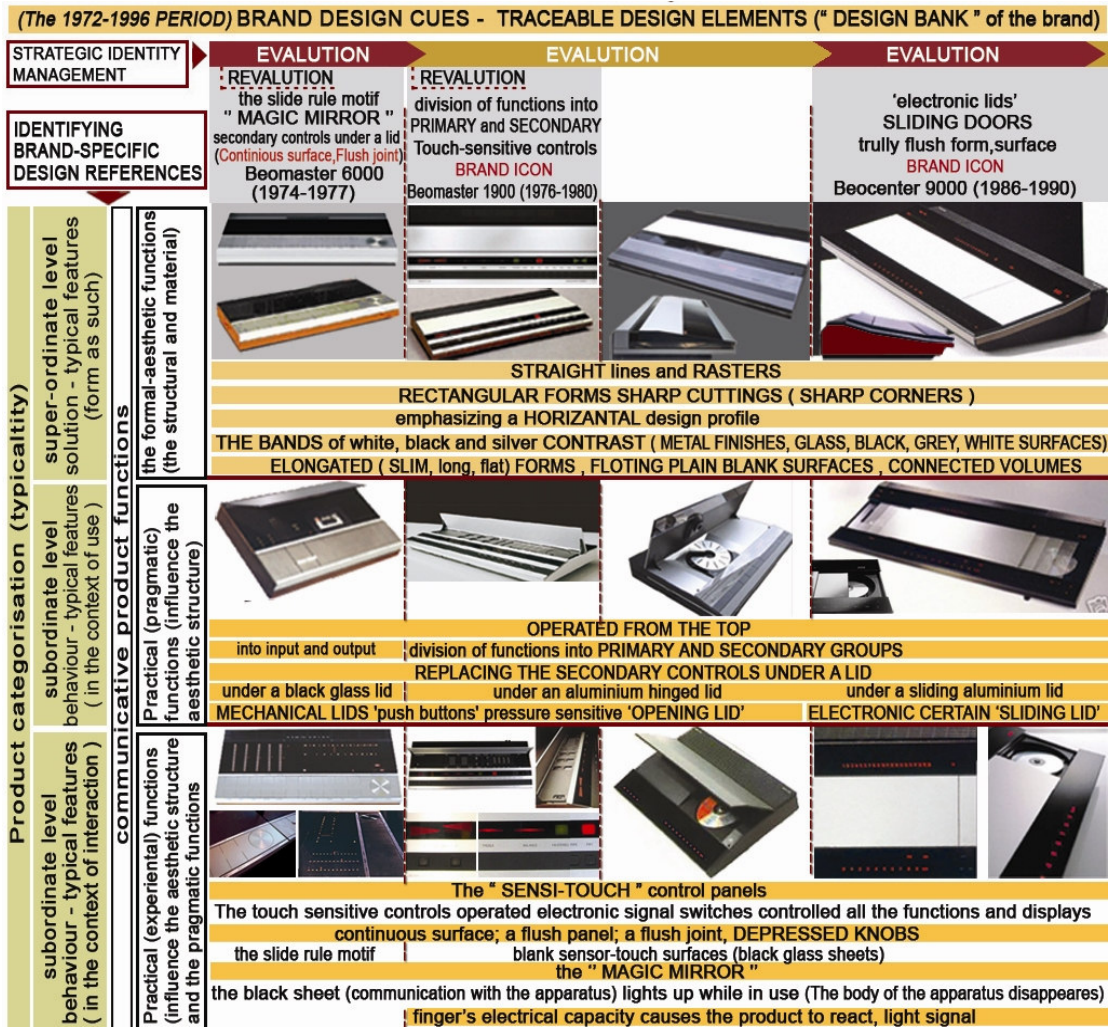
Figure 5.10. The brand design cues in single product level and their coherency across the product portfolio in between 1974 -1996 period.

According to the evaluations and revaluations in design style (the consistent and also flexible use of brand specific design cues) in this period, it can be said that the strategic management of product design (decisions regarding visual product communications and product portfolio management) is being handled in balance between continuity and novelty to obtain product differentiation and a consistent brand identity by the company. The typical (brand-specific) design cues that systematically deploy a distinct product language and the recognizable (typical) brand style can be clearly found in this period. Similar design elements and characteristics of 1964 -1972 period products such as the long flat cabinet, all the controls being on the top surface (operation from the top), depressed knops that have became flush with the surface as a part of the polished aluminum surface are used in the product portfolio of this period as references to the brand's design heritage but also there are revaluations.

The first lead product of this period is Beomaster 6000 (launched in 1974). The 'soft touch concept' and the 'magic mirror concept' are the most important renovations in design language of the product. These characteristics will also influence the design of future products. They are externalization of the new strategic intention in terms of adding a surprise feature to the product and designing products easy to live with that also accomplish emotional experience in use. The 'soft touch concept' is renovation of the 'slide rule motif' of Beomaster 1200 (launched in 1974). In Beomaster 6000 mechanical grips ('slide rule' tuning pointer of Beomaster 1200) replaced by -electronic tuner-circular button that the buttons are gathered together in one large steel sheet, in which 'tongues' have been cut (WEB_4 2006). This touchpad had became fush with the surface as a part of the polished aluminum surface should give slightly under pleasure so called as 'soft touch'. This concept is used by Apple in Ipod years after. Like the design-focused work on tangible interaction, B&O takes advantage of elements of context within the user's range of visual and tactile perception to maximize the experience of product in use with this design. The 'magic mirror concept' is the first representative of a new phase. The designer Jacop Jensen's intention is to make the user feel like a magician, to give the consumer a 'saturated experience of value' and to make it easy to understand what is happening so that living with products becomes a special pleasure (WEB_4 2006). These intentions are embodied in the product by placing the output displays under a sheet of dark glass (while the input is placed in a silver-colored control panel). It is a thorough going 'black box', nothing in the shape of the device revealed how it worked or what it was, that was lighting up while in use and showing which function had been activated that gave an extra experience over and above the purely aesthetical in appearance. This update of the brand's product design provided a remarkable boost to brand perception.

The Beomaster 1900 (developed in between1976 -1980) is another breakthrough product during the decade. Despite technological innovations, the basic design of the product remains intact in many new products over the next decades. The characteristic design language of the product is the 'brand typical flush design concept'. The practical functions of the product; the division of the functions into ' primary ' and ' secondary ' groups and also electronically communicating touch sensitive controls for operating the features and functions, made it possible to design the components of product in the same level with each other. So the product became flush in overall gestalt appearance with the horizontal, floating, blank and smooth surfaces. It is an 'elongated flat box',

nothing in the shape of the device revealed how it works or what it is; the secondary controls are concealed under a full width aluminum hinged lid and the electronically communicating primary controls are easily accessible through a light touch at a stroke at the front panel. The most obvious technical innovation that the design and operation of the product differed dramatically from other contemporary products is these touch sensitive controls for operating the features and functions. Just a light touch and the finger's electrical capacity cause the product to react and a light signal at the front indicated that the message has been understood. This easier to appreciate and more user-friendly mode of operation which would in time come to be known as 'sensi-touch' is an entirely new feeling and an experience in itself.

A remarkable breakthrough product; the Beocenter 9000 launched in 1986 is the last product of this period. Its sculptured design in glass and brushed aluminum makes the product beautiful to look at and one of Bang & Olufsen's outstanding modern classics. Its finish of aluminum and dark plastic gave the system an exclusive and distinct look as B&O's other product designs. The cool, clean design, at once both peaceful and effective in appearance, reflects the rational operation, which is carried out via microprocessors. Uniting all functions in one compact cabinet in flush design concept simplifies the operation and also give simple and uniform appearance to the product. Although Beocenter 9000 looks new, it is designed by combining ideas and technology from other recent models in the range. The Beocenter 9000 launched in between 1986- 1990) is definitely flush as the last representative of this period. The design of the product is radicalization of the basic ideas most importantly which have asserted themselves in the Beomaster 1900 launched in between 1976- 1980 (Figure 5.11). The flush concept is taken a step further. This time everything is entirely flat and nothing projects that gives simple and uniform appearance to the product. It is given two 'angles' but it is close to being merely a horizontal, floating, blank surface. In fact, for the first time, there were no mechanical switches or controls as a major technical achievement. The product effectively underlines that one of the most important competitive parameters of B& O is its engineering technology by creating a entirely new way of controlling the sets and also the designer aim is to make the user feel like the hero of a science fiction film that embodied in the movements and a highly sophisticated mode of operation. This time communication with the apparatus is reduced to two black glass sheets, the operation of the product is being achieved by the touch sensitive controls and touch sensitive 'electronic certain' that slide smoothly and

elegantly to the side. The ease and simplicity in use (coherence with the emotional experience in use) is the first impression for the product. By allowing simple and logical operation, two illuminated displays give all the information needed and the sensi-touch control which works through a condenser effect even the lightest touch of a finger will spark a reaction (WEB_4 2006). For the rest of the century, these significant innovations, movements and a highly sophisticated mode of operation, remained a hallmark of Bang & Olufsen products as a competitive advantage as expressed in their brand theme 'We think differently' which is identified towards the end of the 1970s (Bang & Palshoj 2000).

Figure 5. 11. The Beocenter 9000 (launched in between 1986- 1990) is definitely flush as the last representative of this period. (Source: WEB_4 2006)

The new practical functions, the pragmatic content of the product do not make radical changes in overall syntactic grammar of the product but make the Beocenter 9000 definitely flush as the last representative of this period. In the following years, the new versions of the product have launched until 1998 but the flush concept of this model has remained the same in overall gestalt appearance. The Figure 5.12 shows the Beocenter 9000 (the last representative of '1972 – 1996' period in flush design concept) family timeline between the years 1986 (the first launch) and 1998 (the last launch).

Figure 5. 12. The Beocenter 9000 family timeline between the years 1986 (the first launch) and 1998 (the last launch). (Source: WEB_4 2006)

5.3.1.4. Flexibility and Coherency in Communication through the '1996- 2004' Period Audio Product Range

Although the contents of brand typical 'flush design concept' is incorporated in the design of new products, the fundamental renewals in B&O's design language that reflected to the visual appearance of products is the enhanced emotional value of the products in this period as a reflection of 'B & O United' program. As illustrated in the figure 5.13, the emotional sides of the products are truly improved in '1996- 2004' period. Although the overall gestalt appearances of products resemble the products of other periods, and also there are radical changes.

Figure 5. 13. The emotional side of the products is improved in '1996- 2004' period.

The revision of identity claims in the 1998 'B & O United' program has influenced on the fundamental values of the company which are expected to support B&O future product design strategy. The new values are emerged from the company's observation of the unusual features of the company's products and the company's attempts to make sense of what really differentiated B&O from relevant competitors such as Sony, Philips. The new values of 'Excellence, Synthesis and Poetry' are defined by the company with the new company slogan 'A Life Less Ordinary' as a representation of their vision 'courage to constantly question the ordinary in search of surprising, long-lasting experiences'. The third value of poetry emphasizes the personal excitement and emotion that customers (and employees) experience in relation to B&O's products and design. It is defined as 'Poetry is the surprising silent opening of the doors and the unfolding of the product as a flower' by the company (Figure 5.13). Excellence is associated with 'simplicity and modesty' reference to the Bauhaus tradition. Bang & Olufsen come to be perceived as an expensive luxury brand so that 'excellence' is contrasted with the image of 'exclusivity'. It is defined as 'Aluminum is Excellence. Gold is Exclusive' to provide practical illustration of the concept and the expressions of exclusivity are described as 'gold, marble and empty palaces' (Bang and Palshoj 2000).

PRODUCT 1
BeoSound 9000,1996

PRODUCT 2
Beosound 3000, 2001

PRODUCT 3
BeoCenter 2, 2004

SPINNING

Moving clamper ,SLIDING between CDs

the characteristics of 'personal feel' and 'emotional experience' in design language of B&O
'Poetry is the surprising silent opening of the doors and the unfolding of the product as a flower'

Figure 5. 14. The characteristics of 'personal feel' and 'emotional experience' in design language of B&O reflecting core brand values.

The three audio products launched in this period are the Beosound 9000 (launched in 1996), the Beosound 3200 (launched in 2003) and the Beocenter 2 (launched in 2004). Even though each of which individually incorporate the design elements and characteristics of 'flush design concept' and the brand's visual design history, but also there are radical differences in details and overall gestalt appearance of the products. The visual portfolio strategy of Bang & Olufsen is again in balance between novelty and continuity. The company has still conceived and gave existence to visual brand recognition through design. Besides this, the characteristic design elements of this period products strengthen the emotional side of the brand character better than the previously designed products by the influence of revised identity claims on designers' intentions and inspirations in their design approach. The products truly become lively and breathtaking and the overall gestalt appearance of products truly changes. The Breathtaking, lively, enjoyable character of the products are manifest through mechanical movements like visible spinning and sliding cds and the sliding doors with a music and a instantly illuminated light reminds space age by a hand movement, visible spinning and sliding cds called as 'Magic Open Concept' (WEB_4 2006). The typical slim cross-section of audio product range designed in 'flush concept' is advanced in these three products (Figure 5.15).

Figure 5.15. The typical slim cross-section of audio product range designed in 'flush concept' is advanced in 1996- 2004 period products.

The Beosound 9000 carries visual resemblance (explicit cues) to the other products in its basic form. It is the representative of the characteristic elongated long flat form of previous products. But this time the overall product appearance is transparent that it is not 'elongated flat box' (nothing in the shape of the device revealed how it works and what it is) like other products designed in 'flush concept'. The design characteristics of product in syntactic and pragmatic level (the CD player which can be loaded with 6 CDs -not a single CD- in a row along the length of the machine and the transparent -glass lids- design) make it possible to watch the CD mechanism moves from one disc to another) separates the new model from all others in the product range of Bang & Olufsen and also from the competitors. The Beosound 3200, as being original upright icon of design, is the representative of the new phase with its vertical alignment opposite to the horizontal design profile of the previously designed products in 'flush concept' as well as it carries visual resemblance (explicit cues) to the other products with its slim, blank form, anodized aluminum polished surface treatment, sliding doors etc. The third product Beocenter 2 keeps the same stylistic and functional product identity of Bang & Olufsen products and provides visual brand recognition but overall gestalt appearance points a radical change in design with its elliptical form (Figure 5.16). The product (Beocenter 2) carries strong explicit cues, such as circular button (soft touch, the unique button-less operation) truly flush with the surface resembling the other depressed knobs used in Bang & Olufsen visual brand design history (Figure 5.17).

Figure 5. 16. The evaluation of 'brand typical flush design concept' in between 1964- 2004.

Figure 5. 17. Explicit design references in Beocenter 2 to previously launched products across the visual B&O design history such as such as circular button (soft touch concept, button-less operation) truly flush with the surface.

5.3.2. Implicit and Explicit Design Cues Embedded in Bang & Olufsen Typical Flush Design Concept in between 1965- 1996

Figure 5.18. The characteristic design elements of the flush design concept in syntactic and pragmatic level in between 1965- 1996.

The typical Bang & Olufsen design style 'The flush design concept' takes its roots from the first product in elongated long and slim form launched in 1965. Since then the syntactic features and pragmatic contents that influence the overall aesthetic appearance and character of the style are enhanced and improved by consistent evaluations and revaluations in design so that Bang & Olufsen typical 'flush design concept' takes its last shape in 1990's. In conclusion, the characteristic visual design elements of the flush concept in syntactic level are the discrete straight lines and raster, rectangular forms with sharp cuttings, the bands of white, black, grey, glass and metal surfaces in contrast, the quality of the paint used and anodized aluminum polished surface treatment, smooth (cleansed, floating plain blank) surfaces, elongated (slim, long, flat) forms. These are traceable elements and explicit design cues that incorporate brand specific meanings and associations (semantic references) and also provide brand recognition and distinction through visual resemblance. A pleasing harmony of shapes, material, finish, color and structure of the form, the clarity of basic geometric forms, just the right amount of 'contrast' between elements (tone, shape, color, line), the use of

form elements with strict aesthetic criteria emphasizing a horizontal profile with high functionality make a high sense of 'order' to the design and make the appearance complete in sense that results in harmonious, light, simple and compact form in appearance.

While mostly aesthetic factors have less importance in the case of strictly functional products, the characteristic 'flush concept' embodied in audio products is visually differentiated B&O from competition and give it a strong identity. 'The flush concept' design of audio products in overall gestalt appearance can be characterize as novel aesthetics as its changes the all established ideas about how a audio product should look and strengthens the brand core values of uniqueness, inventiveness, authenticity (originality). The brand specific flush design concept (reflecting brand identity) in syntactic level is typical for the super- ordinate level category (solution-typical features; forms as such) because the form language of flush design concept in overall gestalt appearance changes all established ideas about how a receiver should look and use. The intention of the company (which is creating design icons and having international recognition for their unique designs, original, simple & classic form language by the both revolutionary innovation and a quiet beauty in their now-familiar products) is in coherence with the brand typical 'flush design concept'. Besides, it is fair to note that similar design elements may appear in products of other manufacturers as well. A major part of the communicative strength of traceable elements is explained through intentionality (Karjalainen 2004). The design elements of 'flush design concept' approach complete characterization as intentionally and consistently strengthened by the company and become so powerful 'brand icon' that they are comprehensively related to the brand in question. According to the product portfolio perspective specific design elements that are systematically used in all of a brand's products reinforce consistent brand identity. The design elements and characteristics of flush design concept becomes brand specific through strategic communication and consistent use.

Uniting all functions in one compact cabinet in flush design concept simplifies the operation and also gives simple and uniform appearance to the product. Coherence with the 'function creates design and design creates function' principle of the company, the design of practical functions (pragmatic content) of the products, contents of operating the product from the top, the division of functions into 'primary' (depressed knobs flush with the surface) and 'secondary' groups (replacing the controls under a lid

with flush joints and surfaces) make it possible to design the components in the same level with each other and have a considerable impact on overall gestalt appearance of the the flush design concept with horizontal, floating, blank and smooth surfaces and forms. The 'brand specific flush design concept' in syntactic and also in pragmatic levels are typical for the super- ordinate level category (solution-typical features; forms as such) and sub-ordinate level (behavior-typical features; use, interaction).Because, the form language of flush design concept changes all established ideas about how a receiver should look and use. And the brand specific 'magic mirror', ' soft touch' and 'sensi-touch' concepts are the characteristic components of the flush design concept that incorporate implicit references to the exclusive and emotional brand character (anticipated brand personality) of Bang & Olufsen and to the brand's core values in terms of brand recognition and distinction. They accomplish emotional experience in use and interaction with the product. The characteristics of these concepts make the products 'magic boxes'. The products invite the consumer to closer investigation by having compact designs, nothing in the shape of the product revealed how it works or what it is, which the overall appearance of the product changes in use. As one of but the most important core competences of Bang & Olufsen is designing breathtaking, lively products which add surprise to product and make the user feel like magician coherence with 'form follows feelings' principle of the company. The diversified, lively structure and exclusive, surprising, breathtaking form of 'magic mirror', 'soft touch' and 'sensi-touch' concepts refer implicitly to Bang & Olufsen's design philosophy.

The external brand identity (visual brand strategy) in terms of product portfolio strategy that corresponds to the internal brand identity of Bang & Olufsen (brand core values and brand design philosophy) in between 1965- 1996 are illustrated in the Figure 5.19. In between 1965- 1996 the product portfolio strategy of the company includes, consistent and also flexible use of brand specific design features so that explicit and implicit design cues incorporating the core brand values and brand design philosophy that are embedded in the brand typical 'Flush Concept' design style.
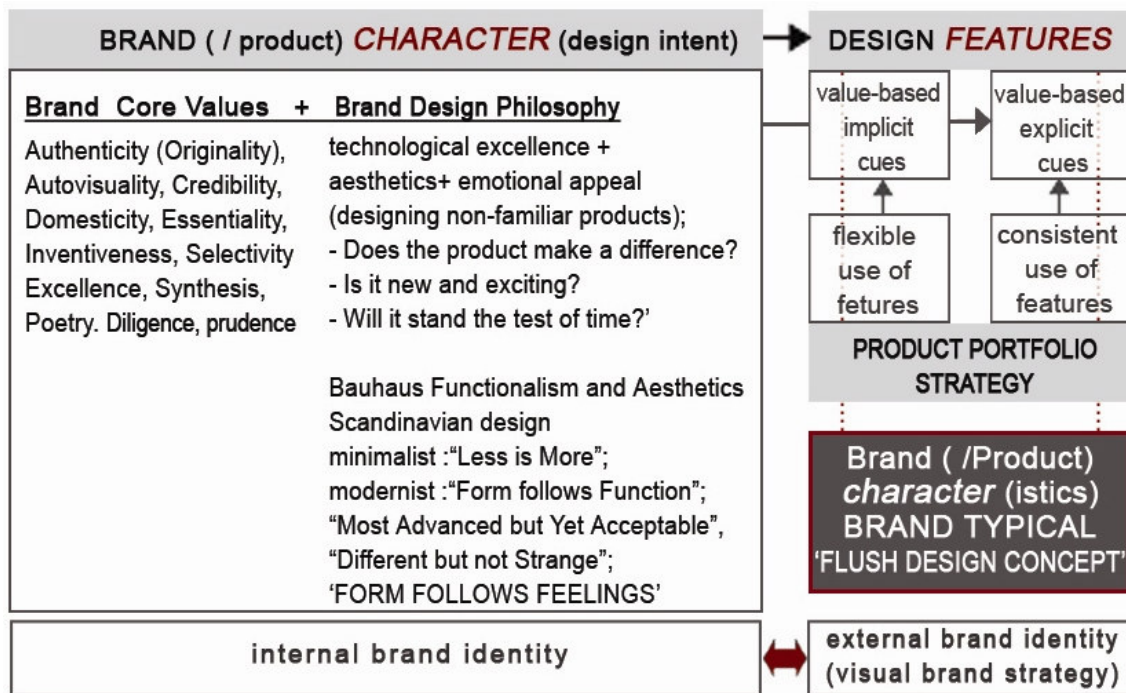
Figure 5.19. The 'brand typical flush design concept' is representing the visual brand strategy that reflects the internal brand identity.

As discussed previously, 'the flush design concept' embodied in products, generally stand out for the brand typical design style across the audio product portfolio of Bang & Olufsen. The features and characteristics of 'flush design concept' are coherence with company's intention in designing products that offer elegance in design, great performance and are a pleasure to operate. The explicit and implicit design cues that are embedded in the brand typical 'flush design concept' (which correspond to the brand character and product portfolio strategy of the company so that the contents of visual brand typicality and their visual references to brand core values) are listed in the Figure 5.20 below. The link between the brand character and design features of products in the brand's visual design history is taken into consideration in order to determine the implicit design cues that communicate the general character of brand. In other words, while searching for the implicit cues the question whether a chosen design feature reflects the brand core values is under specific scrutiny.

THE CHARACTERISTIC ' FLUSH DESIGN CONCEPT' of audio product range in between 1965- 1996		
	Brand characteristics refered by **Explicit Design Cues**	Brand characteristics refered by **Implicit Design Cues**
AESTHETICS (the structural and material)		
	STRAIGHT LINES RASTERS METAL FINISHES GLASS, BLACK, GREY, WHITE SURFACES SHARP EDGES CONTRASTED COLORS GEOMETRIC FORMS RECTANGULAR SHAPES RECTANGULAR FORM ELONGATED (slim,long,flat) FORM CONNECTED VOLUMES, COMPACT FORM SYMMETRICIAN THE BANDS of white, black and silver CONTRAST STRAIGHT HORIZANTAL ALIGMENT TOTAL REPETITIVE LAYOUT IN HARMONY THE CLARITY OF BASIC GEOMETRIC FORMS THE DISCRETE CLEAR LINES FLOTING, PLAIN, BLANK, SMOOTH,CLEAN SURFACES	Simplicity, lightness, pureness, modern, minimalistic calmness, coolness, expressiveness, honesty, reliability, excellence, luxurious, individual slickness, flawless, timeless, high quality, durability attractiveness, elegance, spectacular, striking, stunning, pleasing, desirable
TECHNOLOGY and OPERATION (EXPERIENCE)		

	OPERATION FROM THE TOP
	division of functions into PRIMARY AND SECONDARY GROUPS
	REPLACING THE SECONDARY CONTROLS UNDER A LID
	DEPRESSED KNOBS (fush with the surface)
	
	Unusual, Elegant MECHANICAL MOVEMENTS
	-TOUCH SENSITIVE CONTROLS
	   - The "SOFT TOUCH" concept
	   - The " SENSI-TOUCH " concept
	   - The " MAGIC MIRROR " concept
	   - The " MAGIC OPEN"
	      -SLIDING LIDS
	      -OPENING LIDS
		inventiveness, intelligence, orginality
		uniqeness: distinctive extraordinary
		progressive, seamless, hightect,
		ultimate: advance, outstanding performance,
		cordless, flexibile, simple, communicative,
		comfortable, precision, virtues, inviting,
		expressiveness,experience, breathteaking,
		lively, magical, personality, individual,
		excellence: exclusive ,impressive,
		enjoyable, freedom, inspire, desirable

Left-side vertical labels:

CORE IDENTITY ATTRIBUTES: Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Selectivity CORE VALUES : inventiveness (uniqeness, originality), reliability, high quality, durability, outstanding performance, expressiveness, desirability

categorisation (typicaltity)
solution - typical features (form as such)
AESTHETIC GRAMMER the formal-aesthetic functions (the structural and material)

behaviour - typical features (in the context of use and interaction)
communicative functions
Practical functions (pragmatic, experiental functions; influence the aesthetic structure)

Figure 5. 20. The explicit and implicit design cues embedded in the brand typical 'flush design concept' of audio product range that correspond to the brand character and product portfolio strategy of the company in between 1965- 1996.

The implicit design references behind the products, the messages that are indented to the customers by the company, semantic references of products in terms of brand specific associations are as follows. The core identity attributes defined in design based strategic decision making processes are, Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Inventiveness, Selectivity, Poetry and Diligence. Key personality values of the company are Excellence, Originality, Passion, and Synthesis. The corporate slogans according to these identity claims are 'Bang & Olufsen: We think differently.', 'Danish Hallmark of Quality, The concepts of idea, quality and form ', 'For those who discuss taste and quality before price', 'A Life Less Ordinary ', 1998 'Courage to constantly question the ordinary in search of surprising, long-lasting experiences', 'The best of both worlds: Bang & Olufsen, the unique combination of

technological excellence and emotional appeal'. Coherence with the internal strategic identity, the intention of the company is making well designed aesthetically pleasing products that make advanced technology easy to live with and accomplish emotional experience in use, so the company wants to have a competitive advantage through products on technology, aesthetics and emotional experience in use and appearance (Figure 5.21). These aspects are discussed deeply in design philosophy of B&O section in chapter 5.2.4.
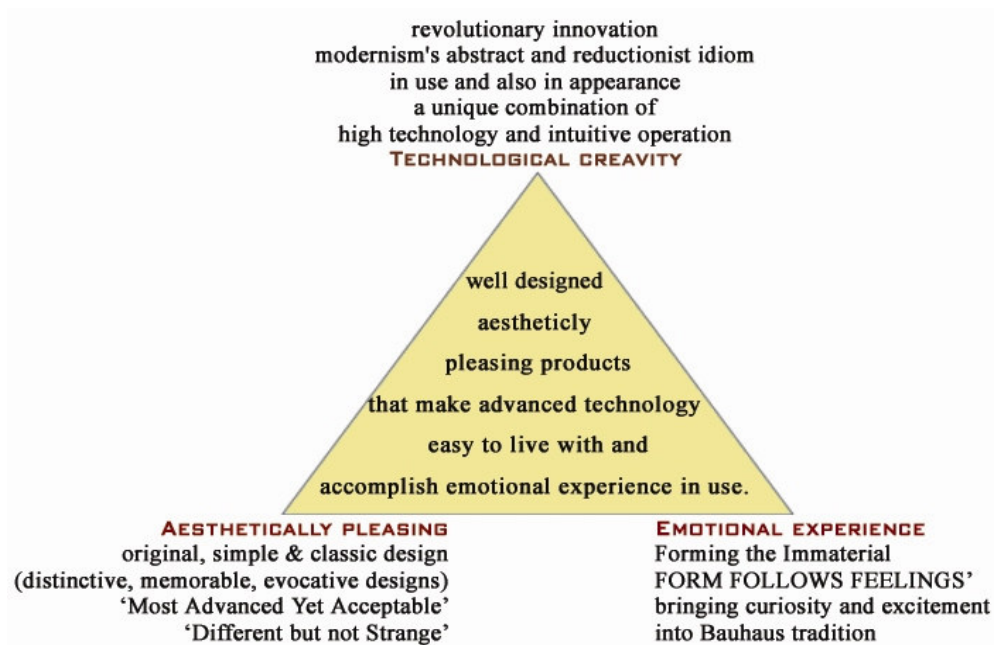
Figure 5. 21. The core competences of products and general form language behind

Verbal descriptions of the key characteristics (qualitative characteristics), implicit design cues behind the design philosophy of the company are; less expression most experience, 'we do not design products we create communication', design is making sense (of things), strong emotional characteristics, characteristic Bang & Olufsen personal feel, creating a unique and high differentiated products, adding surprise and magic to products, make the user feel like magician, 'A characteristic Bang & Olufsen personal feel', the symbolic value attached to the products, giving the consumer a saturated experience of value, breathtaking products more than an object in home, long-lasting experiences. While designing products the design philosophy of the company depends on the questions such as 'How does product design support brand's identity?', 'Does the product make a difference?', 'Is it new and exciting? Will it stand the test of time?'

Table 5. 6. Verbal descriptions of the key characteristics (qualitative characteristics) and implicit design cues behind the design philosophy of the brand.

NON-TRACEABLE (IMPLICIT) DESIGN ELEMENTS AND CHARACTERISTICS:
can not be attached to a physical design replica can be verbally described = ~ indirect definitions =~close to immaterial values =~ hard to immitate =~ flexibile use of the design elements =~ Flexibility, novelty, revalution =~ Change the prototypicalty in the category it belongs =~ constructed by strings of signs =~ subconscious perception =~ stringed references =~ subjective or objective for the target customer =~ subconscious recognation=~ metaphorical associations =~ connotative references =~ partial characteristics =~ implicit recognation

VERBAL DESCRIPTION OF THE KEY CHARACTERISTICS (QUALITATIVE DESCRIPTIONS, IMPLICIT DESIGN CUES IN DESIGN PHILOSOPHY OF BANG & OLUFSEN)
- less expression most experience
- 'we do not design products we create communication'
- design is making sense (of things)
- strong emotional characteristics, A characteristic Bang & Olufsen personal feel'
- Creating a unigue and high diffentiated products.
- adding suprise and magic to products, make the user feel like magician
- The symbolic value attached to the products, giving the consumer a saturated experience of value..
- breathtaking products more than an object in home, longlasting experiences
- 'Poetry is the surprising silent opening of the doors and the unfolding of the product as a flower'.
- A Symphony of movements
- entriching the experience by having a suprise feature

'Does the product make a difference?','Is it new and exciting? Will it stand the test of time?'
- enriching " the emotional side of the product ", accomplishing emotional experience in use
      ' MAGIC OPEN ' , *Over all gelstalt appearance change in use*
      Unusual mechanical movements. Hiding secondary controls under a lid with pure,compact forms inviting user closer investigation. An invitation to embrace (distance, closeness, touch)
- changing all established ideas about how a receiver should look: Flush design concept
      FLOATING FORMS IN HORIZANTAL DESIGN PROFILE, PLAIN BLANK SURFACES, DEPRESSED KNOBS TRULY FLUSH WITH SURFACE, OPERATION FROM THE TOP

The core values of the company based on these strategic intentions are originality, innovativeness, user friendless, durability, reliability magical (Figure 2.22).

CORE BRAND VALUES OF BANG & OLUFSEN

INNOVATIVE
synthesis, advanced, intelligence, Inventiveness, outstanding technical performance, hightect, ultimate, discovered, virtues, expertise, excellence

ORGINALITY
seamless, uniqueness, radicall, extraordinary, individual, distinctive, progressive, curious

USER FRIENDLESS
Easy to use, easy to live with, simplicity, comfortable, flexibility, functional, freedom, integration, intelligentcommunicative, inviting, cordless, Virtues, comfortable, ergonomic

identity claims:
Authenticity, Inventiveness, Essentiality, Autovisuality, Selectivity, Domesticity, Poetry, Diligence
Key personality values:
Excellence, Originality, Passion, Syntesis

MAGICAL
Added value, self-expression, playfull learning,active fun, endless ideas, intuitive, Breathteaking, lively, exciting, surprise, amazement, inspire, desirable, sensible, playfullness, sharing, sociable, yearning, amused, enjoyable, enjoyment, entertainment, experience, favourite, personality, fantastic, future, idea, dreams, expressiveness, desirability, inspire

DURABILITY, RELIABLILITY
high quality, trustfull, flawless, precision, ensure, endurance, honest, powerful, genuine, perfect, expertise, high performance with style,

AESTHETICALLY PLEASANT
Pleasant excited: inspired, desiring, loving
Pleasant calm: satisfied, softened
fascination, timeless, exclusive, admaring, amazed, authentic beauty, refined minimalism, lightnes, cleanless, simplicity, calm, cool, state-of-the-art, piece of art, sculpted, beautifull, pure, elegant, striking, attractive, stunning, impressive, luxurious, spectacular, pleasing, desirable, favourite, luxurious, individual

Figure 5. 22. The implicit design cues embedded in products.

Generally, the strategically defined messages are transmitted to the customers through the following features of products across the product portfolio of the brand that are embedded in brand typical flush concept design by a continuously renewal design driven innovation product strategy. These are the most important characteristics of products that make the product range of the company distinctive from other brands. The unusual mechanical movements which are reflected to different design features of products in syntactic and pragmatic contents (levels) and make the over all gestalt appearance of products change in use so enriching the emotional side of the product, accomplishing emotional experience in semantic level. The designers of the brand aim to invite user closer investigation by hiding secondary controls under a lid with pure, compact forms which gives a delight to the eye, calm acceptance in mind, define this aim as an invitation to embrace (distance, closeness and touch). As discussed deeply in previous sections, the company aims to change all established ideas about how a audio product should look and be used (floating forms in horizontal design profile, blank, plain, smooth surfaces, depressed knobs truly flush with the surface, operation from the top).

5.4. Brand Recognition, Association and Distinction through Brand Design Cues in '1996- 2004 Period' Audio Product Range

In this section, three characteristic products launched in between '1996- 2004 period' of Bang & Olufsen audio product range will be examined through the approach of Design Format Analysis (DFA) developed by Warell. The aim is to determine 'whether or not' or 'what degree' they incorporate the characteristic features of brand specific flush design concept that takes its shape since 1965 until 1996 (Warell 2001). The aim is to analyze in which level and in what degree the design characteristics of products of this period incorporate the design elements and characteristics of recognizable and distinctive Bang & Olufsen typical 'flush design concept' and give existence to visual brand recognition to the previously designed products. From Warell's formal syntactic perspective, the visual product identity of a brand is based on sharing a consistent set of common design cues which carries the semantic content and creates recognition through visual resemblance (Warell 2001). As indicated previously, B&O typical flush design concept embodies explicit design cues and implicit design cues in syntactic, semantic levels and also pragmatic level (that influence syntactic

grammar so semantic interpretation) of design language (product identity). It is aimed to find out the most/less typical features and most/less typical product that incorporate brand recognition and distinction by both explicit and implicit cues.

After visual scanning of products through the design history of B&O in terms of their significant influence on brand recantation in worldwide with the thoughts and the intentions of the designers (and also brand) behind the scanned products, the selected and identified most visually characteristic design elements and features are compared pair wise with each other with respect to representative character of a certain visual element for all models and the visual coherence of a number of different products to find out typical brand style. Then, the most characteristic visual elements and features of this B&O typical brand style (flush design concept) in syntactic, pragmatic and semantic level are now assessed by format analysis in a design format matrix with respect to their presence in the last three models launched in between 1996- 2004. The approach of Design Format Analysis (DFA), developed by Warell explores the occurrence of selected design features among a variety of products in terms of syntactic product qualities (Warell 2001). Although Warell analyzes only explicit design cues in terms of syntactic product qualities, in this thesis, the semantic and pragmatic contents of designed products are included in Design Format Analysis by giving specific importance to brand specific meanings (the core brand values and brand design philosophy) behind the products to analyze the explicit and implicit design cues that construct the visual recognition and distinction in last three products. Because as indicated in literature; syntactic, pragmatic and semantic dimensions of products are closely interlinked (Figure 3.10). And as indicated before strategic intentions of Bang & Olufsen (brand identity attributes, brand message, values, ideas and design philosophy) have references (semantic references) embedded in product properties (brand specific design elements, design cues of the brand) in syntactic, pragmatic and semantic levels. Bang & Olufsen specific design cues are typical for the super- ordinate level category (solution-typical features; forms as such) and sub-ordinate level (behavior-typical features; use, interaction). As a reflection of company's aim in making well designed aesthetically pleasing product that make advanced technology easy to live with and accomplish emotional experience in use, the core competence of Bang & Olufsen's products are in three areas; the product's aesthetic appearance, styling (the formal-aesthetical function of products), the product's functional and innovative performance (practical functions; operation and technology, performance, ease of use, ease of

understanding), the product's experience (emotional appeal and feel in use and appearance) that three of those are uniquely combined in harmony and all have an individual innovative character.

5.4.1. Design Format Analysis of '1996- 2004 period' Audio Product Range through Brand Design Cues in Syntactic, Pragmatic and Semantic Levels

After defining the design features of 'Typical Flush Design Concept', the selected (last) three audio products launched in between 1996- 2004 will be examined by the approach of Design Format Analysis (DFA) to determine whether or not they incorporate these features from the format bank of the company. While determining the ingredients of 'Typical Flush Design Concept' on different levels (the most characteristic visual elements 'typical characteristics', their typicality in the category where they belong 'the categorization of product characteristics' and design references in gestalt design and single design elements through visual scanning by format analysis, as indicated before, they were selected through more objective approaches and it is aimed to decrease the 'subjectivity factor' in selection criteria by giving specific importance to the thoughts and intentions of the designers (and also brand) behind the scanned products. The design characteristics of products that the company itself had defined as the brand's design cues were the starting point for the selection. Because while analyzing the explicit cues that construct the visual recognition through the product portfolio, it is important that features that are deemed most important or otherwise relevant for visual recognition are selected from an initial analysis of products either through subjective selection or through more objective approaches. Now, the occurrence of selected design features of brand typical flush concept among these three products will be examined to determine how well they maintain recognition by visual resemblance through formal syntactics as that recognition related mainly to the syntactic level. As indicated before pragmatic contents of flush design concept ('magic mirror', 'soft touch' and 'sensi-touch' concepts, unusual mechanical movements, operation from the top, depressed knobs flush with the surface) that influence the overall aesthetic (syntactic structure) appearance and the semantic content of the audio products of the brand are included in Design Format Bank of the brand.

The syntactic level of product identity involves the recognition of something perceived previously. Bang & Olufsen has developed and consistently used specific/explicit design cues to communicate Bang & Olufsen identity, for example through repetition of specific elements in multiple models, and through re-use in several generations of models, which creates consistency across the whole product portfolio and in terms visual heritage. For example, without requiring any prior knowledge of Bang & Olufsen as a brand or its associated values, an audio product of Bang & Olufsen may be recognized by elongated, floating, long form with horizontal design profile that is a through going 'black box', nothing in the shape of the device revealed how it works or what it is, or depressed knobs operated from the top. As visual perception and Gestalt psychology suggests, the first exposure to a new product is often characterized by the perception of main features, which attract the eye and provide visual information that, at a later stage, can be used for differentiation from other products of the same type. By repeated and prolonged exposure, more details are perceived, and recognition is ideally strengthened. As discussed previously overall gestalt appearance of products in B&O specific flush design concept catch the eye from a considerable distance immediately that changes the all established ideas how an audio product should look, coherence with the B&O intention in designing extraordinary products.

5.4.1.1. Brand Recognition in '1996- 2004 Period Audio Products through Explicit Design Cues of Bang & Olufsen Typical Flush Design Concept

The table (Table 5.7) suggests a systematic use of Design Format Analysis through between the design elements and features of typical flush design concept and characteristic (selected) three audio products of '1996- 2004 period' range. Based on the list of form elements of flush design concept, three audio product are sorted into three groups (high resemblance, some resemblance and no resemblance) and the stimuli in the groups are given either two, one or zero points according to how great resemblance existed between the studied form element (and characteristics) and the visual product. The degree of occurrence of a specific feature in a specific product (strong, weak, not at all) is marked with a black dot and a white dot (empty circles). Strong occurrence of a specific feature in a specific product is marked with a black dot, for example, product 1

(Beosound 9000) incorporates feature 'elongated (slim, long, flat) form' and weak occurrence with a white dot and no occurrence with no dot, for example, the product 3 (Beocenter 2) does not incorporate rectangular form. By summing up all the occurrences (e.g., black dot scoring 2 points and white 1 point), design features and products are ranked in terms of their importance for visual brand recognition. As Table 5.7 shows, 'product 1'is the most typical product representing flush design concept. And, 'anodized aluminum polished surface', 'floating, plain, blank, smooth, clean surfaces', 'operation from the top', 'unusual mechanical movements' that take explicit references from brand typical flush concept are the most typical design features and characteristics for all products within this analysis. All three products also strongly incorporate the syntactic qualities of general design language of B&O such as 'contrasted colors', 'geometric forms', 'connected volumes, compact forms', 'symmetrician', 'clarity of basic geometric forms', 'discrete clear lines'. These features are explicit brand specific design cues that have been used inherently and continuously through the product portfolio by Bang & Olufsen and make the products aesthetically pleasing in overall gestalt appearance. These features are in design format bank of the company and important impacts on brand recognition through visual resemblance (familiarity) and become important for signifying the brand that they are the designer's implement with the intention to be immediately perceived and recognized. But, they are not exactly brand specific because they can also be used by other companies that prefer modern design style. Thus, these brand specific design elements (explicit design cues) in design format bank of the company are not marked with yellow color.

Table 5. 7. The Design Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in order to find out whether or not they incorporate the explicit design cues of 'Flush Design Concept' and so provides brand recognition through visual resemblance.
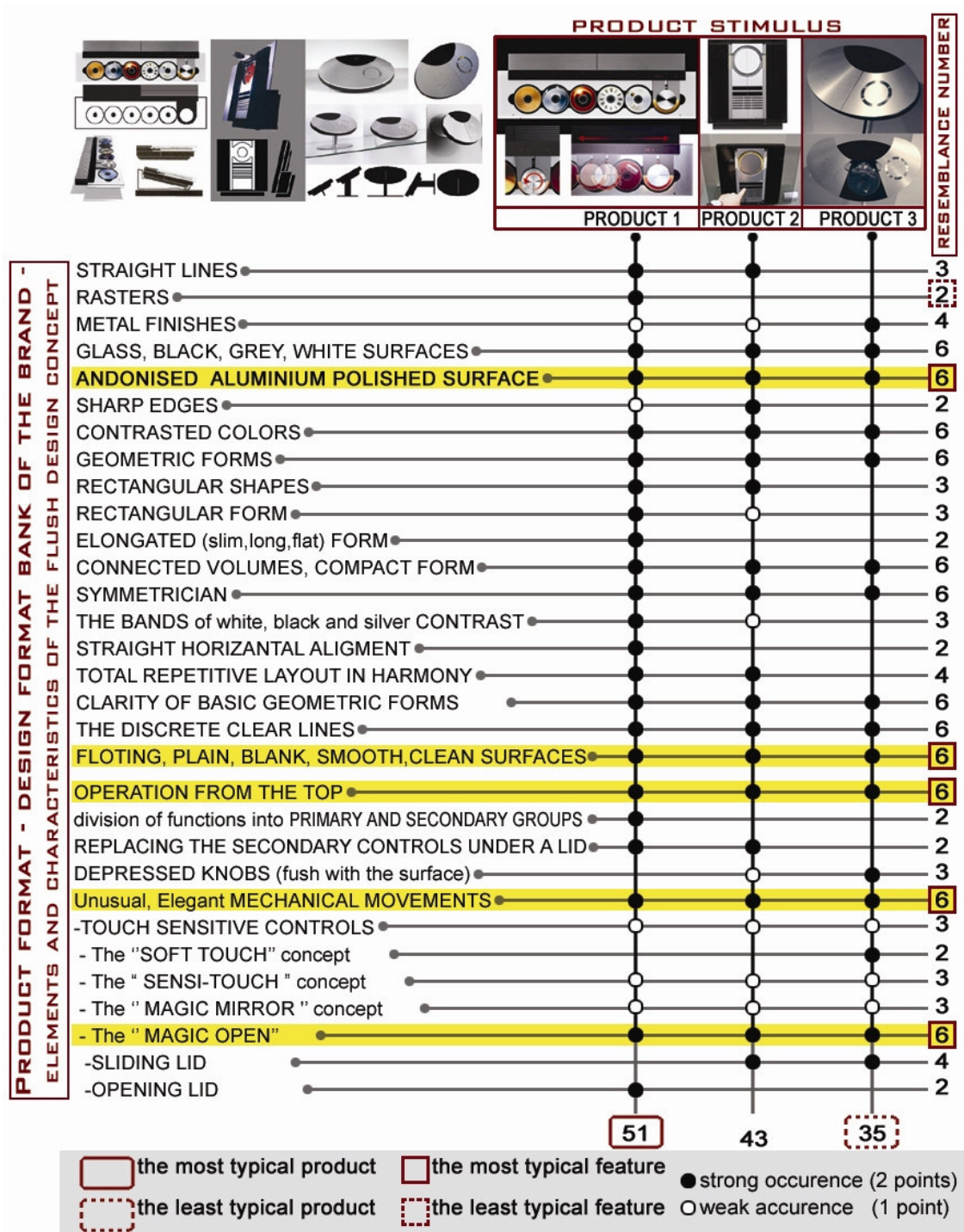
On the basis of the analysis, the Table 5.7 is generated showing the resemblance number for each audio product stimulus (of 1996- 2004 period) together with the sum for each of the specific form element. The horizontal rows indicate the accuracy of

styling features of the common design format (the brand typical flush design concept) of the product family that has taken its shape since 1965 until 1996. Some styling features (design elements and characteristics) are more frequently employed than others, thus representing more significant ingredients of the common design format and provides brand recognition through product design. The structure and nature of visual elements enable recognition through visual similarity within the same brand, in other words which carry the semantic content and create recognition through visual resemblance. The ingredients of the common design format (the flush design concept) are noted in the horizontal row. When dissecting the form of the products of the product family, it is evident that some styling features, ingredients of the whole visual appearance, are more commonly used than others. These are, e.g., form elements such as slim geometrical forms with plain, smooth, clean surfaces and connected volumes, other styling features such as anodized aluminum polished surfaces, grey, black- colored surfaces, glass surfaces metal finishes in contrast. Individually, some of these ingredients of visual aesthetic structure are not unique to the styling of Bang & Olufsen products, but used consistently together in a common design format, they become important for signifying the brand. And practical functions that influence the general style of the products and unique for Bang & Olufsen products such as the unusual mechanical movements, the operation from the top are common for three products. Vertical rows indicate the degree conformance of each product to the common design format. Some products employ more styling ingredients from the common design format, thus represent 'stronger' products in terms of product identity.

Filled circles (two points) indicate a strong correlation between specific product design and product family design format, the empty circles indicate a weaker correlation (one point). Through the selected audio product family from 1996- 2004 period product range, the Beosound 9000 (product 1 launched in 1996) is the most typical product that incorporates the characteristic design elements and features of brand typical flush design concept where the Beocenter 2 (product 3 launched in 2004) is the less typical product with its most noticeable upright elliptical form. Although the characteristic gestalt elliptical shape of the product represents a radical change and novelty in design language, the product incorporates familiar design elements such as and the most noticeable depressed circular button (brand typical 'soft touch concept', the unique button-less operation').

The design of new products after 1996 includes references from the collected visual appearance of the company's image in the mind of the customer that has taken shape until 1996. The product family of audio product range in between 1996- 2004 is efficiently communicated visually and has a clear and unambiguous identity on the market that the design elements of the products employ styling features from a common design format of the company where they will all be perceived as referring to each other. Visually, it is fairly evident that all products come from the same manufacturer. The overall form design theme for the products is similar, yet each product employs its own design format; has its own unique appearance, at the same time, they can all be considered sharing a common design format that of the audio product family.

In B&O, brand heritage included a strong design component. The new B&O design approach and specific design elements include explicit references to many past models. Although there are various determinants of design exist it is not difficult to define clear paths of historical representations. So the new design approach, visual identity of the products that were launched in between 1996-2004 by the push of revised identity claims in B&O United Program, preserve the brand heritage well and thus strongly maintain brand recognition. Although the new products have their unique characteristics in overall gestalt appearance and detail designs, they have consistent design features, clear references to the brand specific flush design concept that had taken its shape in between 1965 – 1996. As discussed previously, up until the early years of the 1996's, various products incorporated certain common elements.

In Table 5.7 the total resemblance number for 'the product 1' was 51 points and 'the product 2' is 43 points and for 'the product 3' is 35 points. So the product 1 was found as the most typical product that incorporate the explicit design cues of 'flush design concept' (that utilize clear design references from the 'design bank' of the brand) and so provides brand recognition through visual resemblance for the customers that have previous experience with the brand. Although the degree of recognition embedded in last three products (new product range), existence of recognized likeness to previously designed products is being decreased from 1996 (product 1) to 2004 (product 3), they can be recognized as the products of same manufacturer (Bang & Olufsen, if the customer has known the brand previously) as they all take high 2 points (strong occurrence) on the most typical design characteristics of brand typical flush design concept. But the degree of implicitness in recognition is increasing from 1996 (product 1) to 2004 (product 3) because the resemblance number is decreasing.

5.4.1.2. Brand Recognition and Distinction in '1996- 2004 Period Audio Products of Bang & Olufsen Through Explicit and Implicit Design Cues

In Table 5.7 the existence of recognized likeness in overall gestalt and individual design elements between brand specific flush design concept that takes shape since 1965 until 1996 and the last audio product range were analyzed in order to find out whether or not they incorporate the explicit design cues of 'Flush Design Concept' and so provide brand recognition through visual resemblance. In this section, the existence of recognized likeness through explicit and implicit brand specific design cues in between three products (new product range launched in between 1996- 2004) will be analyzed. The design elements and characteristics (product properties, brand specific design elements, design cues of the brand) of these three audio product will be analyzed in syntactic, pragmatic and semantic levels in detail by giving specific importance to implicit design cues such as the thoughts and intentions of the designers (and also brand) behind the products reflecting the core brand values and brand specific design philosophy to consider that although every product of new product portfolio (1996- 2004 period audio products) represents a revaluation by its own characteristics and features, they are still sharing a common design format supporting a coherent visual brand identity.

In Table 5.7, the degree of reference relation, the existence of recognized likeness between new product portfolio (1996- 2004 period audio products) and previously launched products (1965- 1996 period audio products) were analyzed. In this section, the degree of reference relation, the existence of recognized likeness in between new product portfolio (1996- 2004 period audio products) will be analyzed. The tables below (Table 5.8, Table 5.9, Table 5.10) are The Design Format of Analysis of new product portfolio of Bang & Olufsen in syntactic, pragmatic and semantic levels in detail. Warell provides a conceptual framework for handling a brand-specific design language, and an analysis tool for identifying merely explicit design references (Warell 2001). The message behind the explicit design cues and pragmatic content that influence the aesthetic structure are not considered in Warell´s Design Format Method. In Warell's design format analysis, products of brands (in single product level and product portfolio level) are analyzed according to which shapes and styling features (in

terms of the syntactic aspect of design language) that are repeated over the product portfolio and only (visual) formal-aesthetic structure of the brand's products are addressed in this thesis not only the syntactic level and also both semantic levels and pragmatic level (that influence syntactic grammar so semantic interpretation) of design language (product identity) with the thoughts and intentions of the designers (and also brand) behind the scanned products are taken into consideration. Karjalainen does not provide an as clear framework for the construction of a brand specific design language as Warell does (Warell 2001, Karjalainen 2004). However, Karjalainen discusses the brand-specific references more in depth on how and where they occur, how they can be identified and what they communicate. He stresses the importance of studying embodied brand specific meanings in products reflecting brand identity (linguistic definitions of their semantic references to brand identity attribute - brand identity definitions). Karjalainen proposes a general guideline, relevant issues for companies and designers of company that are important to be aware of and should take into consideration when designing for a brand in terms of creating brand specific design language (Karjalainen 2004). The analysis below, it is proposed a particular combination of both approaches.

The syntactic, pragmatic and semantic contents of products are included in Product Format Analysis. Because, firstly, the brand specific meanings are embedded in products of Bang & Olufsen in three areas, as that the aim of the company is making well designed aesthetically pleasing products that make advanced technology easy to live with and accomplish emotional experience in use and also in appearance. The core competence of Bang & Olufsen's products are in three areas; the product's aesthetic appearance, styling (the formal-aesthetical function of products), the product's functional and innovative performance (practical functions; operation and technology), the product's experience (semantic functions, emotional appeal and feel in use and appearance) that three of those are uniquely combined in harmony and all have an individual innovative character. Secondly, as indicated in literature material, syntactic, pragmatic and semantic dimensions are closely interlinked. Without semantic dimension, material and syntactic dimensions would have no pragmatic value. Syntactic qualities cannot be associated with the use of the product (pragmatics) without a semantic framework. Pragmatics presupposes both syntax and semantics. Similarly, it could be argued that semantics and syntax have no existence outside pragmatics, while

any semantic or syntactic analysis is a pragmatic invention. Semantics and syntax are thus constructed through pragmatics (Sless 2002).

The product format analysis tables (in syntactic, pragmatic, semantic levels) created below should by no means be seen as complete (in describing all factors of the different audio products) merely as a table describing some of the main form elements (entities) and characteristics that are occurring repetitively among the product portfolio of B&O (design elements of brand typical flush concept, 1964-1996) and among the studied last three audio products (the new product portfolio of B&O) which seem to have radical changes in overall gestalt appearance. As indicated before, by the push of the revision of identity claims in the 1998 'B & O United' program, the representative of the strategically defined new design approach, the three characteristic audio product launched in this period, are the Beosound 9000 (launched in 1996), the Beosound 3200 (launched in 2003) and the Beocenter 2 (launched in 2004). While constituting the structure or physical dimensions of new product portfolio in between 1996-2004, the components of product format in tables are selected from the most important design elements and characteristics (visually characteristic elements) which were determined by visual scanning of the respective products in the design history of the brand (through the chapter 5.3) and new product portfolio. Because, firstly, the aim is to identify and show that although the new product portfolio of B&O have radical changes in overall gestalt appearance, they (each of which individually) incorporate the design elements and characteristics of 'flush design concept' and the brand's visual design history, and so, although the degree of novelty in single product level is high in 1994-2004 period compared to other previous periods, but also the visual portfolio strategy of Bang & Olufsen is again in balance between novelty and continuity and the company has still conceived and give existence to visual brand recognition through design. The brand builds a product portfolio in coherence reinforcing a consistent brand identity. And although, as design format analysis in Table 5.7 shows (the total resemblance number for 'the product 1' was 51 points and 'the product 2' is 43 points and for 'the product 3' is 35 points) the 'product 3, Beosound 3200 (launched in 2003)' is less typical product that provides brand recognition through visual resemblance in more implicit level compared to 'the product 1' and 'product 2', the design elements and characteristics of new product portfolio of the brand incorporate family resemblance supporting a coherent visual brand identity. And secondly; by product format analysis tables in syntactic, pragmatic and semantic levels, the aim is to support a basement for the

analysis in chapter that investigate the relation (link) between the brand character (values) and design features by the method of semantic differentials, developed by Osgood (Osgood 1957).

In the tables below (Table 5.8, Table 5.9, Table 5.10) the contents of pragmatic, syntactic and semantic dimensions of products are listed in product format bank of the brand. The selected and identified most visually characteristic design elements and features in syntactic, pragmatic and semantic levels are compared pair wise with each other with respect to representative character of a certain visual element for all models and with respect to their presence in the last three models launched in between 1996-2004. The occurrence of a specific feature in a specific product points (by also comparing with other products) is graded with 2 points, 1 point and no (0) point. If it is listed what the meaning of these points represent in order, it is such as following; 'strong- weaker- not at all' correlation, 'high- some- no resemblance', 'high- some- no association'.

Vertical rows (vertical row for product 1, vertical row for product 2 and vertical row for product 3) indicate the degree conformance of each product to the common design format. The total point at the end of the vertical row indicates, in what degree the product employ styling ingredients from the common design format, thus represent 'stronger or weaker' product in terms of product identity (in semantic, pragmatic and semantic levels) when compared to totals of other products (stimulus) in the table.

The ingredients of the common design format (the flush design concept) are noted in the horizontal rows. The horizontal rows indicate the accuracy of styling features of the common design format (the flush design concept) of the product family that has taken its shape since 1965 until 1996 and also new design features of '1996-2004 period audio products'. The total point at the end of the each horizontal row indicates how great resemblance existed between the studied form element and characteristics from the common design format and the stimulus products. Some styling features are more frequently employed than others, thus representing more significant ingredients of the common design format. If the total point at the end of the horizontal row is 6 (resemblance number), it means that all of each product is taken 2 points in design format matrix, and thus sharing a common design format. The design element and feature in that horizontal row graded in 6 points is typical for all three products. If the other two products get 0 point for a design format (does not incorporate that design

element or figure) and only the one takes 2 points, it means that this product is typically differentiated from other two products.

5.4.1.2.1. The Product Format Analysis of '1996- 2004 Period' Audio Product Portfolio in Syntactic Level

In the product Format Analysis table of Bang & Olufsen's '1996- 2004 period' audio product portfolio in syntactic level (Table 5.8), the systematic view of design elements and gestalt is applied and design elements are regarded as hierarchy. As is also suggested in the frame of Warell brand references (recognition, differentiation) can be located on in different levels such as gestalt design, characteristic shapes and single design elements (Warell 2001). In Table 5.8, the verbal description of the form elements (entities) in product format bank in red color represent the most typical visual elements of brand typical flush concept which was determined by their the visual coherence of a number of different previously launched products among the product portfolio of B&O since 1964 until 1996. The others represent the design elements of new product portfolio.

Table 5. 8. The product Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in syntactic level

Form Entity (Product format)	Product 1	Product 2	Product 3	Sum
Total body apperance	*35*	*32*	*30*	
Shape	*18*	*16*	*14*	
Rectangular Shape (straight, horizantal) *(reference to flush design concept)*	2	0	0	2
Rectangular Shape (vertical)	0	2	0	2
Circular Shape (curved)	0	0	2	2
Straight (horizantal) outline *(reference to flush design concept)*	2	0	0	2
Vertical outline	0	2	1	3
Slim cross section *(reference to flush design concept)*	2	2	2	6
Symmetrices	2	2	2	6
Elipse (elliptical) forms	0	0	2	2
Rectangular forms including screen *(reference to flush design concept)*	2	2	0	4
- Elongated rectangular form *(reference to flush design concept)*	2	0	0	2
- Vertical rectangular form	0	2	0	2
Compact form *(reference to flush design concept)*	2	2	2	6
Connected Volumes	2	1	1	4
Total repatative shape layout	2	1	0	3
Non- repatative shape layout	0	0	2	2
Lines	*11*	*10*	*10*	
Repeating Lines	2	2	0	4
Non-repeating Lines	0	0	2	2
Curved Lines	1	1	2	4
Straight Paralel Lines *(reference to flush design concept)*	2	1	0	3
Sharp edges *(reference to flush design concept)*	2	2	2	6
- Distinct side lines *(reference to flush design concept)*	2	2	2	6
- Flat bottom line (straight side line)	2	2	0	4
- Smooth side and bottom line - Smooth edges (convex side line)	0	0	2	2
- Non distinct sidelines	0	0	0	0
Colors	*6*	*6*	*6*	
Contrasting collors (Black / aluminium) *(reference to flush design concept)*	2	2	2	6
Bands of black and silver contrast *(reference to flush design concept)*	2	2	2	6
- Pointed upward	0	0	1	1
- Pointed downward	0	0	0	0
- Paralel (straight) *(reference to flush design concept)*	2	0	0	2
- Neutral	0	0	1	1
- Multiple (pointed upward, downward and paralel -vertical)	0	2	0	2
Buttons (knobs)	*3*	*3*	*4*	
Depressed knobs flush with the surface *(ref. to flush design concept)*	1	1	2	4
Circular buttons and Non- repetitive shape layout for buttons	0	0	2	2
Rectangular buttons and Total repetitive shape layout for buttons	2	2	0	4
Doors	*4*	*4*	*4*	
Transparent (doors)	2	2	0	4
Not Transparent (doors)	0	0	2	2
Rectangular (doors)	2	2	0	4
Eliptical (doors)	0	0	2	2
CD slots (On the top surface) (reference to flush design concept)	*2*	*2*	*2*	
Multiple (horizontal alignment in a row along the length of the machine)	2	0	0	2
Single	0	2	2	4
CD changer (On the top surface) (ref to flush design concept)	*4*	*4*	*4*	
Visible when not used	2	2	0	4
Non visible when not used	0	0	2	2
Rectangular (vertical aligment) with curved bottom line	2	2	2	6
Total for Syntactics	96	90	86	

Although the table can be discusses from various perspectives and includes many results, the most important results of the Table 5.8 are such as follows:

The Table 5.8 which is generated by the sums of the resemblance number for each product together with the sum for each of the specific form elements shows that the total resemblance number of products are nearly same such as 96 points for the product 1 (Beosound 9000, launched in 1996), 90 points for the product 2 (Beosound 3200, launched in 2003) and 86 points for the product 3 (Beocenter 2, launched in 2004). So the new product portfolio of Bang & Olufsen is in coherence reinforcing a consistent visual brand identity. The overall syntactic structure of the products enable brand recognition through visual similarity (family resemblance, brand typicality) supporting a coherent visual brand identity.

As indicated before, the most important characteristic of brand typical flush design concept (that takes its last shape 1996) in overall gestalt appearance is emphasizing floating horizontal (straight) design profile by the composition of design elements in different levels (forms, shapes, lines, colors) of brand typical flush design concept in syntactic level such as elongated rectangular forms in slim cross section, contrasting colors in bands of black and silver contrast, straight parallel lines in total repetitive shape layout. As the result of Table 5.8 shows product 1 (Beosound 9000, launched in 1996) can be recognized more easily by users that have pervious experiences with B&O's audio products. The product 1 provides brand recognition in more explicit level compared to product 2 and product 3 by utilizing the past experience of consumers with the brand, because it (Beosound 9000) carries visual resemblance (explicit cues) to the previously launched products in its basic form. It is the representative of the characteristic elongated long flat form of previous products, although the overall appearance of the product is transparent (is not 'elongated compact box' like other products designed in flush concept). And in the Table 5.8 product 1 takes again higher points (96 points) than product 2 (90 points) and product 3 (86 points) as product 2 and product 3 have nearly same points such as 90 and 86. This means that, firstly, generally vertical design profile (vertical alignment) of last two products (product 2 and 3) as a radical change in overall gestalt appearance (novelty, revaluation in design) differentiates them from product 1, but all three products, as the representatives of new product portfolio of the brand, share a certain number of common visual elements and characteristics in details and create a 'family resemblance' as shown by the total resemblance number (98, 90 and 86) of the products in syntactic

level and also they are graded high on same design elements and characteristics from the format bank of the brand (6 points marked with yellow color are the form elements of brand typical flush design concept). And secondly, in overall gestalt appearance, product 2 and product 3 are not truly look like each other at first glance with their vertical alignment in rectangular (product 2) and elliptical (product 3) form and transparent rectangular doors- not transparent elliptical doors. But they incorporate certain amount of design elements and characteristics from the format bank as the total resemblance numbers of these two products in syntactic level are closely the same (90 and 86 points).

Although the product 3 represents a radical change in brand typical flush design concept with its elliptical form in overall gestalt appearance, as it takes 35 points (product1 51 points and product2 43 points) in Table 5.7 and defined as less typical product in flush design concept, it has reference relation to brand typical flush design concept. The product 3 carries strong explicit cues, with anodized aluminum polished surface treatment, circular button truly flush with the surface in lower order elements (details), with its slim, blank, compact form (not in the shape of device revealed how it works and what it is) in superior product gestalt level. As also the results of Table 5.8 and 5.7 show, although overall gestalt appearance of the product 3 (Beocenter 2) points a radical change in design with its elliptical form, it gives existence to recognized likeness, provides brand recognition through visual resemblance. The product 3 takes 35 points in table 5.7 and its recognized likeness to previously designed products in flush design is lower than product 1 (51 points) and product 2 (43 points) so provides brand recognition in subconscious level (implicit recognition) rather than other two products. But it takes 86 points in Table 5.8 that is nearly same with product 2 (90 points) and close to the product 3 (96 points).This means that although the new product portfolio of Bang & Olufsen launched in between 1996- 2004 remarks a revaluation and each product has its unique characteristics, the products of this period incorporate certain amount of visual coherence and resemblance supporting a coherent visual brand identity.

The design elements and characteristics of products in 1994- 2004 period do not give direct references to previously designed products, they involve 'right' brand-specific references in other words 'complete characteristics' (easy and straight forward recognition) among a limited number of perceivers (target customers) and are arbitrary outside this group of subjects. When it is looked the overall gestalt appearance of the

three products, it can be said that they generally look like Bang & Olufsen's audio product but may not be explicitly defined what make them look like that, or, perceptions and associations may take place in subconscious level (implicit recognition) that depend on the ability of perceiver and on the previous experiences of customers with the brand. The design elements of three products have reference relation to historical models in partial (single design element or less prominent (e.g., smaller element) characteristics that may lead to weaker recognition but in the long run brand relevance increases among specific customer groups and may become complete (interpreted by most users, denotative references, explicit recognition, easy, simple, straightforward recognition) for the user that have previous experiences with B&O's audio products.

In Design Format Analysis of Bang & Olufsen's new audio product range in syntactic level, it is seen that the visual product identity of these products have explicit references in overall gestalt appearance and in detail designs to Bang & Olufsen typical 'flush concept design' that has takes its characteristics in between 1965- 1996. But also they have their unique characteristics, which is also in coherence with the overall design philosophy of Bang & Olufsen as that each product must have its own identity in its physical appearance. Although overall gestalt design of '1996- 2004 period' products remark a revaluation in general design language compared to the other periods, the visual portfolio strategy of Bang & Olufsen is again in balance between novelty and continuity in this period and the company has still conceived and give existence to visual brand recognition through design.

5.4.1.2.2. The Product Format Analysis of '1996- 2004 Period' Audio Product Portfolio in Pragmatic Level

As discussed previously, (through the chapter 5.3.1 and especially the chapter 5.3.2) the practical functions, pragmatic content of audio product range influence the syntactic structure and embodies brand specific meanings (semantic content). Uniting all functions in one compact cabinet in flush design concept simplifies the operation and also give simple and uniform appearance to the product. The contents of operating the product from the top, the division of functions into 'primary' and 'secondary' groups, replacing the (secondary or primary) controls under a smoothly opening doors (sliding two sides or opening up right) with flush joints and surfaces make it possible to design

the components in the same level with each other and have a considerable impact on overall gestalt appearance of the flush design concept with horizontal, floating, blank and smooth surfaces and forms and also change the overall gestalt appearance in use that give an emotional character to the products. The brand specific flush design concept in syntactic and also in pragmatic levels are typical for the super- ordinate level category (solution-typical features; forms as such) and sub-ordinate level (behavior-typical features; use, interaction) as that the form language of flush design concept changes all established ideas about how a receiver should look and use. Brand-specific (behavioral-typical) elements become product specific (prototypical) elements because the design is radical enough, in other words, the design language of products change the prototypically (representative of its category) of the audio both in the sense of its appearance and shape and also in purpose and operation (in syntactic and pragmatic levels). In overall gestalt and detailed design of the products (also the pragmatic content of products influence the syntactic structure) can be characterized as novel aesthetics that is visually differentiated from competition and give the products a strong identity.

In the Table 5.9 below, the verbal description of pragmatic contents of the products in product format bank in red color represent the design properties of previously launched products (since 1964 until 1996) and the others represent the design elements and characteristics (pragmatic content) of new product portfolio in brand typical flush concept design.

Table 5. 9. The product Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in pragmatic level

Product format (pragmatic level)	Stimulus			
	Product 1	Product 2	Product 3	Sum
Division of controls into secondary (CD changer , Cdslots) **and primary groups** (switches, adjustments) (reference to flush design concept)	2	2	2	6
Operation from the top *(reference to flush design concept)*	2	2	2	6
	4	4	4	
Primary controls (Buttons, switches, adjustments)				
- Visible	0	2	2	4
- behind a transparent sliding door (glass)	0	2	0	2
- On the ultra-thin polished aluminum faceplate	0 0		2	2
- Non visible (under a portable plastic lid)	2	0	0	2
- ' Magic Mirror Concept ' nothing in the shape of product how it work buttons (sensor-touch surfaces) light up in red. Fingers's electrical capacity causes product to react and light a signal.	**0**	**0**	**0**	**0**
- Depressed knobs flush with the surface	0	1	**2**	3
	2	5	6	
Replacing secondary controls (*CD changer , CDslots*) under a lid (door) *(reference to flush design concept)*	2	2	2	6
- Visible under transparent (glass) lid	2	2	0	4
- Non-visible under Aluminum faceplate (lid)	0	0	2	2
- Sliding two sides (glass or aluminyum) lid	0	2	2	4
- Opening upward glas lid	2	0	0	2
	6	6	6	
CD changer (On the top surface)	2	2	2	6
- Visible CD changer (watching CD mechanism when used)	2	2	2	6
- Rotating	2	2	2	6
- Sliding (Moving clamper automatic CD- positioning)	2	0	0	2
- Non visible when not used	0	0	2	2
	8	6	8	
Smoothly opening Doors (lid in front of secondary controls) *(ref to flush design concept)*	2	2	2	6
Sliding two sides	0	2	2	4
- Just gliding finger along the surface	0	0	2	2
- Open up at the approach of a hand	0	2	0	2
Opening upright (with soft touch or with remote control or automoticly)	2	0	0	2
	4	6	6	
Touch sensitive controls	2	2	2	6
- gliding finger along the surface (no buttons (soft touch concept, buttonless operation)	0	0	2	2
- by an hand approach	0	2	2	4
	2	4	6	
Total for pragmatic	**26**	**31**	**36**	

Although the contents of brand typical 'flush design concept' are incorporated in the design of new products, pragmatic contents of '1996- 2004 period product range' remark a revaluation. The aim of the company was enriching the emotional side of the products, accomplishing emotional experience in use and in appearance, changing all established ideas how an audio product should look as the results of decisions taken in identity treating environmental changes programs appeared in three different periods. In the design of new product range, the products truly become lively and breathtaking through the improvement of technology and unusual mechanical movements. The new concept was called as 'Magic Open' and defined as the core value of poetry ('Poetry is the surprising silent opening of the doors and the unfolding of the product as a flower') which emphasized the personal excitement and emotion that customers (and employees) experienced in relation to the products and design of the brand. And the aim of the company in turning technologically advanced and complex products into something that is easy to understand and use. The dialogue between the product and user is defined by the 'poem' metaphor by the company 'The manifest expression of the dialogue is the product which metaphorically speaking, the poem, which facilitates the continuing dialogue between the writer and the reader regarding the poet's vision.' By simple and well considered mode of operation the products of the company become user-friendly, easy to live with. But these product qualities must be in design of all products. What makes design of Bang & Olufsen products is that the pragmatic content of products embodies emotional values it provides, gives emotional experience in use. The product 2 (Beosound 3200 launched in 2003) and the product 3 (Beocenter 2 launched in 2004) are the representative of 'Magic Open Concept'. The doors in front of the secondary controls are sliding two sides (with a music and a instantly illuminated light reminds space age) by a hand approach. The designer of the company intents to remind the user imagination of caves filled with the most precious treasures with a metaphorical association 'Open Sesame' (The 1001 Arabian Nights, Aladdin and Ali Baba, a picture of mans relationship with music). And switches, adjustments of the product 3 (Beocenter 2) are replaced on the door (on the ultra-thin polished aluminum faceplate in front of Cd slot) with a circular button (truly flush with the surface). And all adjustments are being controlled by this circular button by gliding finger along the surface (soft touch concept, button less operation) which provides emotional interaction with the product for the user. Although circular button flush with the surface is used in previous products in design history of the brand, this time it is truly flush with the

surface and on the lid in front of the secondary functions (Cd slot). These practical functions of the product represent a novelty in design and also influence the visual appearance of the product. The product 1 (Beosound 9000 launched in 1996) and the product 2 (Beosound 3200 launched in 2003) represent a radical change with their transparent design which makes it possible to watch Cd mechanism (visible spinning and sliding cd slot and changer) and gives emotional experience in use, make the product lively and breathtaking in use. These practical functions (pragmatic content) of products differentiate the new models from all others in the product range of Bang & Olufsen and also from the competitors. It is called as 'a symphony of movements' by the company in promotional documents of the brand.

The total point at the end of the vertical row indicates, in what degree the product employ styling ingredients from the common design format, thus represent 'stronger or weaker' product in terms of product identity in pragmatic level when compared to totals of other products (stimulus) in the Table 5.9. The total representative number in pragmatic level for product-1 is 26 points, for product-2 is 31 points and for product-3 is 36 points. As the result of the product Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in pragmatic level shows, product 3 is the 'stronger product' in terms of product identity in pragmatic level compared to other two products, product 2 is the 'weaker product' in terms of product identity in pragmatic level compared to other two products. This means that the pragmatic content of product 3 is accomplishing emotional experience in use and more user friendly (easy to use) than others. Although the product 3 represents a radical change in brand typical flush design concept with its elliptical form in syntactic level, practical functions (pragmatic content) that also influence the overall gestalt appearance of the product give reference relation to previously designed products in brand typical flush design concept. The pragmatic contents of product 3, such as circular button operating all functions by gliding finger along the surface (soft touch concept, buttonless operation) and replacing secondary controls under a lid with pure and compact form (nothing in the shape of product how it works inviting user to a closer investigation, overall gestalt appearance truly changes in use), enable brand recognition through recognized likeness and provide brand specific associations coherence with the core brand values (brand identity) such as magical, originality, user friendless. And as the result of the Table 5.9 shows, the total representative points in pragmatic level of all products are close to each other (product 1 is 26 points, for product 2 is 31 and for

product 3 is 36), so that all products accomplish emotional experience in use. The core values of inventiveness, originality, magicality, essentiality, poetry are incorporated through explicitly definable pragmatic content of products.

5.4.1.2.3. The Product Format Analysis of Bang & Olufsen's '1996- 2004 Period' Audio Product Portfolio in Semantic Level

As indicated previously, the physical design elements and characteristics of the format bank of Bang & Olufsen audio product range (brand specific design cues) were determined by giving specific importance to the brand specific meanings (semantic references) behind them. The coherency in the design qualities of products in single product level and product portfolio level provides brand recognition through family resemblance (similarity, familiarity) by the previous experiences of the users with brand. And also, these syntactic and pragmatic contents of products incorporates strategically defined brand specific meanings and messages such as design philosophy of the brand that reflects core brand values (Figure 5.22). As Karjalainen points out, there appear a "mental" platform for design (key concepts of design in Bang & Olufsen's case) that functions as a basis for all design activities within the company stemming from brand's identity (core values, heritage, etc.) and its intentional communication.

Brand recognition and distinction through product design can be managed through visual resemblance through formal syntactics and also through the development of design features that evoke associations to the brand core values. In the analysis of implicit design cues, the link between the brand character (values) and design features is under specific scrutiny. The implicit brand design cues embedded in the products were deeply discussed in previous sections, while considering and defining the general character of brand in terms of strategic decision making processes of the company, the core brand values, the visual design history with the thoughts and intentions of the designers (and also brand) behind the scanned products, the design philosophy and process of the brand, strategic portfolio management of the company. Karjalainen points out that the significance of implicit experimental knowledge embodies in brand culture and the strategic decisions of brand influence the character of brand specific design cues so as to call they are implicit and explicit. While searching for the brand specific

implicit cues, it is gave specific importance on whether a chosen design feature (or the entire product) reflects the brand core values. For example, does the horizontal alignment of 6 Cd in a row, floating forms in horizontal design profile with slim cross sections, circular button on the ultra-thin polished aluminum faceplate (soft touch concept) communicate the core brand values of originality and inventiveness, or communicate Scandinavian design heritage which is associated with elegance, lightness and cleanness in design or refined minimalism?

In terms of creating connections with beliefs and desires, metaphors, stories and myths that the designer's of the brand aimed to create around the three audio product products are shown in the Figure 5.23. These concepts exactly improve the emotional side of the '1996- 2004 period audio products'. In this period, not only the visual appearance of products changes and the products become lively, breathtaking in use, but also the concepts created around the products create connections with beliefs and desires of the users and provides an emotional interaction with the products. The interpretation and perception of these meanings embedded in the physical design features of the products and their references to brand specific messages (associations with core brand values) takes place in subconscious level from the user side which depends of the ability in decoding that codes as the customers belong to different cultural and social contexts. But the coherency in improving the emotional side of the products across the product range improves the possibility of interpretation of implicit brand design cues (such as magical, breathtaking, exciting, surprising, striking, inspiring, inviting, enjoyable, desirable, communicative, domesticity, inventiveness, high-tech, timeless) in the way that the brand (designer) intents. The concept of products ((implicit, non-traceable design cues) embodied in the syntactic and pragmatic contents of products (e.g, 6 Cds in a row along the length of the machine ready to playback like cd library as framed personalities of family, unusual mechanical movements etc.) give emotional character to the products and incorporated semantic references to the core values and brand identity of Bang & Olufsen such as domesticity, poetry, synthesis, originality, inventiveness, passion.

Figure 5. 23. The Metaphors created around the product 1 (Beosound 9000 launched in 1996) to create connections with beliefs and desires.

Figure 5. 24. The Metaphors, Stories and Myths created around the product 2 (Beosound 3200) and the product 3 (Beocenter 2) to create connections with beliefs and desires.

- characteristic Bang & Olufsen personal feel, strong emotional characteristics
Identity Claims: Core Values: Inventiveness, Essentiality, Selectivity,
Domesticity, Excellence, Synthesis, Poetry, Passion, Originality
(O: Object of reference, brand identity attribute,
the brand message, sign meaning, values, ideas, philosophy)

stringed references associations

The ingredients of the process: meaning creation representation expression knowledge

Symbol index icon

O

I

R

Interpretation context and subject
(I: people, target customer, designer as a customer)

Interpreted as:
authentic beauty, state-of-the-art, striking
High performance with style, attractive,
striking, stunning, impressive
easy, simplicity, comfortable, flexibility,
functional, freedom, integration
fantastic,future, idea, dreams , intelligence,
seamless, unique, radicall, extraordinary
Sharing, enjoyable, enjoyment, entertainment,
experience, favourite, personality

(R: the object of reference, signifier,
Brand specific design element and characteristics,
the design cues of the brand, product properties)
- **6 CD (Cd collection of the family) in a row**
along the length of the machine
framed and hold on the wall ready to playback
resembling framed personalities of family
- **visible sliding and spining Cd mechanism**
resembling old vinly records

Figure 5. 25. Metaphoric associations embodied in explicit (traceable) and implicit (non-traceable) design

cues of the product 1.

Table 5. 10. The product Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in semantic level

	Stimulus			
	Product 1	Product 2	Product 3	Sum
semantic content in brand recognition and distinction				
semantic content (brand recognition through visual resemblance ' familiarity-similarity ' across product portfolio) **It looks like (resembling) other products of Bang & Olufsen (both genuine and stringed reference for the target customer)**	2	1	1	4
semantic content (brand differentiation and so recognition through visual resemblance ' familiarity-similarity ' from other products in the market **It changes all established ideas about how a receiver should look (Genuine reference for both target customer and first encounter)**	2	2	2	6
a- The semantic structure of products 'common' language for the description of specific design features in syntactic and pragmatic level (brand recognition and brand specific associations in implicit level)				
emotional appeal (characteristics) (*adding surprise and magic to products, enriching the emotional side of the product in use and appearance) (both genuine and stringed reference for both the target customer and for the first encounter)*				
a1- changing all established ideas about how a receiver should look unique, high diffentiated, non familiar product (Genuine reference)				
- It is different from competitors (Genuine reference)	2	2	2	6
- it is new and exciting (close to Genuine reference)	2	2	2	6
sub total for a1 Originality	*4*	*4*	*4*	
a2- 'MAGIC OPEN ' open concept				
- overall gestalt appearance change in use (complete characteristics and genuine reference)	1	1	2	4
- breathtaking product more than an object in home (complete characteristics close to geniune reference)	2	2	2	6
- unusual, elegant mechanical movements (partial characteristics close to genuine reference)	2	1	1	4
- accomplishing emotional experience in use (complete characteristics close to genuine reference)	2	2	2	6
- a symphony of movements (partial characteristics close to genuine reference)	2	2	2	6
- 'Poetry is the surprising silent opening of the doors and the unfolding of the product as a flower' (both genuine and stringed references for both the target customer and for the first encounter)	0	2	2	4
sub total for a2 Magicality	*9*	*10*	*11*	
a3- magic boxes				
magic boxes with pure, compact form, nothing in the shape of the device revealed how it worked or what it was, inviting user closer investigation. an invitation to embrace 'distance, closeness, touch') (genuine reference to flush design concept)	0	0	2	2
sub total for a3 Surprising	*1*	*1*	*2*	
magical and original	13	14	17	

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b- Semantic References to the form language of B&O in overall gestalt appearance:			
b1- Formal Aesthetics, Syntactic Structure:			
Competative advantage: The Aesthetic Value of Products (aesthetically pleasing product) (close to geniune reference)	2	2	2	6
- Bauhaus tradition (Stringed and Coupled associations)	2	2	1	5
- modern design (close to genuine reference)	2	2	2	6
- smooth, slick, uncluttered appearance (close to genuine reference)	2	1	2	
- minimalist 'Less is More' (Stringed and Coupled associations)	2	2	2	6
- modernist 'Form follows Function' (Stringed and Coupled associations)	2	2	2	6
- MAYA principle: 'Most Advanced Yet Acceptable', 'Different but not Strange'. original form language (Stringed and Coupled associations)	2	2	1	5
- a design icon (original, distinctive, memorable and evocative design) (close to genuine reference)	2	2	2	6
- Scandinavian style: lightness, cleanness and elegance (Stringed and Coupled associations)	2	1	1	4
aesthetically pleasing product	**18**	**16**	**15**	
b2- Technology and Operation (Pragmatic functions in the context of use that also influence the syntactic structure)			
Competative advantage: The Practical Value of Products (advance technology easy to live with) (Stringed and Coupled associations)	2	2	2	6
- Technological creavity (Innovative) (close to genuine reference)	2	1	2	5
- outstanding technical performance (close to genuine reference)	2	1	2	5
- a unique combination of high technology and intuitive operation (close to genuine reference)	2	2	2	6
innovative	**8**	**6**	**8**	
- modernism's abstract and reductionist idiom in use and appearance (Stringed and Coupled associations)	1	1	2	4
stripping away all the unnecessary	2	1	2	5
- leaving the user with a clear impression of what the product can and should do	2	2	0	4
making technically complex products into something that is easy to *understand*	1	2	1	4
making technically complex products into something that is easy to *use*	2	2	2	6
- simple and well considered operation (essential, functional, user-friendly, easy to live with)	2	2	2	6
- Function creates design and design creates function	2	2	2	6
- Scandinavian conditions (putting priority on durable, practical, simple and long term products that reflect function,	2	1	2	5
Durability - reliability (Stringed and Coupled associations)	2	1	2	5
userfriendly	**16**	**14**	**15**	
innovative and userfriendly	**24**	**20**	**23**	
b3- Experience (in the context of interaction. practical functions that make the product change in use and influence the general syntactic structure)			
Competative advantage: The Emotional Value of Products (accomplish emotional experience in use and appearance) (close to geniune reference)	2	2	2	6
Form follows feelings (bringing curiosity and excitement into Bauhaus tradition)	2	2	2	6
- Forming the Immaterial	2	2	2	6
accomplishing emotional experience in use and appeerence	**6**	**6**	**6**	
Sub Total for semantic	*65*	*59*	*64*	

Table 5. 10. The product Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in semantic level (cont.)

c- DESIGNER'S INTENTIONS (Metaphors, Stories and Myths created around objects to create connections with beliefs and desires) (stringed references, subconscious associations)				
value of *poetry* emphasized the personal excitement and emotion that customers (and employees) experienced in relation to B&O's products and design. *'The manifest expression of the dialogue is the product which metaphorically speaking, the poem, which facilitates the continuing dialogue between the writer and the reader regarding the poet's vision.'*	2	2	2	6
Old vinyl records (spinning on the record player's turntable)	2	0	0	2
Family machine	2	0	0	2
Library machine	2	0	0	2
Angel wings	0	2	2	4
the unfolding of the product as a flower	2	2	2	6
The 1001 Arabian Nights, Aladdin and Ali Baba, a picture of Mans relationship with music	0	2	2	4
Open Sesame (imagination of caves filled with the most precious treasures)	0	2	2	4
FLYING SAUCER				
''change and transformation'', ''changing my mind''	2	1	2	5
''my feelings about the future'', ''wondering what will happen''	2	2	2	6
	14	13	14	
Total for semantics	*79*	*72*	*78*	

Table 5. 11. Total resemblance number of '1996-2004 period audio products' through Product Format Analysis in Syntactic, Pragmatic and Semantic Levels.

Total for Syntactic	*96*	*90*	*86*
Total for Pragmatics	*26*	*31*	*36*
Total for Semantics	*77*	*73*	*79*
TOTAL (for Syntactic, Pragmatics and Semantics)	*199*	*194*	*201*

5.4.2. The Analysis of Brand Specific Associations Embedded in '1996-2004 Period Audio Products of Bang & Olufsen' by the Method of Semantic Differentials

The design features and characteristics of brand typical flush design concept that were graded high on the basis of the tables above were deeply discussed in the pervious sections (Table 5.7, Table 5.8, Table 5.9, Table 5.10). In this section, the ingredients of flush design concept is summarized as 'unusual mechanical movements' which is the most important characteristic of Bang & Olufsen products as a competitive advantage and involves different design features varied in different products. Since 1974 by the launched of Beomaster 6000, overall gestalt appearance of the products changes in use coherence with the aim of company in adding surprise and magic to products, enriching the emotional experience in use, inviting user closer investigation. The aim of 'hiding secondary controls under a lid with pure, compact forms nothing in the shape of device how it works and how its used, an invitation to embrace (distance, closeness, touch)' is generally characterized by 'Magic Open' concept. The unusual mechanical movements make the products appearance change in use.

In the analysis of the link between brand characteristics (values) and design features or products, the method of semantic differentials, developed by Osgood (Osgood 1957) which is the 'first and well-known method to conceptualize characters' will be used. The analyzes are performed on the basis of the tables (Table 5.8, Table 5.9, 5.10) that have been generated in main study Table 5.7. The values are analyzed concerning which design elements and features had highpoint in Design Format Analysis of three products. The associations that specific design elements and features evoke to specific brand characteristics (values) are assessed on a scale ranging from 'not at all associated (1 point)' to 'strongly associated (7 point)'. The aim of the analysis is to in a structured approach investigate the relation between syntactic (aesthetic visual appearances), pragmatic contents of products and implicit brand characteristics.

Based on the results from previous tables (Table 5.8, Table 5.9, Table 5.10), the purpose of the analysis is to see if it is possible to find relations between the retrieved brand characteristics, values and the product formats. In literature, this topic is generally discussed around the theme of 'the relation between emotional (brand) experience and

the visual appearance of the product' that of which relates the need and demand for understanding the user's emotional response towards product appearance in terms of the increasing importance of the aesthetic product form as a competitive factor. But as stated earlier, the emotional experience towards products is dependent on several other factors and it is not the focus of this thesis. The term 'emotional brand experience' is come close to strategic intentions of the brand which are defined as 'value based (non-traceable) implicit design cues, qualitative characteristics' based on Karjalainen's (Karjalainen 2004) research, such as brand core values, mission, goals, key personality values, corporate slogans, qualitative (linguistic) descriptions of design philosophy, general form language in terms of describing the identity domain of product design and the ideas an thoughts behind the designed products (Table 5.10). As Karjalainen states, if semantic differential scales are used to gather impressions of a large quantity of people, rather reliable data of the implicit recognition of the brand character can be generated, but the analysis are performed individually by the thesis person (Karjalainen 2007). The quantitative nature of Design Format Analysis and 'the method of semantic differential' is tried to diminished and reliability of the results is tried to be increased by scanning deeply visual design history of the case brand with the thoughts and intentions of the designers (and also brand) behind the products. As stated earlier, as a conceptual limitation, from the Karjalainen's transmission viewpoint, the consumers are regarded as pure recipients of ready-coded meanings. As that this thesis sets focus on primarily searching how the company (strategically) manages its identity through product design not on investigating how customers actually interpret these messages (and often create unexpected meanings from them), thus by creating and communicating intentional messages.

Table 5. 12. The analysis of brand specific associations embedded in '1996-2004 period' audio products by the method of semantic differentials.

			Product format. The stimulus were graded high on:		
			Transparent doors opening upright with soft touch, visible CD mechanism rotating and sliding. Non visible controls, under a hinged lid, no buttons	Transparent doors sliding two sides, when a hand approaches visible controls behind the glass lids push buttons	secondary controls behind an plain anodized alu. Polished surfaced lid sliding two sides, touch sensitive controls, button-less operation operated by gliding finger along the ultra-thin polished aluminum faceplate (soft touch)
			product1	**product2**	**product3**
		Characteristics			
	Magical	playful learning	3	5	7
		Breathtaking	5	6	6
		exciting	3	5	7
		Passion	3	4	6
		surprising	4	6	7
		inspire	5	6	7
		sociable	6	3	2
		enjoyable	6	6	7
		fantastic	5	5	5
		expressiveness	6	4	5
		inviting	4	6	7
	Innovative	**Synthesis**	7	7	7
		advanced	7	6	6
		Inventiveness	7	5	6
		high-tech	7	7	7
		excellence	7	6	7
	Originality	**Authenticity**	7	7	7
		radical	5	6	7
		extraordinary	7	5	7
		distinctive	7	5	7
		progressive	5	6	7
	Aesthetically pleasant	fascination	6	5	5
		timeless	7	5	5
		authentic beauty	7	5	5
		refined minimalism	7	6	7
		state-of-the-art	7	5	5
		striking	7	7	7
		attractive	7	7	7
		stunning	7	5	5
		luxurious	7	6	7
		spectacular	6	5	4
		desirable	6	4	5
	User friendless	**Essentiality**	6	4	5
		Domesticity	6	6	5
		comfortable	6	5	6
		flexibility	7	5	6
		integration	7	7	7
		Communicative	7	6	5
		Virtues	5	5	7
	Durability	Selectivity	7	7	7
		high quality	7	5	6
		flawless	4	3	5

Identity claims: Inventiveness, Authenticity, Essentiality, Autovisuality, Selectivity, Domesticity, Poetry, Diligence

Key personality values: Excellence, Originality, Passion, Synthesis

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Table 5. 13. The reference relation between product design features and brand values
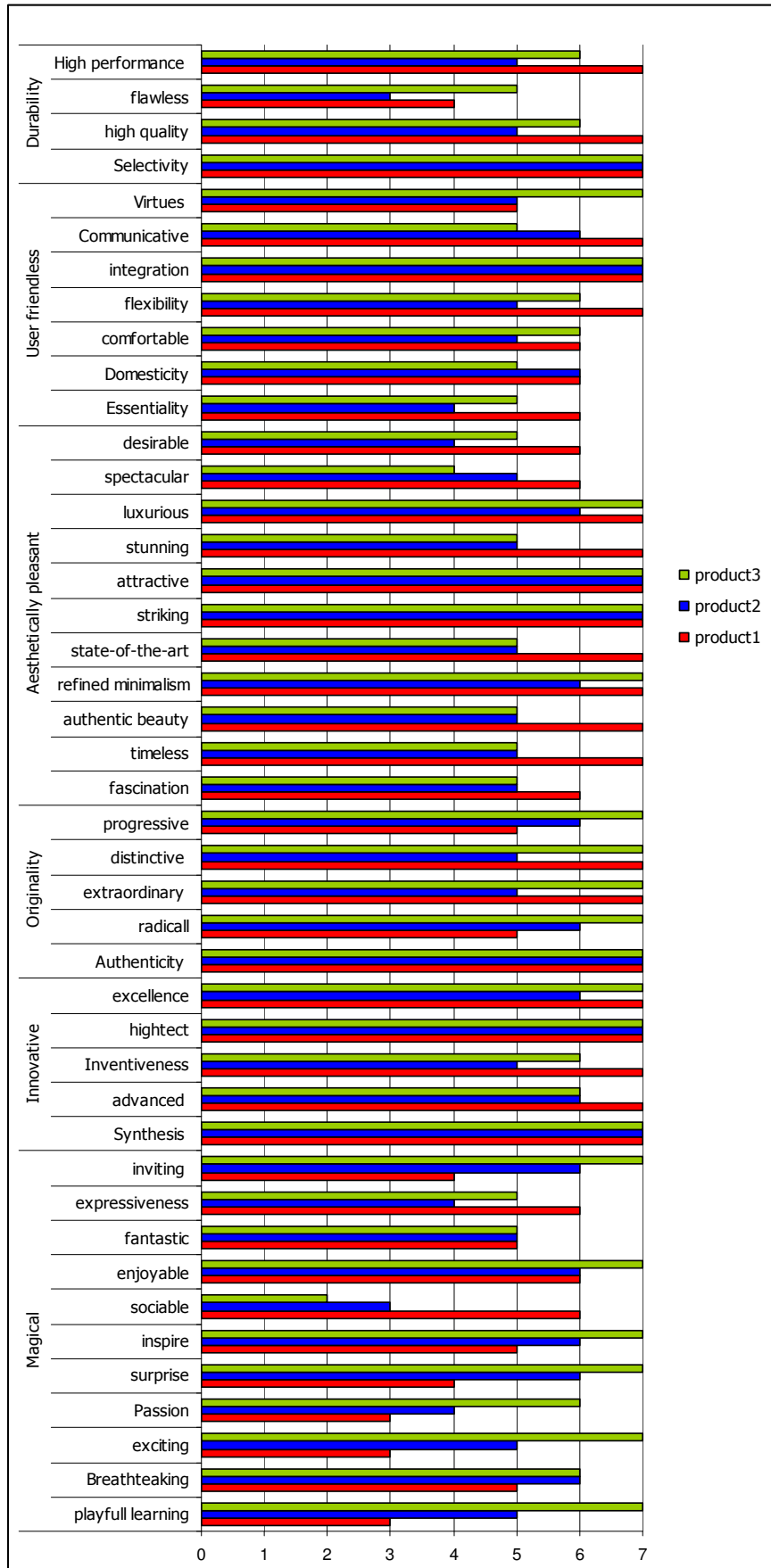
Table 5.14. The reference relation between product design features and brand values.
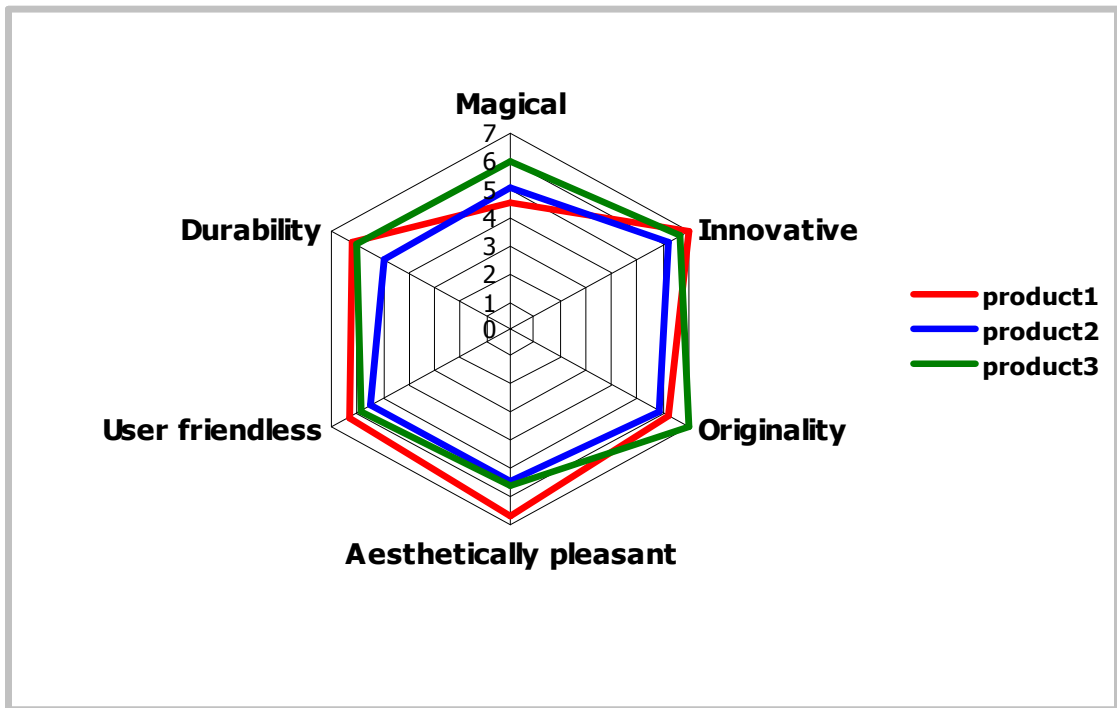
Table 5.15. The reference relation between product design features and brand values.

	Magical	Innovative	Originality	Aesthetically pleasant	User friendless	Durability
product1	5	7	6	7	6	6
product2	5	6	6	5	5	5
product3	6	7	7	6	6	6
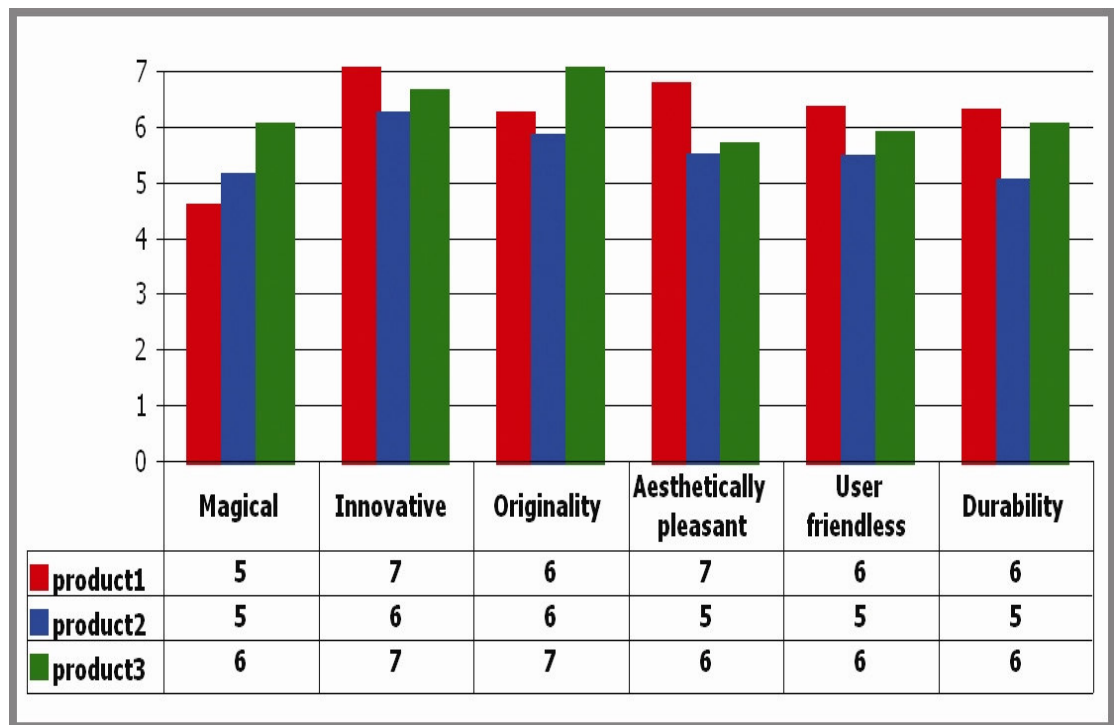
Table 5.16. The reference relation between product design features and brand values.

Product Format	Unusual mechanical movements' MAGIC OPEN ', Over all gelstalt appearance change in use							

Product1

	0	1	2	3	4	5	6	7
Magical						■		
Innovative							■	
Originality							■	
Aesthetically pleasant							■	
User friendless							■	
Durability							■	

Product2

	0	1	2	3	4	5	6	7
Magical						■		
Innovative							■	
Originality							■	
Aesthetically pleasant						■		
User friendless						■		
Durability						■		

Product3

	0	1	2	3	4	5	6	7
Magical							■	
Innovative								■
Originality								■
Aesthetically pleasant							■	
User friendless							■	
Durability							■	

Not associated — Strongly Associated

CHAPTER 6

CONCLUSION

It is determined that the essence of Bang & Olufsen's strategy in strategic brand identity communication through product portfolio in terms of transmitting strategically defined brand specific messages to the target customers by the communicative aspects of product design to reinforce brand recognition (identification) and brand differentiation (distinctiveness, uniqueness) depends on continuously renewal design based model of strategic change through continuously renewal design driven innovation product strategy.

The Table 5.8 which is generated by the sums of the resemblance number for each product together with the sum for each of the specific form elements shows that the total resemblance numbers of products are nearly same. This means that although the new product portfolio of Bang & Olufsen launched in between 1996- 2004 remarks a revaluation and each product has its unique characteristics, the overall syntactic structure of the products enable brand recognition through visual similarity (family resemblance, brand typicality) supporting a coherent visual brand identity. As the result of Table 5.8 shows product 1 (Beosound 9000, launched in 1996) can be recognized more easily by users that have previous experiences with audio products of Bang & Olufsen. The product 1 provides brand recognition in more explicit level compared to product 2 and product 3 by utilizing the past experience of consumers with the brand, because it (Beosound 9000 launched in 1996) carries visual resemblance (explicit cues) to the previously launched products in single product level and in overall gestalt appearance.

In Design Format Analysis of the new audio product range of Bang & Olufsen in syntactic , pragmatic and semantic levels, it is seen that the visual product identity of these products have explicit references in overall gestalt appearance and in detail designs to Bang & Olufsen typical 'flush concept design' that has takes its characteristics in between 1965- 1996. But also they have their unique characteristics, which is also in coherence with the overall design philosophy of Bang & Olufsen as that each product must have its own identity in its physical appearance. Although overall gestalt design of '1996- 2004 period' products remark a revaluation in general design

language compared to the other periods, the visual portfolio strategy of the brand is again in balance between novelty and continuity in this period and the company has still conceived and give existence to visual brand recognition through design.

The pragmatic contents of '1996- 2004 period product range' remark a revaluation. In the design of new product range, the products truly become lively and breathtaking through the improvement of technology and unusual mechanical movements that differentiate the products from previously designed products and from the competitors. The pragmatic contents of products make the overall gestalt appearance of the new product range change in use more than previously designed products in brand typical flush design concept These characteristics give products a emotional character that incorporates brand core values such as magical, originality. Although product 3 is 'weaker product' in terms of product identity in syntactic level compared to other two products (Table 5.8), it is the 'stronger product' in terms of product identity in pragmatic level compared to other two products (Table 5.9). This means that the pragmatic content of product 3 is accomplishing emotional experience in use and more user friendly (easy to use) than others. And, the result of Table 5.9 shows; the product 3 incorporates semantic references (brand recognition and association) in pragmatic level that enable brand recognition through recognized likeness and provide brand specific associations coherence with the core brand values (brand identity) such as magical, originality, user friendless. And as the result of the Table 5.9 shows, the total representative points in pragmatic level of all products are close to each other (product 1 is 26 points, for product 2 is 31 and for product 3 is 36), so that all products accomplish emotional experience in use. The core values of inventiveness, originality, magicality, essentiality and poetry are incorporated through explicitly definable pragmatic content of products.

The Product Format Analysis of Bang & Olufsen's '1996- 2004 period' audio product portfolio in semantic level is generated by the references of Table 5.7, Table 5.8 and Table 5.9. In the table (Table 5.10), the product 1 (Beosound 9000 launched in 1996) gets 79 points and product 3 (Beocenter 2 launched in 2004) gets 78 points while the product 2 gets 72 points. This means that product 1 and product 3 are the most typical products that incorporate semantic references in terms of brand specific associations. This is an important result as that, although product 1 (elongated horizontal profile in rectangular form, transparent design with glass lids, etc.) and product 3 (elliptical form, not transparent with aluminum lid, etc.) do not incorporate so

much common design elements and characteristics in syntactic and pragmatic level, they get nearly same scores (79 points and 78 points) in semantic level. This means that although they look like truly different at fist glance, they enable brand recognition through visual similarity (family resemblance, brand typicality) in subconscious (implicit level). So that the design features and characteristics of audio products of the company is in large degree of visual coherence and resemblance through the product portfolio of the brand, as well as each product has its unique characteristics since they are quite characteristic compared to their competitors. This is also in coherence with the overall design philosophy of Bang & Olufsen as that each product must have its own identity in its physical appearance.

The other important and interesting result is such as following. Although the product 3 is found as the less typical product that incorporates the characteristic design elements and features of brand typical flush design with its most noticeable upright elliptical form in Table 5.7., it gets the high points (product 1 gets 199 points, product 2 194 points and product 3 201 points) in Table 5.11. The product 3 is the most typical product that incorporates semantic references in terms of brand specific associations that also provides clear differentiation and instant recognition. This result is coherence with the strategic intention of company in transmitting core brand values of inventiveness, originality, magicality, essentiality and poetry by improving emotional side of the products and adding surprise to products (overall gestalt appearance changes in use). Because, the product 3 gets high points in product format analysis in pragmatic level as indicated previously.

The products get nearly same points in Table 5.11. The products incorporate explicit design cues of Bang & Olufsen typical 'Flush design concept' in syntactic, pragmatic and semantic levels that they utilize clear design references from the 'design bank' of the brand. So, they provide brand recognition through visual resemblance for the customers that have previous experience with the brand. Although the products carry visual resemblance (explicit cues) to the previously launched products, they are exactly new products for the target customer as the product has an individual character with radical differences in details and overall gestalt appearance. They are different from the competitors. They do not look like other products in the market. The design of products change all established ideas about how an audio product looks and is used. So the products attract the customers that have first encounter with the brand and make the customer wonder the brand behind the product.

It is seen that the case company of this thesis (Bang & Olufsen) is giving specific focus in integrating portfolio strategy with business strategy and creating correspondence between them for gaining competitive advantage in the market through products. The company understands the full potential of design at product level and also at business level and manages to integrate them. For the company, product design is in the center of the processes in terms of strategic decision-making practices and transforming their strategic intentions to product design in new product development, with giving special and equal importance to the aesthetic, technological and emotional aspects of products. The company use design based business with the interaction of strategic business activities and philosophy based on design activities. The translation of the immaterial qualitative values (brand values) to products is important for the company to distinguish their product from its competitors. Strategic management of product design and integrating brand values into the development of product concepts within this framework are crucial issues for the company in terms of creating brand recognition and differentiation. In the process of transformation from strategy to ideas and concepts and further to design representations, the company accomplishes in increasing the correspondence between 'the intended transformed message from company side to customer side' and 'the perception of transformed message by the customers.' They use the concept of design as a meaning making and a business making activity.

Bang & Olufsen has a strong brand heritage and culture that has remarkable influence both on handling strategic brand identity (strategic approach of the company) through years and also in strategic portfolio management with regard to creating visual recognition and also distinction through product design. Brand specific design language of Bang & Olufsen is dynamic with in a right balance between novelty and consistency by a long-term strategic brand communication through whole product portfolio considering both internal design culture, design heritage and the changing market. Although Bang & Olufsen is forerunner and create its own market, the company also at a certain degree should react to cultural changes in fashion, trends, tastes or society and be sensitive to socioeconomics, politics but without potential of erosion of core brand values or losing consistency of quality. The company has strong internal links and ability to influence factors critical to design.

The company sees the product range as the most important 'spokesmen' for their brand so the product and brand benefit from each other mutually. The company is in the

'high corporate involvement and high product involvement' category as it is proposed that a strong corporate voice strengthens all product messages by a strategy where the corporate voice and the brand work together to deliver a consistent service. Bang & Olufsen positions it self in the category of master brand that means one brand to identify all products / services and descriptions to unique product competencies, in other words, uses only one name with belonging visual identity and this penetrates the whole company. So the company has a monolithic identity that the whole company uses one visual style and that the consistency between the corporate identity and the product identity is very strong, the product reflecting the corporation directly. Input comes from outside and inside of the corporation. Output goes to inside and outside of the company. The consumer experiences consistency between product (physical and functional aspects) and brand (emotional aspects). The company has a successful brand communication resides in communicating its visions and values by means of the identity and image of its products, keeping the notion of audience involvement in mind. Product design has had a remarkable role in making the Bang & Olufsen brand known worldwide. Bang & Olufsen is benefits brands which has a high relative cost and at the same time a high value-added advantage. It offers benefits that consumers appreciate and are willing to reward with a premium price.

There is a strong correspondence between the way company handling strategic brand identity (the internalization of the identity, the strategic, performance-oriented view) and strategic brand communication through product design (externalization of the strategic identity, the visual, operative-implementation view) that they are treated together in coherence by the company. Firstly, (by the force of identity-threatening environmental changes), while determining the strategic dimension of identity such as business idea, goals, mission and values of the company, the inherent impact of brand culture, heritage and reputation on aligning the strategic identity is clear. Secondly, while externalization of strategic identity through brand specific design language, strategic portfolio management of company is in balance between novelty and consistency in process. Therefore, there is a true correspondence between business strategy and product portfolio strategy of the brand, and so between the inherent organizational identity (inner self & heritage etc.) that is 'the messages B&O wishes to customer be believe' and external identity 'what the brand is and have been known for'.

The products of the company have a strong identity and have a considerable impact on the visual recognition of B&O brand even though the company mostly

prefers the 'push' strategy in strategic design approach resulting from an innovative design approach and designing differentiating products instead of the 'pull' strategy offered by a strong market-oriented approach. They use design in terms of not only developing visually attractive and extraordinary designs by their aesthetic, practical and emotional value that can substantially strengthen the company's brand image, but also managing selected design features strategically and consistently with regard to developing and maintaining brand recognition and distinction. Although the products of the brand do not include high degree of familiarity aspect for the users that the products (design concepts) in overall gestalt appearance changes all the established ideas about how a audio product should look so the brand specific design cues reflecting brand identity and distinction are typical for the super- ordinate level category (solution-typical features; forms as such) and sub-ordinate level (behavior-typical features; use, interaction), the company can reinforce brand distinction, awareness, recognition and loyalty by the strategic use of product design. Some consistency of identity references is always evoked in product design. The company's inherent organizational identity (inner self -heritage etc.) has significant influence on the formation and definition of the strategic identity. And, the intentional decisions of the company constitute a right balance between including or excluding the identity references in the contemporary product design to the brand's history.

The design intention of the company is 'the application of technology (unique patented B&O technology: competitive advantage) within the aesthetically pleasing (clean, sculpted designs, novel aesthetics, competitive advantage) product range always based upon the experience that it can accomplish for the user (personal feel, emotional experience: competitive advantage). So, the brand aims to have a competitive advantage through products in three areas; the product's aesthetic appearance (styling), the product's functional and innovative performance and the emotional value added to the products, which of all are uniquely combined in harmony and all have an individual innovative character. While designing products the design philosophy of the company depends on the questions such as 'How does product design support brand's identity?', 'Does the product make a difference?', 'Is it new and exciting? Will it stand the test of time?'. The vision of B&O is 'Courage to constantly question the ordinary in search of surprising, long lasting experiences.' The company believes that their core customers are very demanding so function, technology or design alone is not sufficient to separate from other brands as there are many competitive products today (e.g., LCD). So goal of

B&O is creating products that really make a difference for the customers by creating a 'dream world' by combining an array of parameters into a unique, long lasting experience. As a design approach; user-driven approach means 'from experience (dream) to product' for the company. The company gives specific importance for designing user experiences as storytelling that creates value in an experience economy. A story creates identity and tells the why behind the product. The story promotes motivation and function, and explains an opinion, identity, feelings. The fundamental challenge for the company is to find the right question/problem/need to address. Besides focusing in experience design, in design process, the focus of the company in innovation process is both 'Technology > Product > Effect > Meaning' (Innovation process, product-driven innovation) and 'Meaning > Effect > Product > Technology' (User-driven innovation). Innovation and technology are important for gaining a competitive advantage for the company. The strategic goal of the company in design management is 'manufacturing for design (user driven) rather than design for manufacturing, every product must have its unique characteristics in appearance and technology. For the company the innovation challenges are to create a unique balance between; 'innovation (future) and tradition (past)', 'functionality and aesthetics (opt out)', 'breakthrough and market speed (uptake)'.

Bang & Olufsen has a strong brand culture and brand heritage dates back to 1925. Such a strong heritage and early-established identity form a consistent basis for brand recognition. The own characteristic design of the brand was developed by 1960's. In terms of heritage and internal product and design knowledge, the company history started from scratch along with the development of the first elongated, long and slim flat radios. The role of heritage is deemed so influential in B&O. Even though B & O's design has varied, because of the influence of different external requirements the brand recognition in different periods has remained consistent. The design history of the company is an aspect that has an important role both in strategic approach of the company through years and also in strategic communication with regard to visual recognition through product design. The company has always taken references from their heritage and reflected in new product development and communication. The company always recognizes, has control over and modifies its brand identity with respect to the requirements coming from the external environment by always being aware of distinctive practices, cultural heritage and the central character of a company

that are typical for the brand and exhibit sameness overtime. The company manages to make brand management and design strategy alive and fresh.

The identity-threatening environmental changes induced the company to interrogate themselves on the features that are really central and distinctive to the organization for three times in between 1972 and 1998 at Bang & Olufsen. When the identity-threatening environmental changes occur and force the competitive position of the company in the market, the company make sense of what is the organization is really about and always asks itself 'Who are we?', 'What values do we embody?', 'How is the organization perceived and represented externally?', 'What makes us different (or similar to) from other organizations?'. These questions have demanded a clarification of the company's identity and self-perception and the products have always been central to the culture of the organization. The revision of identity claims at Bang & Olufsen in between 1972-1998 took place in three different periods with respect to the identity-threatening environmental changes. These periods were named by the company as 'The Seven Corporate Identity Components (1972), Break-Point (1993) and B & O United (1998) when core design principles, guiding design and communication policies were codified. These values as an expression of the company's self-perception are Authenticity, Autovisuality, Credibility, Domesticity, Essentiality, Inventiveness, Selectivity (The Seven Corporate Identity Components in 1972), Excellence, Synthesis and Poetry and 'The best of both worlds: Bang & Olufsen, the unique combination of technological excellence and emotional appeal'(Break-Point, creative and manage to transform abstract concepts to different design features , can refer a specific brand attribute through different replicas and reflect brand identity through different aspects of the products. But overall product portfolio of the brand still incorporates brand specific associations. Brand specific associations and meanings are constantly regenerate and reshape by the designers but their root remain same through years. As the second format analysis of three audio product shows, although every product represents a revaluation by its own characteristics and features, they are graded high on same design elements and characteristics from the format bank of the brand. And also the table which is generated by the sums of the resemblance number for each product together with the sum for each of the specific form elements shows that the total resemblance numbers of products are nearly same.

The company aims to have a competitive advantage through products in three areas; the product's aesthetic appearance (styling), the product's functional and

innovative performance and the emotional value added to the products, which of all are uniquely combined in harmony and all have an individual innovative character. The corner stone of the brand, originality and providing emotional experience, has still been kept as the main point of focus. The design features and characteristics of the products are in coherence through the product portfolio and the visual product identity (brand specific design language) makes a product or product range typical for B&O, and also, the products do not look like other products in the market do in general, they are truly distinctive. The key concept of B&O design 'emotion with originality', which is the result of aiming at designing 'aesthetically pleasing products that make advanced technology easy to live with and accomplish emotional experience in use', is communicated through various design features and characteristics. Consistently used and strategy-driven design has strengthened the position of B&O as one of the most distinctive brands in the consumer electronics market.

In this thesis, the qualitative nature of Design Format Analysis and its potentially biased results are tried to be diminished and reliability of the results are tried to be increased by scanning the audio product portfolio of Bang & Olufsen deeply through brand's design history in terms of their 2D and 3D appearance with the thoughts and intentions of the designers (and also brand) behind the scanned products and not only the syntactic level and also both semantic levels and pragmatic level (that influence syntactic grammar so semantic interpretation) of design language (product identity) are taken into consideration. Flush design concept is found as typical design style for Bang & Olufsen by 'Design Format Analysis' of audio product portfolio of the company through the design history. The characteristics design elements of 'brand typical flush design concept' that provides clear differentiation and instant recognition to elongated long slim horizontal forms, plain smooth blank clean surfaces depressed knobs and touch sensitive controls flush with the surface, operation from the top, unusual mechanical movements (magic open concept) that makes the overall gestalt appearance of the products change in use. With regard to utilizing product design as a means of differentiation, the company aims at being innovative by having revolutionary design approach and also having familiarity (consistency) by evolutionary design approach in order to create a clear differentiation and instant recognition through products. The company builds its identity through likeness and repetition, strengthening the position on the market through a right degree of visual similarity (resemblance) as well as do not look largely like audio products do in general. The design characteristics

and elements of the audio product range of the company share a certain number of common visual elements and characteristics on the detail as well as the overall gestalt level of product appearance, which is important for creating a 'family resemblance'. Brand specific design language of Bang & Olufsen is dynamic with a right balance between novelty and consistency by a long-term strategic brand communication through whole product portfolio considering both internal design culture, design heritage and the changing market. The design features and characteristics of audio products of the company is in large degree of visual coherence and resemblance through the product portfolio of the brand, as well as each product has its unique characteristics since they are quite characteristic compared to their competitors. The products of the company have a strong identity and have a considerable impact on the visual recognition of B&O brand even though the company mostly prefers the 'push' strategy in strategic design approach resulting from an innovative design approach and designing differentiating products instead of the 'pull' strategy offered by a strong market-oriented approach.

The designs of the products can catch the eye at a considerable distance and when a new product is launched, the current customers can recognize the brand even you take the logo off from the product, or the customers that have not experienced with the product yet and have no idea about B&O brand wonder what the product is and where it comes from. The target customers prefer their products and add to their B&O collections even though they are much expensive compared to competitor's products at first glance. The company can be called as 'benefits brand' with respect to terminology in literature which has a high relative cost and at the same time a high value-added advantage, can be related to the pure form of the value-added brand. It offers benefits that consumers appreciate and are willing to reward with a premium price.

The contents of design elements and characteristics of 'B&O typical Flush Design Concept' design style in syntactic, pragmatic and semantic levels incorporate the core brand values such as 'magical, inventiveness, originality, selectivity' and reinforce brand recognition and differentiation. The company manage to transmit predefined (intended) messages (core brand values) to the target customers through the communicative qualities of brand-specific design language (product design) by 'continuously renewal design based model of strategic change' (brand identity management) through 'continuously renewal design driven innovation' product strategy.

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APPENDIX A

TABLES OF DESIGN FORMAT ANALYSIS

Table A.1. Pragmatic Measurement Table

	Product 1	Product 2	Product 3	Sum
Form Entity (Product format)				
Division of controls into secondary (CD changer , Cdslots) **and primary groups** (switches, adjustments) (reference to flush design concept)				
Operation from the top *(reference to flush design concept)*				
Primary controls (Buttons, switches, adjustments)				
- Visible				
- behind a transparent sliding door (glass)				
- On the ultra-thin polished aluminum faceplate				
- Non visible (under a portable plastic lid)				
- ' **Magic Mirror Concept** ' nothing in the shape of product how it work buttons (sensor-touch surfaces) light up in red. Finger's electrical capacity causes product to react and light a signal.				
- Depressed knobs flush with the surface				
Replacing secondary controls (*CD changer , CDslots***) under a lid (door)** *(reference to flush design concept)*				
- Visible under transparent (glass) lid				
- Non-visible under Aluminum faceplate (lid)				
- Sliding two sides (glass or aluminum) lid				
- Opening upward glass lid				
CD changer (On the top surface)				
- Visible CD changer (watching CD mechanism when used)				
- Rotating				
- Sliding (Moving clamper automatic CD- positioning)				
- Non visible when not used				
Doors (lid in front of secondary controls) *(ref to flush design concept)*				
Sliding two sides				
- Just gliding finger along the surface				
- Open up at the approach of a hand				
Opening upright (with soft touch or with remote control or automatically)				
Touch sensitive controls				
- gliding finger along the surface (no buttons (soft touch concept, button less operation)				
- by an hand approach				
Total for pragmatic				

Table A.2. Syntactics Measurement Table

Form Entity (Product format)	Product 1	Product 2	Product 3	Sum
Total body appearance				
Shape				
Rectangular Shape (straight, horizontal) *(reference to flush design concept)*				
Rectangular Shape (vertical)				
Circular Shape (curved)				
Straight (horizontal) outline *(reference to flush design concept)*				
Vertical outline				
Slim cross section *(reference to flush design concept)*				
Symmetries				
Ellipse (elliptical) forms				
Rectangular forms including screen *(reference to flush design concept)*				
- Elongated rectangular form *(reference to flush design concept)*				
- Vertical rectangular form				
Compact form *(reference to flush design concept)*				
Connected Volumes				
Total repetitive shape layout				
Non- repetitive shape layout				
Lines				
Repeating Lines				
Non-repeating Lines				
Curved Lines				
Straight Parallel Lines *(reference to flush design concept)*				
Sharp edges *(reference to flush design concept)*				
- Distinct side lines *(reference to flush design concept)*				
- Flat bottom line (straight side line)				
- Smooth side and bottom line - Smooth edges (convex side line)				
- Non distinct sidelines				
Colors				
Contrasting colors (Black / aluminum) *(reference to flush design concept)*				
Bands of black and silver contrast *(reference to flush design concept)*				
- Pointed upward				
- Pointed downward				
- Parallel (straight) *(reference to flush design concept)*				
- Neutral				
- Multiple (pointed upward, downward and parallel -vertical)				
Buttons (knobs)				
Depressed knobs flush with the surface *(ref. to flush design concept)*				
Circular buttons and Non- repetitive shape layout for buttons				
Rectangular buttons and Total repetitive shape layout for buttons				
Doors				
Transparent (doors)				
Not Transparent (doors)				
Rectangular (doors)				
Elliptical (doors)				
CD slots (On the top surface) (reference to flush design concept)				
Multiple (horizontal alignment in a row along the length of the machine)				
Single				
CD changer (On the top surface) (ref to flush design concept)				
Visible when not used				
Non visible when not used				
Rectangular (vertical alignment) with curved bottom line				
Total for Syntactic				

Table A.3. Semantic Measurement Table

	Product 1	Product 2	Product 3	Sum
Semantic references embedded in Product format bank of B&O				
semantic content in brand recognition and distinction				
semantic content (brand recognition through visual resemblance ' familiarity-similarity ' <u>across product portfolio</u>) **It looks like (resembling) other products of Bang & Olufsen (both genuine and stringed reference for the target customer)**				
semantic content (brand differentiation and so recognition through visual resemblance ' familiarity-similarity ' <u>from other products in the market</u> **It changes all established ideas about how a receiver should look (Genuine reference for both target customer and first encounter)**				
a- The semantic structure of products 'common' language for the description of specific design features in syntactic and pragmatic level (brand recognition and brand specific associations in implicit level)				
emotional appeal (characteristics) (*adding surprise and magic to products, enriching the emotional side of the product in use and appearance) (both genuine and stringed reference for both the target customer and for the first encounter*)				
a1- changing all established ideas about how a receiver should look unique, high diffentiated, non familiar product (Genuine reference)				
- It is different from competitors (Genuine reference)				
- it is new and exciting (close to Genuine reference)				
sub total for a1 Originality				
a2- 'MAGIC OPEN ' open concept				
- overall gestalt appearance change in use (complete characteristics and genuine reference)				
- breathtaking product more than an object in home (complete characteristics close to genuine reference)				
- unusual, elegant mechanical movements (partial characteristics close to genuine reference)				
- accomplishing emotional experience in use (complete characteristics close to genuine reference)				
- a symphony of movements (partial characteristics close to genuine reference)				
- 'Poetry is the surprising silent opening of the doors and the unfolding of the product as a flower' (both genuine and stringed references for both the target customer and for the first encounter)				
sub total for a2 Magicality				
a3- magic boxes				
magic boxes with pure, compact form, nothing in the shape of the device revealed how it worked or what it was, inviting user closer investigation. an invitation to embrace 'distance, closeness, touch') (genuine reference to flush design concept)				
sub total for a3 Surprising				
magical and original				

Table A.3. Semantic Measurement Table (cont.)

b- Semantic References to the form language of B&O in overall gestalt appearance:			
b1- Formal Aesthetics, Syntactic Structure:			
Competitive advantage: The Aesthetic Value of Products (aesthetically pleasing product) (close to genuine reference)			
- Bauhaus tradition (Stringed and Coupled associations)			
- modern design (close to genuine reference)			
- smooth, slick, uncluttered appearance (close to genuine reference)			
- minimalist 'Less is More' (Stringed and Coupled associations)			
- modernist 'Form follows Function' (Stringed and Coupled associations)			
- MAYA principle: 'Most Advanced Yet Acceptable', 'Different but not Strange'. original form language (Stringed and Coupled associations)			
- a design icon (original, distinctive, memorable and evocative design) (close to genuine reference)			
- Scandinavian style: lightness, cleanness and elegance (Stringed and Coupled associations)			
aesthetically pleasing product			
b2- Technology and Operation (Pragmatic functions in the context of use that also influence the syntactic structure)			
Competitive advantage: The Practical Value of Products (advance technology easy to live with) (Stringed and Coupled associations)			
- Technological creavity (Innovative) (close to genuine reference)			
- outstanding technical performance (close to genuine reference)			
- a unique combination of high technology and intuitive operation (close to genuine reference)			
innovative			
- modernism's abstract and reductionist idiom in use and appearance (Stringed and Coupled associations)			
stripping away all the unnecessary			
- leaving the user with a clear impression of what the product can and should do			
making technically complex products into something that is easy to *understand*			
making technically complex products into something that is easy to *use*			
- simple and well considered operation (essential, functional, user-friendly, easy to live with)			
- Function creates design and design creates function			
- Scandinavian conditions (putting priority on durable, practical, simple and long term products that reflect function,			
Durability - reliability (Stringed and Coupled associations)			
user-friendly			
innovative and user-friendly			
b3- Experience (in the context of interaction. practical functions that make the product change in use and influence the general syntactic structure)			
Competitive advantage: The Emotional Value of Products (accomplish emotional experience in use and appearance) (close to genuine reference)			
Form follows feelings (bringing curiosity and excitement into Bauhaus tradition)			
- Forming the Immaterial			
accomplishing emotional experience in use and appearance			
Sub Total for semantic			

Table A.3. Semantic Measurement Table (cont.)

c- DESIGNER'S INTENTIONS (Metaphors, Stories and Myths created around objects to create connections with beliefs and desires) (stringed references, subconscious associations)				
value of poetry emphasized the personal excitement and emotion that customers (and employees) experienced in relation to B&O's products and design. 'The manifest expression of the dialogue is the product which metaphorically speaking, the poem, which facilitates the continuing dialogue between the writer and the reader regarding the poet's vision.'				
Old vinyl records (spinning on the record player's turntable)				
Family machine				
Library machine				
Angel wings				
the unfolding of the product as a flower				
The 1001 Arabian Nights, Aladdin and Ali Baba, a picture of Man´s relationship with music				
Open Sesame (imagination of caves filled with the most precious treasures)				
FLYING SAUCER				
''change and transformation'', ''changing my mind''				
''my feelings about the future'', ''wondering what will happen''				
Total for semantics				

Table A.4. Total Calculation of Design Format Analysis

Total for Syntactic			
Total for Pragmatics			
Total for Semantics			
TOTAL (for Syntactic, Pragmatics and Semantics)			
semantic content (brand recognition through visual resemblance ' familiarity-similarity ' across '1996-2004' product portfolio)			