



International Marketing & Brand Management Spring 2009 Master Thesis

By: Rickard Aronsson, Christian Hansson & Daniel Wierup

Supervisor: Johan Anselmsson

## **ABSTRACT**

Title: Crash! Boom! Brand! – Product Sound as an Audio Branding Tool

Date of the Seminar: 2009-06-04

Course: BUS 808. Master thesis in International Marketing and Brand Management

Authors: Rickard Aronsson, Christian Hansson, & Daniel Wierup

**Advisors:** Johan Anselmsson

Keywords: Audio Branding, Product Sounds, Consumer-Based

**Brand Equity** 

**Thesis purpose:** The purpose of this thesis is to explore, describe, and

analyze how firms that manufacture and market public consumer products utilize the potential of product sound, as an audio branding tool, in building Consumer-

Based Brand Equity.

**Methodology:** A qualitative case study with an exploratory approach

and purpose.

Theoretical perspective: The framework is based upon the six blocks of

Consumer-Based Brand Equity as well as the theoretical

potential of product sounds in brand-building.

**Empirical material:** Empirical data was collected during semi-structured

interviews with consumers of Volvo and professionals

from different departments at Volvo.

**Conclusion:** This study found that the theoretical potential of product

sounds is overall used quite well, in terms of its affect on consumers, in the majority of the Consumer-Based Brand Equity building blocks. Furthermore, we found that consumers are enthusiastic and receptive to the idea of using product sounds to stimulate brand relationships and identification in the sixth building block. However, Volvo does not fully manage to take advantage of the potential in the sixth block. The managerial implications of this study are that it highlights that product sounds can fill extensive brand equity building functions and that it may be beneficial for firms with public consumer products to review their product sounds in regards to the multiple effects they can have on consumers. The study also sheds light on the concept that product sounds may affect all brand equity building blocks simultaneously.

# **TABLE OF CONTENTS**

1	IN	NTRODUCTION	4
	1.1 1.2 1.3 1.4 1.5 1.6 1.7	A Harsh Reality A World Full of Sound. A World Full of Brands Audio Branding Consumer Products Past Research Problem formulation Purpose	4 5 6 7 9
2	M	1ETHOD	
	2.1 2.2 2.3 2.4 2.5 2.6 2.7	GENERAL APPROACH  CASE STUDY  QUALITATIVE RESEARCH APPROACH  DATA COLLECTION METHOD.  INTERVIEW WITH VOLVO PROFESSIONALS  INTERVIEWS WITH VOLVO CONSUMERS  DATA ANALYSIS	13 15 15 15
3	TH	HEORY	20
	3.1 3.2 3.3 3.4 3.5	STEP 1, WHO ARE YOU? STEP 2, WHAT ARE YOU? STEP 3, WHAT ABOUT YOU? STEP 4, WHAT ABOUT YOU AND ME? CONSUMER-BASED BRAND EQUITY VIA PRODUCT SOUNDS	21 24 27
4	Eſ	MPIRICAL MATERIAL	30
		VOLVO CONSUMERS	
5	Α	NALYSIS	43
		Brand Salience Brand Performance Brand Imagery Brand Judgment Brand Feelings Consumer-Brand Resonance	46 52 56 59
6	С	ONCLUSIONS	66
	6.1 6.2 6.3 6.4 6.5	Answering the Million Dollar Questions  Product Sounds for Building Consumer-Based Brand Equity  Managerial Implications.  Future Research.  Methodological Considerations.	68 70 70
ΡI	FFRF	INCES	73

## 1 INTRODUCTION



## 1.1 A Harsh Reality

Hyper competition is a harsh reality for the majority of firms in today's global markets and the development of competitive advantages is therefore something of key concern (Hultén, et al., 2008, p.37). However, in pace with increased global competition firms are finding it difficult to differentiate their brands, break through the media jungle, and cope with the consumer's limited time (Hultén, et al., 2008, pp.31,43). Furthermore, today's consumers see superior product attributes, high quality, and an excellent image as an obvious part of a firm's offer (Hultén, et al., 2008, p.30). This has lead to the fact that it is not enough to simply satisfy functional needs anymore and it is thus becoming increasingly important for firms to as well think in terms of stimuli and consumer engagement (Hultén, et al., 2008, p.43). In order to accomplish this, firms must put emphasis on the relationship between the brand and the five senses (Hultén, et al., 2008, p.42). Therefore, firms and brand managers must ask themselves: What does the brand sound like? What is the brand scent? What does the brand look like? What does the brand taste like? What does the brand feel like? Questions such as these are based on the theoretical point of departure that a brand is the sum of all consumer brand experiences and that stimulus plays a central role in shaping these experiences (Hultén, et al., 2008, p.9).

## 1.2 A World Full of Sound

The very first conscious action a human performs is listening and long before we are born our ability to hear sound is well developed (Stockfelt, 1997, p.18). Stockfelt (1997, p.20) states that the other senses remain underdeveloped long after birth. He also says that for those of us that have the ability to hear, it is impossible to imagine an existence without sound since we live our lives in symbiosis with sound. Because our ability to hear came first, it is through sound that we find our self-image and the other senses are developed in conjunction with the ability to hear (Stockfelt, 1997, p.21). Stockfelt (1997, p.23) claims that it is therefore almost impossible to depict pictures, tastes, scent, and touch as if they existed in silence. The world is therefore first and foremost a world full of sound (Stockfelt, 1997).

The ability of sound to affect human beings has been known for thousands of years. This is well illustrated by the following statement by Aristotle in The Politics from 1340:

"What we have said makes it clear that music possesses the power of producing an effect on the character of the soul."

(DeNora, 2000, p.21)

Variations in tempo of rhythmic sounds affect human beings. Fast paced rhythmic sounds can for example activate and incite movement (DeNora, 2000, p.7). Through this perspective, sound can be seen as active and dynamic, but it can as well be relaxing and time transforming. It has been shown that a fixed waiting time may be perceived shorter with a slow rhythmic tempo (DeNora, 2000, p.8). This implies that sound has the ability to reconfigure the perceived experience of a temporal interval (DeNora, 2000, p.13). Furthermore, she states that sounds can also be employed as a way to make the receiver pay closer attention to if something of importance is about to happen. One method of achieving this is to use quick, loud, tonally centered, and upward-sweeping sounds (DeNora, 2000, p.13). This has the implication that in a group setting, sound may be able to promote both a certain image and social mood (DeNora, 2000, p.16). She states that sounds also have several therapeutic affects and that it can encourage and modulate mood and stress levels. DeNora (2000) claims that sounds can over relatively short time spans enable the transformation of one set of feelings to another. Finally, expert designed sounds in public spaces have shown to have the ability to encourage as well as discourage various forms of public conduct (DeNora, 2000, p.20). This has the implication that sound can as well be politically powerful and thus be employed for purposes of social control. The above are just a few out of many examples that demonstrate some of the affects that sounds have on human beings. From the discussion it is obvious that sounds play an active role in defining and shaping our everyday life.

## 1.3 A World Full of Brands

Just like sounds are an integral part of life, brands play an active role in our lives as they surround us in our everyday life (Kapferer, 2008, p.9). They can work as a tool for us to express our attitudes and opinions but also to show our social belonging (Schouten & McAlexander, 1995). Brands can also create the perception that a product is something more than a commercial object (Belk, et al., 1989), which illustrates the value of brands for firms as they can increase the perceived value of a product. A brand is also what generally enables us to have a relationship with a firm as it contains promises, sets expectations, and creates a feeling of consistency (Davis, 2000). The next logical step is thus to look at what is said about the usage of sounds to build brands, a marketing tool often labeled audio branding.

## 1.4 Audio Branding

We have found that marketing magazines for practitioners frequently use the terms audio branding and sonic branding. There does not, however, seem to be one clear definition of what the terms encompasses. For instance a brand strategist at an American audio production firm describes audio branding as the intentional use of music, sound and voice to create a connection between people and organizations (Franus, 2007). He mentions two approaches for using sounds for branding purposes; the promotional which serves the purpose of reinforcing an identity in a way similar to a logo, and the actionable which aims at affecting behavior and feelings in a way that serves the brand. Clearly his definition of audio branding is wide and includes every application of sound that can strengthen the brand, even if it cannot be associated with a brand. Well known audio branding consultant Martin Lindstrom, on the other hand, focuses on sounds that can be associated with a brand when he speaks about the use of sounds in brand-building (Lindstrom, 2005, pp.73-82). He makes no apparent

distinction between the different approaches that Franus (2007) speaks of. Jackson (2003), which is described as a pioneer in this area by Dinnie (2004), puts great emphasis on so called sound logos in his book Sonic Branding. He mainly describes audio branding as a tool to reinforce an identity and he stresses the importance of repeating chosen sounds at every consumer touchpoint.

In academic literature it has not been possible, for us, to identify any discussions on a clear-cut definition of audio branding. Fulberg (2003), however, focuses on the potential music holds to help consumers recall previous brand contacts and that music can improve in-store environments, when he talks about audio branding. This suggests a somewhat wider view than Jackson's (2003). Fulberg (2003) recognizes that music in itself can have an effect on the performance of a store even if it is not associated with a brand, though this is not his main argument.

We base our view on audio branding on the idea that a brand is the sum of all experiences a consumer has with a brand. A view, as mentioned earlier, that is proposed by Hultén, et al., (2008, p.9) which suggests that every sound registered in connection to a brand affects it in some way. Though, as this is a study of brand-building efforts, we will only cover the deliberate use of sounds for branding purposes. Hence, we define audio branding as every deliberate use of sound that affects the brand. Sound itself, we define as air pressure oscillations (vibrations) in the form of waves that can be perceived through hearing, i.e. frequencies between 20 and 20 000 Hz (Treasure, 2007, pp.20,51). Our definition of sound therefore includes sound effects, music, and various other ambiences audible to the ear.

## 1.5 Consumer Products

Sound can be linked to brands in several different scenarios, for instance in advertising, consumer spaces, websites, and products (Treasure, 2007, pp.155-233). Hence, there is the question of which sounds have the greatest impact on consumers and therefore make the most valuable objects of study. Keller, et al., (2008) states that the product is what consumers primarily associates with a brand. Therefore, the product is the brand element with the greatest impact on brand equity and is also described as the core of brand equity (Keller, et al., 2008). The significance of the product in relation to the brand, and the importance of sound in relation to humans, make consumer product sounds an important area to cover within audio branding. This is confirmed by Treasure's (2007) statement that the usage of sounds in products is a vital part of audio branding and that it is also rarely recognized as an opportunity.

Technology developments have lead to improved possibilities for the control and design of sound in consumer products. For instance, today's technology enables the possibility to dampen unwanted sounds with inverted sound waves and this in turn leads to increased room for desirable sounds (Genius, 2009). Another example is that car manufacturers have introduced electric motors that are much quieter than conventional motors (Toyota, 2009). Today, there is also a wider range of high quality digital components available for manufacturers, which create new and enhanced possibilities for sound in consumer products (Physorg, 2009; Nzherald, 2009). For example, mobile phone manufacturers are increasingly developing and improving the sound in their products (Nokia, 2009). These facts reinforce our view that consumer product sound, and thus audio branding, is a current and exciting topic. We will now therefore take a closer look at what academic research has to say on the topic.

### 1.6 Past Research

We have stated that a brand experience is based on the five senses; touch, taste, smell, sight and sound. However, it is argued by Lindstrom (2005, p.87) that an overwhelming 99 percent of a brand experience consists of what consumers hears and sees. In an earlier discussion in this paper, we confirmed the significance of sound in consumer's everyday lives. As a result, sound is an important element in a firm's brand communication strategy (Lindstrom, 2005, p.87). Despite these facts, there is a very limited amount of academic research on the relationship between sounds and brands. We believe Fulberg (2003) and Beverland, et al., (2006) to be the most significant and noteworthy in the context of this paper. Fulberg (2003) studied music and branding in retail environments. The study shows that music in retail environments can effectively be used to create so-called brand triggers. The author claims that these brand triggers act as consumer associations in regards to previous brand experiences. Fulberg (2003) also speaks of the importance for retailers to create an environment that via sound dramatizes brand values. The study shows that since music communicates on both a conscious and subconscious level it allows the consumer to interact with the brand in a retail setting. Fulberg (2003) concludes that music can create a bond between consumers and brands. Beverland, et al., (2006) examined the relationship between in-store music and brand position. By brand position, the authors mean whether the consumers perceive the brand as premium/non-premium or as authentic/non-authentic. Their findings propose that music with a proper fit can reinforce a brand's position as well as strengthen its image. An example of proper fit, which the authors suggest, could be a clothing store that plays rock while offering rock inspired clothing. However, Beverland, et al., (2006) argue that this is especially true for consumers without previous brand experiences. The authors state that for consumers with previous brand experiences, in-store music was a source for strengthening the consumerbrand relationship.

The above research has focused on the relationship between sounds and brands in service and retail settings. However, as a whole, academic marketing research, in terms of sound, has focused mainly on the following two areas: 1. The affect sound has on consumers in service and retail settings 2. The affect sound in advertising has on consumers. There also exist academic research, which is not marketing oriented, on consumer perception of product sounds. In the below section we will present and discuss what we believe to be the most prominent and relevant research for our paper in these areas.

## 1.6.1 Sound in Public Settings

A renowned researcher on the impact of sound on consumer behavior in public settings is Steve Oakes. Oakes (2000) has developed the framework Musicscape, which demonstrates sound's behavioral influence in service environments. His model is based on variables that in interaction can influence consumer's in-store behavior. For example, volume can affect the perceived duration of time spent in the store, and music tempo can affect consumer's speed of consumption (Oakes, 2000). Additionally, his model also handles demographical variables such as gender, age and social class, and how these affect consumer's in-store behavior in relation to the music. Oakes (2003) has also made a study on music tempo in retail and service settings and how it influences consumers. His findings show that slow-tempo in-store music made the consumers feel more relaxed and therefore more satisfied with their shopping experience. However, he also found that slow-tempo music has a negative affect on consumer's perceived waiting time, for instance in queues and such. Consumers actually perceived the waiting time to be shorter if fast-tempo music was played (Oakes, 2003).

Furthermore, Sweeney and Wyber (2002) found that consumer's emotions can be positively affected by appropriate music in public settings. Also, North, et al., (1999) states that the country of origin of music influences peoples buying behavior in public settings, such as in retail stores.

We see from this section that sound can affect consumers in public settings such as in a retail environment. However, this research does not take the brand into account. Now let's look at the affects of sound in advertising.

## 1.6.2 Sound in Advertising

Several researchers have directed attention towards the issue of how music is used in advertising. According to a study by Allan (2008), 94 percent of advertisements contained some kind of music or sound. His findings show that popular music was more relevant in relation to the narrative, rather than to the product or service. This implies that it is more important that the music is connected to the story in the commercial than towards the product. In addition to researching sound in retail/service environments, Oakes (2007) studied music's impact on commercials. His study found that music that is well connected to the product, for example punk music and pink hair dye, can have a positive affect on consumer's purchase intentions, their attitude towards the brand, and their emotional responses. Similar to this, Alpert, et al., (2005) propose that consumer's purchase intentions will increase if the music evokes feelings that represent a buying scenario for the consumer. Also, Roehm (2001) studied this issue further and demonstrated the difference between using instrumental or vocal versions of popular music in commercials. Roehm (2001) found that individuals who are familiar with a song registered the message better when the instrumental version was playing because they sang along with the commercial and the message was easier to remember. In contrast, consumers unfamiliar with a song needed the vocal version to be able to derive the intended message (Roehm, 2001).

This section has shown that advertising sounds also have the possibility to affect consumer behavior. Oakes (2007) mentions that advertising sounds can affect the consumer's emotion towards the brand. However, it is not a study on brands. Finally, since marketing research has not focused on product sounds we will now present what the non-marketing academics have to say in terms of product sounds.

#### 1.6.3 Sound in Products

Lyon (2000) states that sound consist of a complex set of attributes, both aesthetic and functional. His study implies that sound can be a source to why a consumer enjoys using a product as well as an indicators of how well the product is functioning. Jekosch (2005) describes that sound can communicate messages through speech sounds, music sounds, and product sounds. It is reasoned that in order to successfully communicate a message, aspects of how listeners perceive the sound have to be considered (Jekosch, 2005). Furthermore, he states that it is also important to be aware of the undesirable sounds that consumers are exposed to since these can disturb the registering of a desired sound. According to a study made by Ozcan (2008), sound is an important part of product performance and how consumers perceive it. It is thought that product sounds affect consumer's expectations, emotions, and preferences regarding product performance. Ozcan's (2008) study found that a product sound should be typical for the product, informative, and present product characteristics successfully. Ludden and Schifferstein (2007) have performed a study where they manipulated sounds in dust busters and juicers that were either congruent or incongruent with the visual expression of the products. Their aim for this was to examine if the sounds

influence the overall perceived expression of the products. The sounds were, according to Ludden and Schifferstein (2007), judged based on the variables quality: robust, exclusive, expensive, and stylish; and cuteness: small, quiet, feminine, not sharp, cute, and round. Their study findings were not always consistent, but there are some indications that sounds can affect the overall perceived expression of the products. An example of their findings is that the level of cuteness and quality were higher for sounds that were congruent with the visual expression for some of the dust busters and juicers (Ludden & Schifferstein, 2007). Also, they state that some cases indicated that higher sounds were perceived as sharper and therefore as less cute.

Meunier, et al., (2001) investigated perceived pleasantness and sharpness in relation to the loudness of the sound in products. The author's experiments show that loud product sounds have a negative affect on pleasantness as well as on the perceived sharpness of the sound. Lyon (2000) performed a product sound study in which product sounds where analyzed. The aim of his research was to find a method to develop product sounds that enhances positive attributes, such as high performance and quality, and reduces negative attributes. In his study, test persons judged different washing machine sounds in terms of how effective and qualitative they sounded. By doing this, valuable information about which sounds required improvement was achieved (Lyon, 2000). His intention was to find the link between how the sound is perceived and the design of the sound, in order to develop successful product sounds. However, the best-designed sound could not be identified in his study. He therefore concluded that sound design must start out with keeping the current product configuration, and then make changes that improve product perception. In other words, start by listening to how consumers perceive the sound, not by developing a new sound (Lyon, 2000). Also, Nykänen (2008) has made several studies on how to approach developing quality sounds, for example the sound a car's power window makes and saxophone sounds. His research has mainly focused on the sound quality of products, but with a particular attention on acoustical aspects such as loudness, sharpness and roughness. Nykänen (2008) concludes that the combination of these acoustical aspects results in how the sound is perceived in terms of being annoying, pleasant, or powerful.

From the above discussion, we find that academic marketing research has focused mainly on sound in terms of retail and service environments, and as well sound in advertising. Sound in products has to some degree received academic attention, but not in relation to building brand equity. We have therefore identified that a gap exists in academic research, in terms of how product sounds are used in brand-building. This naturally leads us to our problem formulation.

## 1.7 Problem formulation

There exists a certain degree of confusion around the expression brand equity and the reason is that an abundance of definitions, concepts, and measurement tools have been created over the years (Kapferer, 2008, p.9). However, our view on brand equity is based on Feldwick's (1996) and Kapferer's (2008, p.14) discussions on the topic. According to Kapferer (2008, p.14), brand equity consists of three sequential components: 1. Brand Asset, a consumer's brand associations and beliefs. 2. Brand Strength, a measure of the behavioral strength of the consumers' brand attachment. 3. Brand Value, the total economical value of a brand to the company as a separable asset. The components sequential nature implies that they affect each other in that respective order, the relationship is however conditional and not direct (Kapferer, 2008, p.14). Brand equity has the ability to provide a long list of benefits to firms and Keller (2001a) states that strong brand equity creates consumer loyalty, less vulnerability to

competitive marketing activities, increased margins, favorable consumer response to price increases, and increased effectiveness of marketing communication. The basic premise of this paper is that the power of a brand, and thus brand equity, lies with the consumer.

Keller (2001a) describes the process of building strong Consumer-Based Brand Equity by dividing it into a four-step pyramid, the CBBE-Model. He says that the main purpose of the CBBE-Model is to describe the progress of brand-building efforts and to describe what is required to create strong Consumer-Based Brand Equity. We have earlier established that sound has great impact on humans. From a marketing perspective, this can be confirmed by practitioners like Treasure (2007) who describe sound as an important and undiscovered brand-building tool. This makes building Consumer-Based Brand Equity via product sounds, i.e. audio branding, an interesting academic and managerial topic. Out of the four steps in Keller's CBBE-Model, product sounds are however only discussed by Treasure (2007) in terms that can be partially related to Step 1 and Step 2. Furthermore, he does not attempt to discuss the branding functions of product sounds in relation to Keller's CBBE-Model. To our knowledge there does not exist any other practical or academic study that analyzes this relationship. Below we will therefore present the most central concepts of the CBBE-Model and discuss them in relation to sound since it offers us a structure for analyzing and describing how audio branding via product sounds may affect Consumer-Based Brand Equity.

The First Step in building Consumer-Based Brand Equity is to make consumers associate the brand with the needs that the products of a brand can fulfill. It relates to different dimensions of brand awareness. Treasure (2007) mentions that product sounds, such as Kellogg's 'crunch' can have the same affect as a logo and thus create awareness. In our view, there are several examples of firms using product sounds in a similar way to a logo, for example Apple's computer start up sound (MusicThing, 2009). However, this is just one dimension of Step 1, which is depth of brand awareness. In building Consumer-Based Brand Equity breadth of brand awareness is also of concern, for example a consumer's purchase and consumption consideration (Keller, 2001a). Can product sounds also play an active role in regards to these, and if this is the case then how?

The Second Step of the CBBE-Model involves establishing brand meaning by making the consumers link more detailed characteristics with the brand, as for instance a certain type of user profile or product features. It deals with aspects of brand performance and imagery dimensions. According to Treasure (2007), product sounds can enhance product experience in terms of pure aesthetic value and perception of durability. Step 2 does not, however, only contain product durability and aesthetics but also user profiles associated with a brand, brand heritage, and brand personality (Keller, 2001a). The fact that sound is strongly connected to memories (Toop, 2004) raises the question; can product sounds have a greater significance in this step than what Treasure (2007) mentions, as it can help trigger advanced associations, and if this is the case then how?

Step 3 involves evoking feelings within consumers that they associate with a brand and their personal opinions about it. It consists of the dimensions judgment and feelings. It is the consumer's personal opinions, evaluations, emotional responses, and reactions in terms of the brand. As mentioned earlier, DeNora (2003, p.16) speaks of sounds therapeutic affects and how it can transform feelings and alter moods. Therefore we wonder, can product sounds have the ability to play an integral role in Step 3, and if this is the case then how?

The Fourth and final step consists of establishing a relationship between a brand and consumers that results in consumer engagement and loyalty. This step deals with resonance dimensions that result in strong consumer relationships as well as high level of consumer identification with the brand. As mentioned earlier, Stockfelt (1997, p.21) reasons that since our ability to hear came first it is through sound that we find our self-image. In light of this statement, we wonder if it is possible that product sounds can as well play an integral role in the Fourth Step of building Consumer-Based Brand Equity, and if this is the case then how?

To summarize, in this discussion on the relationship between product sounds and building Consumer-Based Brand Equity we wonder if product sounds are useful audio branding tools when building Consumer-Based Brand Equity, in the matter that they can play integral roles in several blocks. To determine this, it is likely that we need to look at how firms and consumers perceive the existence of products in some matter and with that statement we continue this problem formulation.

In our view, it is possible to make the distinction between consumer products that are frequently used in public environments and those that are not. For instance, the owner of a product that is frequently used in public obviously experiences this product when it is use, but a bystander can often as well partially experience the product. We therefore define consumer products with this characteristic as public consumer products. Sound is a medium that spreads easier through an environment than the other mediums that stimulate our senses. To clarify, sight, sound, and smell are the senses that can be stimulated from a distance. Among these, only sight and sound are commonly stimulated via consumer products. Furthermore, sight is logically more restricted than sound since it is possible to hear someone or something that you do not see. This sound distinction is of key concern for us. Consequently, in a public environment, consumer product sounds have the potential to not only affect the user, but also individuals in a social context and potential buyers. We therefore find public consumer product sounds to be valuable study objects when looking at the affect audio branding and product sound can have in building Consumer-Based Brand Equity.

We have stated earlier that hyper competition and difficulties of product differentiation has resulted in firms needing to consider the relationship between the consumer's senses and the brand. Out of the five senses, we have shown sound to be of utmost importance in public consumer products from both a managerial and academic viewpoint. Consumer-Based Brand Equity and audio branding may thus be an essential tool for firms that manufacture and market public consumer products to cope with increasingly crowded market conditions. It has been stated that public consumer products sounds are unique, and that their possible brand-building functions have not been studied academically. In other words, both practical knowledge and theory are lagging behind this phenomenon. It is therefore of interests to get a deeper understanding of how public consumer product sounds are used as an audio branding tool. Hence, public consumer product sounds in building Consumer-Based Brand Equity will be studied. This will allow the results of this unstudied phenomenon to be of interest for firms with public consumer product as well as academia. The above discussions and considerations shape our first research question.

In which steps of building Consumer-Based Brand Equity, and how, do firms that manufacture and market public consumer products attempt to utilize product sound as an audio branding tool?

The question is meant to uncover how firms that manufacture and market public consumer products utilize product sounds in consumer based brand-building efforts. It is however, also of interest to analyze whether these brand-building efforts have an affect on consumers since what we are looking at is Consumer-Based Brand Equity. As audio branding via product sounds is a relatively new and undiscovered marketing tool, there is as well a need to analyze how successful the deliberate product sound applications in public consumer products are, in term of building Consumer-Based Brand Equity. This leads to our second research question.

How is Consumer-Based Brand Equity affected by the impact that deliberately designed product sounds have on the users of public consumer products in regards to the steps of building Consumer-Based Brand Equity?

## 1.8 Purpose

The purpose of this thesis is to explore, describe, and analyze how firms that manufacture and market public consumer products utilize the potential of product sound, as an audio branding tool, in building Consumer-Based Brand Equity.

## 2 METHOD



## 2.1 General Approach

As we to aim to explore, analyze, and describe a phenomenon that has not been covered by past academic research, our study appears to have an inductive nature. The reason for this is that the process of induction means that the researcher first produces findings and then develops theory from those findings, according to Bryman and Bell (2007, p.11) Though, as our main area of research is brand-building and since we will establish a theoretical framework in Chapter Three that describes the six blocks of brand-building, our study is rather exploratory within this field, according to what is written about the exploratory approach. Saunders, et al., (2007, p.133) claim that exploratory studies are a flexible way of approaching a problem of imprecise nature which can increase the understanding of it. Though, Adams and Schvaneveldt (1991, in Saunders, et al., 2007, p.134) state that even if the approach offers certain flexibility, it does not mean that the exploratory researcher lacks direction. It merely means that a study starts with a wide approach and becomes increasingly narrower. The lack of theory on this precise area lead to us starting with a wide theoretical base which describes the brand equity building process and that gives some indications of the possible potential of product sounds in building Consumer-Based Brand Equity, based on sound theory. By combining this theoretical framework with our empirical material we will attempt to develop a new understanding regarding the role of product sounds in building Consumer-Based Brand Equity. Our study deals with the brand-building process and has a focus on one single brand element, which is product sounds. Keller (2001b) claims that products are the brand element with the greatest impact on consumers because products are commonly what consumers associate with a brand and as well what they know about a brand. Therefore we assume that individual aspects of a product can play a role in all blocks of Keller's CBBE-Model, and that this theoretical view offers an interesting approach to describing the brand-building functions of one brand element in several stages. Finally we also state that Saunders, et al., (2007, p.134) claim that exploratory research can be valuable even if the studied phenomenon is shown to be uninteresting as it then shows that the research within an area is not worth pursuing further. In exploratory research it appears likely, to us, that some uncertainty lies when starting as the nature of the phenomenon of study is unclear.

## 2.2 Case Study

According to Bryman and Bell (2007, p.63), a case study is suitable when research demands an in-depth investigation of an object of interest. As it requires detailed empirical material from both professionals and consumers, of the same firm, to answer the research questions of

this thesis, a case study is appropriate. One single case cannot represent all cases that fulfill the profile that our purpose holds, though a degree of theoretical generalizability can be made (Bryman & Bell, 2007, p.63). In order to allow for an in-depth study, we have chosen to focus on one case with the profile described in our problem discussion. This would mean a brand that has public consumer products with sounds applied in them. A consumer product that is especially interesting, in terms of its sound, is the car. The car is a consumer product where sound appears in a seemingly continuous matter. Product sounds in cars are part of the driving experience, but not always in an obvious way. For example, the sound of the engine is a natural part of the car and the sound of the blinker is needed as an indicator. Another interesting characteristic of the product sounds in cars is that others than the driver can hear certain sounds, such as the horn and central locking system. Then there is as well the fact that certain sounds have to be present and cannot be eliminated. Examples of such sounds are the sound of the car door closing and the windshield wiper sound. This complexity and multifaceted nature of a car's product sounds makes it an interesting case to study. Also the car is a case that offers certain generalizability to other public consumer products as for instance mobile phones and laptops. According to us these types of products can be used to show status, they contain sounds that are needed for the products' functions, and have sounds that are heard by others than the user. Furthermore cars are often used as case within marketing research which could also indicate its suitability. For instance, Bosnjak and Brand (2008) use the Chevrolet brand to study the affect of negative associations on the perceived symbolic value of consumption and Algesheimer, et al., (2005) use European car club members to describe how identification with a brand community leads to positive consequences for a brand. Another example is Lawrence, et al., (1992) who uses the car as a case to describe how the origin effect influences purchasing decisions in New Zealand.

Then there is the issue of choosing a specific car brand and we reasoned that a typical case would be more interesting than a unique case as it would provide more generalizability. The car brand that uses the potential of audio branding the most could assumingly be the most exclusive brand that has the most refined products due to their investment in premium products. This would not be a valuable case, according to us, as a typical firm with public consumer products would not have the same resources to spend on product refinement. Hence we tried to identify a typical car company that we could get access to. Thus the possibility to use our findings in other settings appears to be on a level that makes them academically interesting. This is called transferability by Guba and Lincon (1994, in Bryman & Bell, 2007, p.411)

In order to determine a car brand that could form a typical case we have extrapolated price levels onto firms expected usage of car sounds for brand-building purposes. Our assumption was that price level, to a satisfying degree, indicates both product refinement and brand equity strength and that these factors are linked to advanced brand-building efforts such as branding car sounds. That product refinement and brand equity can be connected to price level to a degree is confirmed by Kapferer (2008, pp.246-247). In other words, we assumed that by choosing a mid-priced car brand we would receive a case that could indicate the general usage of car sounds for Consumer-Based Brand Equity building. According to our review of the monthly price list for new cars made by the Swedish motorsport journal Auto Motor & Sport (2009) Volvo Cars is a mid-priced brand. Its cars are not as high priced as BMW, Mercedes and Audi but higher priced than Skoda, Toyota and Renault, when comparing corresponding models. Also there was a matter of access and Volvo Cars headquarter is situated relatively nearby our study location. Furthermore, the professionals at Volvo Cars have, to a wide extent, the same native language as the members of our research group. This is likely to

increase credibility of our findings according to Guba and Lincoln (1994, in Bryman & Bell, 2007, p.411) Therefore we chose the brand Volvo Cars as our case, which is to be called Volvo throughout this thesis.

## 2.3 Qualitative Research Approach

To fulfill the purpose of this thesis we believed that we needed to interpret what professionals and consumers of a car company say regarding car sounds. In other words, we saw the need to collect material based on the spoken word and not quantitative measurable variables. According to Bryman and Bell (2007, p.402) this is typical for a qualitative research approach that expresses the epistemological position of interpretivism. Furthermore we saw the nature of our object of study as ambiguous and then it requires closeness and openness to collect the appropriate material (Jacobsen, 2000, p.54). As we had not found a similar study to ours it was not suitable to start with any pre-defined conditions, according to Jacobsen (2000, p.50). When it comes to collecting material that requires closeness and openness, a qualitative approach is more natural to use (Jacobsen, 2000, p.32). The fact that we needed very detailed information from multiple parties and that this requires an intense and deep study (Jacobsen, 2000, p.32) further motivates our focus on one in-depth qualitative case study.

## 2.4 Data Collection Method

To answer our research questions, we identified a need of collecting material from both Volvo professionals and Volvo consumers. Interviews can provide deep and broad knowledge about a specific topic (Bryman & Bell, 2003, pp.362-364), which is suitable for our study. Also, interviews tend to be less intrusive in people's lives and the respondents tend to be less disturbed compared to observations (Bryman & Bell, 2003, pp.362-364), which we believed to be important to consider when interviewing consumers in order to keep them focused. We perceive the consumers' lives as a private and closed environment compared to the worksite of Volvo professionals. Furthermore, interviews are also a flexible way of collecting material and qualitative interviews show major attention towards the respondent's point of view (Bryman & Bell, 2003, pp.362-364). Also, Easterby-Smith, et al., (2002, p.86) states that interviews are appropriate when the questions are not that simple to answer briefly and detailed answers is sought after. Since our research area demands detailed answers and we are interested in the respondent's opinions regarding product sounds, we found qualitative interviews to be the most suitable data collection method.

## 2.5 Interview with Volvo Professionals

## 2.5.1 Selection of Interviewees

When selecting respondents, the sampling method judgmental sampling technique was used. This technique implicates that the researcher uses his or her judgment to select study objects and the main criterion for this method is that there should be convincing reasons as to why the respondents are able to give valuable answers to the research questions (Malhotra & Birks, 2003, p.364). We selected one respondent from each Volvo department that is engaged in developing sounds. To make sure that we would get answers that were representative for the whole department we chose persons with leading positions. Noteworthy is that all our respondents claimed to take their own initiatives regarding the branding affects of product sounds, at our initial inquiry. This made all departments, not only the brand department, interesting for describing what products sounds should communicate in terms of brand

messages and not only to determine which sound design provides a certain affect. The respondents are as follows:

## Attribute Manager from the Infotainment Department

The Infotainment Department handles the infotainment system in the cars which consist of the audio and radio system, navigation system, telephone system, and HMI system. The Infotainment department is also in charge of the sounds in these systems and therefore we found them to be an interesting interview object.

## Brand Identity Specialist from the Brand Department

The Brand Department works with brand identity, core-value communication, customer segmentation, target customer analysis and strategic planning. Besides this, the Brand Department is also involved in sound issues. Because our topic concerns both sounds and the brand, we felt that this department were appropriate to interview.

## Function & Attribute Leader from the NVH Department

The Noise Vibration Harshness Department, NVH, works with all sounds which the car itself produces, except from brakes and signal sounds, such as the blinker. The NVH Department mainly focuses on sounds from engine and other components. Since this department is involved in many different sound issues, we found them suitable to interview.

### Concept Engineer from the HMI Department

The Human-Machine-Interaction Department, HMI, develops buttons, controls and outputs in forms of display and sounds. The HMI department handles both informative messages and warning signals. Since the HMI Department is handling a major part of the product sounds in the car, we found it necessary to use them as an interview object.

#### Interaction Designer from the Design Department

The Design Department deals with the interaction design and are responsible for the picture, sounds, and physical controls in the cars when it comes to design issues. Regarding sounds, the Design Department is in charge of sounds that are used as an effect or part of the communication systems and they have a close collaboration with the HMI Department. Since the Design Department cooperates with the HMI Department regarding the sound issue, we found them necessary to interview.

#### Task Leader from the Telephone Department

The Telephone Department is mainly responsible for sounds in telephones, such as ringtones and SMS signals. By interviewing the Telephone Department, we covered all the product sounds that are present in a car.

#### 2.5.2 Formation of Interviews

All interviews we held were semi-structured because we aimed at holding flexible interviews where we did not steer the respondent too much, and were we could ask follow-up questions. Semi-structured interviews are suitable when the aim is to let respondents speak relatively freely, and also when interviewers desire the opportunity to ask questions, which are not included in an interview guide (Bryman & Bell, 2003, p.343). A loose interview guide is also something that Easterby-Smith, et al., (2002, p.88) encourages the use of.

We created an interview guide, as recommended by Bryman & Bell (2007, p.475), which consisted of six clear grand-tour questions based on our theoretical starting point in Chapter

Three. It is stated by Easterby-Smith, et al., (2002, p.88) that the research will be more successful if the areas which are of interest are clearly defined. The reason for using an interview guide was that we wanted to be sure that we covered all areas that were of interest. Regarding the grand-tour nature of the questions we perceived it as important that we did not ask detailed questions to begin with, as that might present ideas to the respondent that he or she would not have considered otherwise. Though, when we desired a wider elaboration of something we turned to more detailed mini-tour questions in order to increase the depth of our material. The interview guide was structured after the six blocks of Keller's CBBE-Model and the questions were structured based on the main concept behind each block. As mentioned previously we utilized six questions, and this means that there were one for each block and each question was meant to cover what efforts Volvo are engaged in when it comes to using product sounds to reinforce the different brand equity building blocks. Our aim was to ask Volvo Professionals about what different associations, memories and feelings they aim to trigger with their product sounds, without presenting our view of the brand equity building process. The reason for this was that we did not find it likely that they would have the same view on this process as our study is built on. Below are our six grand tour questions that we used as an interview guide for our interviews with Volvo Professionals.

- Do you want consumers to associate any product sounds with Volvo and in that case which and why?
- Do you try to affect actual or perceived product performance with your product sounds and in that case, which sounds and why?
- Do you want to evoke any associations in terms of adjectives with your product sounds and in that case which sounds and adjectives, and why?
- Do you find your product sounds important in any particular evaluation processes and how do you want your product sounds to affect consumers' overall impression of your products?
- Do you try to evoke feelings within consumers when hearing your product sounds and in that case which sounds and feelings?
- Do you try to increase consumers' engagement and interest in your brand with the help of product sounds and in that case how?

The interviews were performed during face-to-face meetings at Volvo's headquarter in Gothenburg, which we visited during a two day period in the middle of April 2009. Each interview lasted between 60 to 90 minutes and two tape recorders were used to make sure that we would not lose any important material. Also, all interviews were transcribed afterwards because it is stated by Bryman & Bell (2003, p.353) that recording and transcribing is suitable for qualitative research because it allows for a more thorough examination of what respondents says. However, it is important to remember that a tape recorder could be distressing (Easterby-Smith, et al., 2002, p.92), but our respondents agreed to us recording the interviews and did not seem to be anxious about it. Also, at each interview occasion only one of us participated in the conversation in order to decrease the possibility that respondents became distressed.

## 2.6 Interviews with Volvo Consumers

## 2.6.1 Selection of Respondents

When selecting the respondents for the consumer interviews, snowball sampling was used. In this sampling method, a small group of people who are relevant for the research is selected and then in turn those people recommend other respondents. A snowball sample has no accessible sampling frame within the population that easily could be identified and therefore, an own sampling frame has to be created. (Bryman & Bell, 2003, p.105) Since our sample of respondents have to fulfill certain unique demands, a snowball sample was most suitable because it had been difficult for us to find respondents that satisfy our criterion. Our demands for the representatives are as follows:

- Age 30-40
- Currently owning a new Volvo car

The reason for having these demands are that people fulfilling these have great purchasing power and are familiar with the sounds which are currently present in Volvos cars. We interviewed two persons, one man and one woman, who are friends of a friend to us and those persons each selected two other respondents, also one man and one woman. We believed that it was important to include as many men as women because we found it possible that there were differences between the genders. This left us with the total of six respondents who were interviewed separately and those respondents are: Herman, age 32, Jonna, age 35, Elias, age 38, Christine, age 34, Nils, age 36, Sebastian, age 30.

## 2.6.2 Formation of interview

The interviews with the consumers were also semi-structured based on the same reasons as for Volvo. Each interview started with a test driving session of the latest model of a Volvo V50 in order to let our interviewees try all the car's functions which produce some kind of sound. The purpose was to expose the respondent to the car sounds of a typical Volvo model, in order to be able to discuss them. The car we used was a Volvo V50 because we found it to be one of their average models, regarding equipment, price and image. Though, we saw to it that our test car had all the equipment that was mentioned by Volvo Professionals during our interviews with them. The reason was that we wanted to give the consumers the chance to evaluate all product sounds that the Volvo Professionals mentioned. After the car was tested, an interview with the respondents was performed which lasted 60 to 90 minutes and where one of us participated. We used the same interviewer for all interviews in order to keep the conditions as homogenous for them all, as a certain degree of comparison will be made between them in the analysis. Our consumer interviews were also recorded and transcribed, for the same reasons as those for Volvo.

As we did not want to affect or control our respondents in a way that made them over-analyze our test car and make up fictional opinions about it, we let them explore the car on their own and thereafter speak about the sounds that they perceived as most relevant. This is a suitable method when focus lies on what the interviewees finds important in order to describe something, according to Bryman and Bell (2007, p.475). As a structure of these interviews we used the same approach as for the interviews with the Volvo Professionals. We followed an interview guide based on six grand-tour questions that covered the basic content of each block in Keller's CBBE-Model. The only difference between this guide and the one that we used for the Volvo Professionals was that the phrasing of the questions suited a consumer's perspective. Below are the grand tour questions that made up our interview guide.

- Do you associate any product sounds that this car produces with the brand Volvo and in that case which and why?
- Do you perceive any of the sounds in this car to affect your opinion about its performance and in that case, which sounds and why?
- Do you associate the sounds in this car with any adjectives and in that case which sounds and adjectives, and why?
- How do the sounds in this car affect your overall opinion about it and why?
- Do any of the product sounds in this car evoke a specific feeling in you and in that case which sounds and feelings?
- Do any of the sounds in this car affect your interest or engagement in it and in that case which sounds and why?

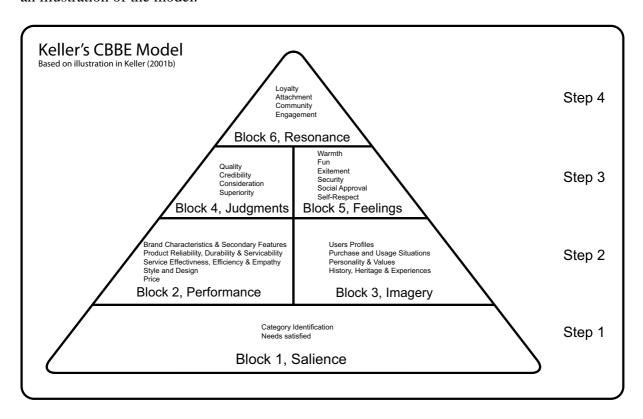
## 2.7 Data Analysis

As we mentioned in Chapter One, Keller's CBBE-Model offers a description of the steps of building Consumer-Based Brand Equity. As our aim with this study is to explore, describe, and analyze how firms that manufacture and market public consumer products utilize the potential of product sound, as an audio branding tool, in building Consumer-Based Brand Equity, we see it as beneficial to structure our analysis according to this model. Therefore the CBBE-Model will be presented extensively in Chapter Three together with other branding theories that explain the steps of building Consumer-Based Brand Equity, and sound theories that indicate the possible potential of product sound in the different blocks. In order to develop theory in the research area of our study, we will attempt to sort the empirical material according to our theoretical framework and explain why logical connections can be made between them. In our analysis chapter the sound theory from Chapter Three will be used to increase the credibility of our interpretation of our consumers' statements. Lastly, we will compare our interpretation of the material from the Volvo Professionals and the consumers in order to determine if and which efforts, regarding brand-building product sounds, work as audio branding tools.

## 3 THEORY



As mentioned in the problem formulation section, Keller's CBBE-Model consists of four steps. Each step is dependent on having successfully completed the previous step until finally the top of the model is reached. The four steps in turn consist of six logically constructed brand-building blocks. The CBBE-Model's theoretical point of departure is that the power of a brand lies in the minds of the consumer. We will now present the CBBE-Model in detail since it makes up this paper's theoretical framework. The model will as well be discussed in terms of its relation to both product sounds and other branding and sound theories. Below is an illustration of the model.



## 3.1 Step 1, Who Are You?

At this step the consumer asks the following question about the brand: Who Are You? This is where the firm achieves the right type of brand identity and it requires creating Brand Salience with consumers (Keller, 2001b). The point is to increase the consumer's ability to

recall or recognize the brand as well as evoke a wide range of purchase and consumptions scenarios for the brand (Keller, 2001b). Clarke (2005, p.7) speaks of a sounds ability to be recognized. It is stated by him that to hear a sound and recognize it is the same thing as understanding the meaning of that sound, which in turn results in a corresponding action. This suggests that if a consumer hears and recognizes a product sound, then that sound can as well evoke a purchase or consumption action in this consumer. The implication of this reasoning is that product sounds may be a useful tool in this step of building Consumer-Based Brand Equity. We will therefore now take a closer look at Brand Salience.

## 3.1.1 Block 1, Brand Salience

The CBBE-Model's First Step and foundation is based upon Block 1, Brand Salience. Brand Salience is the degree to which the brand is thought of in buying situations (Keller, 2001b). It is stated by Romaniuk & Sharp (2004) that a brand is more likely to be thought of in a buying situation the more cues that it is linked to. They claim that important factors are the quantity: how many; and the quality: how fresh and relevant, the cues are since consumers are affected by a range of cues beyond a specific product category. Creating consumer Brand Salience is related to different aspects of brand awareness (Keller, 2001a). According to Aaker (1996), brand awareness is an important component of brand equity but it is however sometimes undervalued in brand equity contexts. He says that awareness has the ability to affect consumer brand perceptions and attitudes and it can cause consumers to believe that a brand is superior as well as instill confidence in the brand. In some context, brand awareness can even be a driver of brand choice and loyalty (Aaker, 1996). He also states that several levels of brand awareness exist and consumer Brand Salience is a reflection of these. Aaker's (1996) list includes Recognition: have you heard of Brand X; Recall: what brands in the product category X can you recall; Top-of-Mind: the first-named brand in a recall situation; Brand Dominance: the only recalled brand; Brand Knowledge: when the consumer knows what the brand stands for; Brand Opinion: consumer's opinions about the brand. Keller (2001b) speaks of Brand Salience in terms of the brand awareness aspects depth and breadth. He refers depth to the consumer's ability to recall or recognize the brand while breadth is the range of purchase and consumption situations the brand evokes. In order to be highly salient, he claims that a brand must have both depth and breadth. It is not enough to simply be remembered, the consumer must do so at the right time and place (Keller, 2001a). Brand breadth deals with increasing the usage situations in which the brand comes to mind, which helps drive consumption and increase sales volume (Keller, 2001a). Key questions of breadth deal with when and where the consumer thinks of the brand, and how easily and often they do so (Keller, 2001a). It is of interest for us to know if product sound can contribute to the Brand Salience Block.

## 3.2 Step 2, What Are You?

Step 2 of the CBBE-Model concerns brand meaning. This is where the consumer asks the following question about the brand: What Are You? In order to give meaning to a brand, a firm must establish what the brand is characterized by and should stand for in the mind of the consumer, as well as creating a brand image (Keller, 2001b). He states that Brand associations are key aspects of Step 2. According to DeNora (2000, pp.11,13), sound can be significant in defining situations and also be used for making sense of a situation by making people aware of how to react. DeNora (2000, p.13) takes an airline safety system as an example. She describes that these systems have quick and relatively loud sounds when sending out messages that the passengers should pay attention since something important is about to happen. This may be of relevance for Step 2 since it implies that product sounds can be

helpful in communicating information for consumers. Hultén, et al., (2008, p.76) state that sound has the capacity to evoke memories. Hearing a specific sound can, according to Hultén, et al., (2008, p.76), trigger a memory from the past in an individual that evokes certain associations. This also implies that sound may play an integral role in Step 2 of building Consumer-Based Brand Equity. The reason for this is that if a consumer hears a product sound that triggers a memory and thus an association, then this sound may shape that consumer's brand associations. Keller (2001a) describes that Step 2 of the CBBE-Model consists of two blocks of consumer brand association categories, formed from either direct contact with the brand, advertising, or other information source. In order to build Consumer-Based Brand Equity, it is essential that these consumer brand associations are strong, favorable and unique because it will produce the most positive brand responses in the next step (Keller, 2001b). These two blocks of consumer brand associations will now be presented in detail.

## 3.2.1 Block 2, Brand Performance

Block 2 is the Brand Performance Block and is related to how the products intrinsic properties meet consumers' functional needs (Keller, 2001a). Park, et al., (1986) state that brands can be selected based on functional needs. Furthermore, Park, et al., (1986) describes functional needs as motivating the consumer to search for products that solve consumption-related problems. Consumption related problems can, according to Fennell (1978), be everything from solving a current problem, preventing a potential problem, resolving a conflict, and restructuring a frustrating situation. It involves basic usage, and consumers expect that the purchased product works right, looks good, is durable, and performs as promised and expected (Fennell, 1978). Functional value can be derived from a variety of characteristics or attributes including reliability, durability, and price (Sheth, et al., 1991). Functional aspects of brands are thus designed to solve externally generated consumption needs (Park, et al., 1986). Depending on the circumstance, rational externally generated consumption needs may dominate purchase decisions (Sheth, et al., 1991). In regards to the price aspect, Sivakumar and Raj's (1997) study shows that high-quality brands are less unfavorably affected by price increases than low-quality brands. They also found that the overall effects of short-term price changes favor high-quality brands. In the CBBE-Model, Keller (2001a) states that it is the fundamental properties of the brand in terms of actual product characteristics that make up the performance associations. He also suggests that the block's performance dimensions can be used for product differentiation. Brand Performance transcends the ingredients that make up the product to include factors of the brand that augments the ingredients (Keller, 2001b). It is therefore of interest to know if product sounds can affect the functional performance attributes and benefits of the CBBE-Model. It is the following five functional performance attributes and benefits that underlie the block (Keller, 2001b):

## Primary Characteristics and Supplementary Features

This is the consumer's beliefs about how well the primary and secondary features of the product operate.

#### Product Reliability, Durability, and Serviceability

Reliability refers to performance consistency over time and from purchase to purchase. Durability deals with the expected economic life of the product. Serviceability means the ease of servicing a product, which is not of relevance for this paper. These attributes and benefits are in other words the consumer's broad view of the product performance.

## Service Effectiveness, Efficiency, and Empathy

This deals with performance-related associations in terms of service interactions with the brand. These functional performance attributes are not relevant for this paper and will not be discussed further.

## Style and Design

These are associations that go beyond functional aspects to more aesthetic considerations. Size, shape, material, sound, and color are involved factors. Product performance is thus also dependent on the five senses.

#### Price

Brand pricing policy can create consumer associations. A price strategy can dictate if the consumers categorize the price of the brand as low, medium, or high. It can as well dictate if the consumer perceives the price to be frequently or infrequently discounted.

## 3.2.2 Block 3, Brand Imagery

Block 3 is the Brand Imagery Block and is related to more abstract, imagery-related aspects (Keller, 2001a). This type of brand meaning refers to the extrinsic product properties that try to meet the consumer's psychological or social needs (Keller, 2001a). Brand image is, according to Kapferer (2008, p.174), on the receiver's side and therefore accounts for the consumer's perspective. He refers it to the way that consumers decode the signals that originate from the brand and image is thus the result and interpretation of the brand identity by the consumer. A brand's extrinsic product properties are important since they can provide a richer source of competitive advantage than its functional features can (Sherrington, 2003). Aaker (1996) speaks of the intangible image related associations brand personality and brand organization. He argues that a brand's personality provides an important link to the brands emotional and self-expressive benefits, as well as a foundation for consumer-brand relationship and differentiation. Brands that have minor physical differences and consumed in social settings can especially benefit from brand personality (Aaker, 1996). He state that a brand personality tells the consumer what type of person that may use the brand and it makes the brand interesting with descriptions such as: energetic, vital, friendly, reliable, and rugged. Ghodeswar (2008) argue that since personality is difficult to copy it can help brands achieve sustainable differentiation. The personality association is also an effective tool for establishing a direct relationship with consumers (Ghodeswar, 2008). If the firm behind a brand is visible then Aaker's (1996) brand-as-organization perspective can play an important imagery association role as well. This perspective takes into account the organization, its people, values, and programs (Aaker, 1996). He claims that a visible firm can show the consumer that a brand represents more than products and services. Also, he says that key organizational associations include: caring for the consumer, innovative, striving for high quality, successful, visibility, community oriented, and being a global player. The brand-asorganization may conjure up consumer imagery of trust, admiration, and credibility (Aaker, 1996). The Brand Imagery Block consists of various intangible brand aspects and it is how the consumer abstractly thinks about the brand, not what the brand actually does (Keller, 2001b). Numerous intangibles can obviously be associated with a brand and it is of interest for us to know if product sounds can have an affect on these. The CBBE-Model highlights the following four (Keller, 2001a):

#### User Profile

This set of Brand Imagery associations involves the type of person who uses the brand in question. It can cause consumers to have profiles or mental images of users or idealized users.

The associations may be based on demographic or more abstract psychological factors. If a consumer believes that many individuals use the brand it may in turn think that the brand is popular or that it is the market leader.

### Purchase and Usage Situations

Associations can also involve the type of conditions that the brand could or should be bought and used in. A purchase situation association can be based on aspects such as: the distribution channel, type of retail store, and ease of purchase and associated rewards. Usage situation associations can be based on aspects such as: when the brand is used, where the brand is used, and during what type of activity the brand is used.

## Personality and Values

A brand can take on human personality traits and values. This involves descriptive usage imagery as well as rich contextual information. The CBBE-Model identifies the following dimensions of brand personality: sincerity, excitement, competence, sophistication, and ruggedness.

## History, Heritage, and Experience

Brands can be associated to their past as well as to important events in the brand's history. This involves specific and concrete examples that transcend the usage imagery generalizations. The associations can consist of distinctly personal experiences or be related to behaviors and experiences of friends and family. These are therefore fairly personal but sometimes certain commonalities can be found. However, the associations can as well be more public and broad-based and therefore be shared to a larger degree.

## 3.3 Step 3, What About You?

The CBBE-Model's Third Step deals with brand response and refers to how the consumers respond to the brand (Keller, 2001b). Firms therefore must pay attention to how consumers react to marketing activities and other firm oriented sources of information, according to Keller (2001b). He states that this is the step where the consumer asks: What Do I Think or Feel About You? Also, he argues that these responses consist of the consumer's feelings and judgments towards the brand. Sound has been shown to have an impact on individuals' feelings and judgments. Tonalities of sounds can for example trigger various responses in individuals and can be linked to descriptions ranging from majestic, dignified, happiness, joy, dreamy, solemn, and sadness (Hodges, 1996, pp.310-312; Wedin, 1972; Hevner, 1936). Wedin (1972) also claims that loud sounds are closely related to intensity and linked to descriptions such as lively, energetic, or agitated, while soft sounds are closely related to gentleness through descriptions such as soft, peaceful, and light. This has the implication that a specific type of sound in a product can evoke a wide range of consumer responses towards a brand when experienced in connection to it. Consequently product sounds may be a useful aspect of Step 3 when building Consumer-Based Brand Equity. The brand responses judgments and feelings can be either head or heart oriented and what matters is how positive and accessible these responses are (Keller, 2001a). We will now take a closer look at the model's two blocks.

## 3.3.1 Block 4, Consumer Judgments

Block 4's source comes from the head and deals with Consumer Judgments and it is the consumer's personal opinions about the brand based on how different performance and imagery associations are put together (Keller, 2001a). An important aspect of Block 4 is the

consumer's attitude towards the brand. Attitudes, in this context, can be defined as relatively enduring consumer evaluations towards a brand (Eagly & Chaiken, 1993). The more positively a consumer evaluates a brand, the more likely it will approach or consume it (Priester. et al., 2004). Priester. et al., 2004 say that attitudes toward alternative brands are a fundamental precursor of a consumer's brand consideration. Howard, et al., (1969) introduced the concept that consumers prior to making a choice consider subsets of alternatives. As much as 70 percent of consumer variation in final choice can be explained by consideration (Hauser & Wernerfelt, 1989). The importance of consideration can therefore not be understated. Attitudes play a fundamental role: The more liked (Povasac, et al., 1997) or memorable and easily accessed from memory (Nedungadi, 1990), the more likely it is that a brand will be considered. Furthermore, Priester, et al., (2004) found that the strength of an attitude is a decisive factor in consumer choice. That is, strong positive attitudes can guide behavior by influencing which alternatives are considered prior to a choice being made. Perceived quality is another important dimension of Consumer Judgments (Aaker & Joachimsthaler, 1991). It does not involve the actual quality of the product but rather the consumer's subjective evaluation of it (Zeithaml, 1988). According to Pappu, et al., (2005), perceived quality provides consumer value by providing reasons to buy the brand and it can also serve the function of differentiating the product from competing brands. Herbig and Milewicz (1997) argue that a firm's credibility can be pivotal for brand success. They claim that a firm's credibility is the believability of a firm's intentions at a specific moment in time and it involves whether or not a company can be relied on to do what it says it will do, for instance deliver quality products. They also suggest that credibility is time sensitive and exists when the consumer can use past actions of the firm to predict future actions. Keller (2001a) states that there are four main brand judgments that are particularly important for creating strong brands. We are interested in knowing how product sounds may influence these. The CBBE-Model consists of the following brand judgments (Keller, 2001a):

#### Quality

This is the most important attitude and relates to the various ways in which the consumer perceives the brand's quality. Other quality-related attitudes are consumer perceptions of value and satisfaction.

#### Credibility

Consumers may form judgments with respect to the firm behind the brand. This refers to the degree that the brand and its firm as a whole are thought of as credible in the following dimensions: perceived expertise, trustworthiness, and likeability. Credibility judgments transform specific brand quality concerns to consider broader issues related to the actual firm.

#### Consideration

It is of key concern that the consumer actually considers purchasing or using a brand. Consideration is the likelihood that consumers will actually include the brand in the set of brands they may buy or use. This brand judgment partially depends on how personally relevant consumers find the brand to be. It also depends largely on strong and favorable brand image associations. Brand consideration is therefore the extent to which the brand is thought of as appropriate and meaningful.

### Superiority

This is the degree to which the consumer views the brand as unique and better in comparison to other brands. Superiority is critical to building intense and active consumer relationships. It is largely dependent on the number and nature of unique brand image associations.

## 3.3.2 Block 5, Consumer Feelings

Block 5, Consumer Feelings, relates to the consumer's heart and is the emotional responses and reactions towards the brand (Keller, 2001b). Emotional responses and reactions towards a brand involve the brand fulfilling experiential consumer needs (Park, et al., 1986). Park, et al., (1986) define experiential needs as consumers desire for products that provide sensory pleasure, variety, and cognitive stimulation. Experiential needs can be filled through hedonic consumption, which deals with aspects of consumer behavior that involve multi-sensory, fantasy, and emotive aspects of the product usage experience (Hirschman & Holbrook, 1982). Multi-sensory images can conjure up actual past events as well as fantasy imagery and emotive responses are both psychological and physiological in nature and generate altered states in mind and body (Hirschman & Holbrook, 1982). According to Holbrook and Hirschman (1982), important aspects of consumer behavior include playful leisure activities, sensory pleasures, daydreams, esthetic enjoyment, and emotional responses. This experiential perspective regards consumer behavior as a subjective state of consciousness and consumer behavior thus consists of symbolic meanings, hedonic responses, and aesthetic criteria (Holbrook & Hirschman, 1982). Both Hirschman and Holbrook (1982) and Holbrook and Hirschman (1982) works illustrate the importance of experiential needs from a consumer consumption perspective. Experiential needs are important in building Consumer-Based Brand Equity since brands need to be consumed in order to be able to build brand equity. A brand with experiential aspects can fulfill consumers internally generated needs for stimulation and variety (Park, et al., 1986). According to Park, et al., (1986), consumers do much more than just simply process incoming information when making purchasing choices. Consumers as well engage themselves in imaginative, emotional, and enthusiastic consumption experiences (Woods, 1981). In other words, consumers buy products for the meaning and feeling they evoke, not just for what they can do. Keller (2001b) states that Consumer Feelings can be mild or intense as well as positive or negative in nature. It is therefore of interest to know if product sounds can actively contribute to the level and type of consumer feeling that is evoked. The CBBE-Model presents six important brand-building feelings (Keller, 2001b):

## Warmth

This refers to when the brand evokes soothing feelings such as peaceful, sentimental, warmhearted, or affectionate.

#### Fun

Upbeat, amused, lighthearted, joyous, playful, and cheerful types of feelings are part of this brand feeling.

#### Excitement

Brands that evoke excitement feelings may result in euphoric feelings of being alive. The brand makes the consumer feel cool and sexy. It relates to the degree that the brand energizes the consumer and makes it feel as if it is experiencing something special.

## Security

This occurs when the consumer associates the brand with the elimination of worries or concerns. The brand thus may produce feelings of safety, comfort, and self-assurance in the consumer.

### Social approval

Social approval takes place when consumers feel that others look favorably upon their appearance and behavior as a result of the brand. The consumer thus receives positive feelings from the reactions of others to them.

## Self-respect

If the consumer feels a sense of pride, accomplishment, or fulfillment from the brand then self-respect has been achieved. The brand thus can make the consumer feel better about themselves.

## 3.4 Step 4, What About You And Me?

The CBBE-Model's final step deals with the consumer's ultimate relationship and level of identification with the brand and this is where a consumer-brand relationship has been established (Keller, 2001b). Stockfelt (1997, pp.19-21) describes how individuals live their entire lives in close and interactive relationships with sound. This has resulted in that it is through sound that individuals establish an identity (Stockfelt, 1997, pp.19-21). Individuals can be highly passionate towards specific sounds and even develop relationships with them, according to Turax (2001, p.29). He states that this may be achieved if the sounds lives up to social norms, has positive associations, and is stuck in memory. Individuals are also attracted to sound since our whole being is connected to sounds: our mind, our body, and even the nature in which we live in (Rothenberg & Ulvaeus, 2001, p.14). Stockfelt (1997, pp.19-21), Turax (2001, p.29), and Rothenberg and Ulvaeus (2001, p.14) statements have several implications for product sounds and building Consumer-Based Brand Equity. Product sounds may create interactive relationships with the consumer and the brand. Product sounds may aid the consumer in establishing a strong level of identification with the brand. Product sounds may encourage passion from the consumer towards the brand. This leads us to believe that product sounds can as well be instrumental in this Fourth and final Step of building Consumer-Based Brand Equity. We will therefore take a detailed look at Block 6, Consumer-Brand Resonance, which Step 4 is based upon.

## 3.4.1 Block 6, Consumer-Brand Resonance

Block 6 is, according to Keller (2001b), the most valuable brand-building block and can only occur when the previous five brand-building blocks are entirely in sync with consumers' needs, wants, and desires. Consumer-Brand Resonance thus reflects an entirely harmonious relationship between consumers and the brand (Keller, 2001b). It involves the personal component of the relationship between consumers and brands (Keller, 2006). Fournier (1998) studied the nature of the relationships that exist between consumers and brands. The following dimensions were identified by her that can combine to yield brand relationship strength and durability over time: self-concept connection, commitment or nostalgic attachment, behavioral interdependence, love/passion, intimacy, and brand partner quality. Affective and socio-emotive attachments take place when the brand connects to a consumer's self-concept by delivering on important identity concerns, tasks, or themes, according to Kleine, et al., (1995). They state that this enables the consumer to express a significant aspect of self via the brand. Another aspect of affective socio-emotive attachments is when a passionate love exists towards the brand, according to Fournier (1998). She says that it can conjure up feelings in the consumer that something is missing if the brand has not been used for a while. Strong behavioral ties are, according to Fournier (1998), characterized by interdependence between the consumer and the brand. She states that it involves the consumer frequently interacting with the brand through consumption rituals. Behavioral ties also exist when there is a sense of commitment from the consumer towards the brand (Fournier, 1998). Then there are the supportive cognitive belief dimensions: intimacy and brand partner quality (Escalas, 2004; Fournier, 1998). Intimacy can involve personal associations and experiences with the brand that creates narratives in which the brand plays a central role (Escalas, 2004). The brand partner quality dimension refers to how in strong consumer brand relationship the consumer feels wanted, respected, listened to, and cared for (Fournier, 1998). Keller (2001b) states that Consumer-Brand Resonance refers to the nature of the consumer's brand relationship and the degree to which they feel in sync with the brand. According to Keller (2001a), the depth of the psychological brand bond and the level of activity produced by this loyalty characterize Consumer-Brand Resonance. It also involves intensity and activity aspects, according to him. Intensity refers to the strength of the attitudinal attachment and sense of community, while activity is the frequency of purchase and usage of the brand, as well as how often the consumer engages in brand activities not related to the purchase and usage of the brand (Keller, 2001a). We see that Consumer-Brand Resonance is the key for creating Consumer-Based Brand Equity. Four categories of Consumer-Brand Resonance exist and we are interested in knowing what role product sounds play in these. The CBBE-Model consists of the following categories (Keller, 2001a):

## **Behavioral Loyalty**

This category relates to aspects such as repeat purchases and the amount, or share, of category volume that can be credited to the actual brand. Of interest is thus to know how often and how much a consumer purchases a brand.

#### Attitudinal Attachment

To properly create resonance a brand must be perceived as something special in a broad context since some consumers buy specific brands merely out of necessity and accessibility. A strong personal attachment is necessary, not just a positive brand attitude, which can create attitudinal attachment. Consumers with attitudinal attachment may state that they love a brand and that it is one of their favorite possessions.

## Sense of Community

Identification with a brand community occurs when consumers feel kinship or affiliation with other people associated with the brand. It can be consumer connections in the form of fellow brand users or consumers as well as individuals from the firm.

## **Active Engagement**

This takes place when consumers willingly invest time, energy, money, or other resources into the brand beyond those used during purchase or consumption. Consumers thus become brand evangelists and ambassadors since they actively communicate about the brand as well as strengthen brand ties of others.

## 3.5 Consumer-Based Brand Equity via Product Sounds

In this chapter we have presented Keller's model of building Consumer-Based Brand Equity and as well related it to other relevant sound and branding theories, in order to provide a structure for describing a brand-building process and also indicate the potential of product sounds in brand-building. The potential we have described is highly theoretical even if it appears logical that product sounds could be used according to it. In practice it is possible that product sounds can have affects on several blocks and that this brings complex practical problems. Therefore there is a need to confirm the ideas of this theoretical view. Regarding

product sounds other researchers have shown that they can affect the perception of product performance (Lyon, 2000), the enjoyment of using products (Lyon, 2000), consumers' feelings (Ozcan, 2008), the overall product experience and also that they can communicate messages (Jekosch, 2005). It is also claimed by Jekosch (2005) that undesired product sounds can disturb the experience of desired sounds. These statements further indicates the potential that product sounds may have in reinforcing Block 2 and Block 4 in Keller's model as they concern product performance and feelings. Fulberg (2003) states that sound in retail environments can be used as a brand trigger to ease the recollection of previous brand memories. This also indicates that there is a potential of product sounds in Block 1. Though his study is focused on music, and product sounds are most often shorter than a piece of music and also less complex, which means that his study cannot be fully extrapolated on our theoretical view of product sounds in Block 1.

We can see that past research within the area of product sounds have not focused extensively on the relation between product sounds and brands even though connections can be made between past statements and individual blocks in our theoretical base. None of the past research has had an overall focus on brands which means that the same product sound has not been studied in regard to its simultaneous affect on several levels of brand equity building. Neither has it looked at firms' efforts of using product sounds to reinforce a brand in relation to how their consumers perceive the sounds of their products. Due to gaps in past research and the fact that the potential of product sounds in brand-building that we have described is highly theoretical, we see a need to verify it with empirical material. Therefore we believe that it would be valuable to relate our theoretical potential of product sounds in brand-building to a firm's efforts of using product sounds as an audio branding tool. This could indicate if firms find product sounds valuable when it comes to brand-building and what parts of the theoretical potential they attempt and manage to benefit from. Furthermore, Keller's CBBE-Model has its focus on the perceptions of consumers which creates a need to also test how consumers of the same firm perceive their product sounds. Without showing that the firms efforts of using product sounds to build its brand has the desired affect on consumers no certain answers can be given regarding this thesis's reasoning.

## **4 EMPIRICAL MATERIAL**

a how figures that manufacture and

The purpose of this thesis is to explore, describe, and analyze how firms that manufacture and market public consumer products utilize the potential of product sound, as an audio branding tool, in building Consumer-Based Brand Equity. Therefore, the empirical material consists of both Volvo consumers and professionals at Volvo.

## 4.1 Volvo Consumers

This section presents empirical material from our six interviews with consumers that have extensive experience with the Volvo brand and its products. The interviewees are referred to by their first names; Herman, Jonna, Elias, Christine, Nils, and Sebastian.

#### 4.1.1 Herman

Herman mainly focuses on the car sounds functional values and claims not to appreciate any aesthetic values about them. He thinks that the suction sound of the power window provides him with proper confirmation that the window is completely rolled up. Also the mechanical sound that appears when locking the doors in the test car provides him with similar information. He claims that he would not trust a synthetic sound for this function, since he would need to check whether the pins are down if he did not hear the actual lock being activated. However, he does not need confirmation of every function in the car, for instance he does not need an engine sound to indicate how it is performing. Instead, he stresses the importance of a quiet car to be able to hold a conversation while driving.

Herman perceives that the presence of the sounds that confirm his actions increases his sense of the product quality. Also the actual sounds in the car indicate good quality, according to him. He thinks that low frequency sounds and the absence of rattling sounds provide him with this impression. For instance, Herman associates the car door sound with a new high quality car even though he thinks it sounds more hollow than his expensive Volvo V70. He claims that the sound of closing the door, the door locking sound, and the other sounds that creates the impression of a safety vault is associated with Volvo's image of producing safe cars. Though, the sound from the trunk being closed lessens this impression for him, as it sounds metallic. Furthermore, Herman thinks that car sounds are most noticed when they sound poor as you expect them to sound well in a new car. He claims that he would notice sounds in a car that are perceived as irritating if he should visit a show-room to buy a new car. Herman also thinks that the moderate engine sound of our test car suits the image of Volvo, as a sporty sound is associated with sports cars and those in turn are not associated with safety.

Regarding sounds that he can connect to the brand Volvo, Herman mentions the sound from closing the door and the blinker sound. He perceives these sounds to be unique for Volvo and that he would recognize them. Herman thinks that these sounds are directed towards people inside the car and that there is no sound in our test car that bystanders would notice. In his view, bystanders would only notice if a car door sounded metallic and clunky as that would make it sound as something was broken. Another reflection that Herman makes regarding the blinker sound in the test car is that it sounds like a relay, which was used to control blinkers before cars had computers in them. He thinks that this is the way blinkers should sound, as a synthetic sound would appear too staged for him. Herman feels safe with car sounds that he recognizes. He believes this is the case because humans are creatures of habits.

The sound quality of the car stereo is very important to Herman as this turns the car into a place for entertainment, instead of just a means of transportation. He thinks that a poor stereo sound can disturb his driving and lessen his overall product experience.

When Herman is asked about the possible feature of personalizing sounds in a car he thinks it would be a good idea to have a unique sound when unlocking your car as it would help him to find it on a parking slot.

#### 4.1.2 Jonna

Jonna cannot associate any of the sounds in the test car with the brand Volvo. Though when she is asked about the associations she gets when hearing the different sounds she talks a lot about quality. The closing of the door sound gives her a feeling that the door is heavy and therefore safe, which is very positive for her. She thinks that it sounds as if Volvo has invested a lot of resources in developing their doors. In her view it is the low frequency sounds that indicate quality since she does not like beeping sounds. Jonna perceives the acoustics of our test car to be very good, something that she believes contributes to a calm driving experience, and that is typically Swedish. Also the engine should produce a low frequency sound in order to be perceived as high quality, in her mind. Her overall impression of the sounds in our test car is that they indicate high quality. As cars are something that you invest a lot of money in, and therefore should be durable, it would lessen her product experience if they sounded poor. Though, she mentions some sounds that she does not like in the test car. Jonna thinks that the glove compartment produces a rattling sound when it is closed. This does not meet her expectations of a Volvo car, which surprises her. Instead she would have preferred just a clicking sound. Also the sound of closing the trunk is disturbing to her. She thinks it is too loud even though it is positive that it sounds heavy.

Jonna stresses the importance of having a calm driving environment in the car as stressful sounds can make her tired. Generally, she wants sounds that are pleasant and not too loud in order to stay relaxed. She points out the blinker sound as positive because she likes the sound. She describes that this sound is not repeated too fast and that it is just loud enough for you to notice if you forgot to turn off the blinker without being annoying. It is important for Jonna that the engine can be heard when pressing the gas to get a confirmation that the engine is performing. Regarding the engine sound, it is also important for her that it is calm so that it allows her to hear what people say inside the car.

Jonna thinks that it is important that car sounds match the car. In other cars she has perceived the horn sound to be poor sounding and weak, but in the test car she finds that it matches Volvos image. Her impression is that it is firm and that it is a bit musical as it has chord like

characteristics. In other words, Jonna expects a loud and distinct horn sound from a Volvo and she thinks that the test car fulfills this.

Concerning the pure functional values of car sounds, Jonna says that the door locking sound provides an important confirmation along with the flashing lights. Though, in the test car she thinks that this sound is too low even though she prefers a mechanical sound, which Volvo cars have, in front of a synthetic beep. This sound is higher in her car and as a result of owning this car she would have to change her behavior to confirm that this car is locked, and this would as well be annoying to her.

When asked about whether she would like to have the possibility to personalize some of the sounds in the car she says that she would not appreciate that particularly. Though she thinks that people are used to having that possibility nowadays, but also that Volvo's target group probably would not be interested in this. Still, Jonna thinks that the aesthetic values in car sounds are important and that a well sounding car, like our test car, is perceived to be worth more. She thinks that the sound profile of our test car does not fit a young target group, as it is generally quiet and that younger people often prefer more powerful sounds from the stereo and engine.

Finally, Jonna claims that the stereo quality is important for her because it can be disturbing otherwise. She does not fully like the stereo sound in our test car as the treble is too low.

#### 4.1.3 Elias

Elias strongly associates the sound of pulling the door handle of the test car with Volvo and he says that it reminds him of a high quality product. It gives him the perception that the door is solid and not just an empty shell. He also associates the engine sound with Volvo even though he cannot define why. Regarding the engine sound he wants it loud enough to know when it is time to shift gear but not too loud as that would disturb his driving or conversations with passengers. The engine of the test car does not sound strong to him but it fulfills his other requirements. Elias cannot say whether there are similarities between Volvo's different engines and does not connect a louder engine sound with better performance. He thinks that you can notice how the engine is performing without the engine sound.

Elias finds the blinker sound of the test car pleasant, as it is not too loud or stressful. He also associates it with safety and Sweden. Elias claims that a faster blinker sound would make him nervous and that calm sounds are typically Swedish. He refers to that French cars are being less thought through and restless in this sense.

Elias thinks that the sound of activating the central lock sounds cool, but that only younger people tend to use this public sound to impress others when they are leaving their car. Elias would prefer a synthetic beep instead of the mechanical sound of Volvo as an indicator of locked doors. The reason is that it would give him a clearer confirmation than the mechanical sound of the test car. He also finds that it is too quiet. Elias does not believe that the sound of closing a Volvo door, or any other public car sound, is a way to show status.

Elias does not like the sound of the closing of the glove compartment as it sounds plastic and this affects his impression of the car's quality. Neither the closing of the trunk sound appeals to him as he thinks it sounds as if something is getting in the way of it from closing properly.

The stereo of the test car fulfills his needs. Elias describes it as a sound without crackling noises and a good bass as it otherwise would sound flat and boring to him. He thinks that low frequencies in general signal quality and that they are an important part of the sound aesthetics of a car. As examples of this he mentions the door and the gearshift of our test car. He claims that the sounds of a car are an important part of the aesthetics of a car and that poor sounds could ruin the aesthetic impression of a car. At the same time he does not see cars as important aesthetic objects but more as a means of a practical and comfortable transportation.

He thinks that the test car is not made for young men, but for families. He states that the sounds of the car, which he perceives as unexaggerated and moderate, follows this. He believes that younger persons would want a car that is louder in general. The possibility to personalize sounds in the car would appeal to him, as this is common in other products like mobile phones, and he is used to this.

Elias is not sure of how sounds would affect him at a show-room, but he is sure that the central locking sound would not affect him. He perceives it to be too quiet and it therefore fails to enhance the quality impression.

### 4.1.4 Christine

The most significant impression Christine gets from the sounds in the test car is that the inside acoustics are very quiet, and she states that it would be even quieter without the winter tires that are on the car. To her, the overall sound of the car is not sporty, but quiet, which she believes contributes to a safe feeling. In line with this, Christine finds the engine to sound safe and compact and she associates it with a family car. It does not sound sporty to her.

Christine describes that she comes from a car-interested family and that sounds play an important role for her driving experience. She mentions the starting sound, the sound of shifting gear, and the sound of an accelerating engine as extra important. Though, in our test car these sounds are too moderate to offer her a special driving experience. Christine needs harder and more aggressive sounds to enjoy driving a car. The test car makes her feel as if she is enclosed in an airplane. Cars are important aesthetic objects to her and she wants them to appear exclusive no matter what they cost. She does not see a big aesthetic value in the sounds of the test car. The sounds of pulled handles in the car sounds cheap and plastic to her, the blinkers geeky, and the car's sounds are too modest in general, she says. Though she likes the sound of the closing of the trunk, but that is because it gives her a confirmation that it is closed properly.

The central locking sound of our test car is too quiet according to Christine. She believes that a high synthetic beeping sound would give her a better confirmation that the doors are locked. Though, she claims that the volume of this sound is more crucial than the actual sound. Christine would also like to get two beeps for locking and one for opening to make it even clearer when the doors are locked. Also the warning sound for open doors could be higher as they should be disturbing, she says.

It is not possible for Christine to associate any of the sounds in the test car with Volvo. She claims that she has never cared about others hearing what her car sounds like. Instead, it is more crucial to her that a car has an impressive design in order for her to be proud of it. Though she thinks that a strong engine sound could make her turn her head and impress her. The test car's engine does not fulfill this, in her view. She does not care about the affect that the central locking sound could have on others. Furthermore, Christine thinks that people that

are attracted by Volvo cars appreciate its quiet and calm feeling. In her view, young people want more raw feelings from car sounds, and that Volvo consumers do not care much about aesthetics, but rather comfort. She thinks that people who look for a lifestyle product in a car want a high profile product that is not as quiet as the test car. Christine also believes that the possibility of personalizing sounds would enable her to get a more personal relationship with her car. She compares it with buying a mobile phone or a computer, in which case she first adjusts all the sounds before she starts using the product. However, she stresses that it should not affect the safety of the car.

Christine finds a good stereo sound in cars to be extremely valuable because her car is an important place for entertainment and that a poor sound can make her irritated and tired. The stereo sound in our test car does not impress her at all and she clearly expresses her disappointment.

#### 4.1.5 Nils

Nils sees similarities between the sounds in our test car and the ones in a Volvo 240, produced 1974-1993, which he has owned. The horn sound is familiar to him in this way, and he thinks that it sounds loud and distinct compared to other modern cars. The horn sound of a Volvo 240 sounds geeky to him but in our test car, he finds it to be improved. Nils also describes the closing of the trunk sound as a typical Volvo sound and that it sounds substantial to him. He says that the engine fan sound is the easiest way to hear that a Volvo 240 is driving by, but he does not find that sound in the test car. He also remembers that old Volvos used to have a screechy sound coming from the interior panels, but he does not find this in the new test Volvo. Instead, he finds the interior acoustics to be very quiet.

Regarding the engine sound Nils thinks that it sounds sporty and powerful, especially for a car that does not have a sporty image. Nils perceives several other sounds in our test car as positive, and that sounds strongly affect the durability impression of a product. Mainly because you cannot see how cars are constructed. Nils describes the sound of shifting the gear and the AC-fan sound as robust and free from unwanted noise. The wiper sounds well and high-tech to him and he believes that it will not get annoying even if you use them for a long time. He appreciates that there is a clicking sound when you turn the stereo controls as this provides him confirmation of his actions. Nils focuses somewhat on the volume of different sounds as well. He finds it good that the blinkers are hearable even when you speak and that the wipers do not sound too much. Nils associates the sound of the closing of the door with a BMW, which he in turn associates with quality and safety. He also appreciates the locking sound, which sounds high-tech and effective to him. He stresses the functional value of getting a sound confirmation that the car is locked from the sound. However, there are also sounds that do not signal quality or positive associations in his mind. There are some button sounds, for instance the interior lights that do not strike him as positive. The start-up sound is also too low to illustrate the power of the engine, he says. This sound strikes him as unusual, as he cannot tell if the start engine is part of the start-up procedure. Nils perceives the start sound to contain two separate sounds, one from the start engine and one from the engine itself. Furthermore, he thinks that the door handle sounds are too loud.

Nils associates Volvo with safety and thinks that the sound of adjusting the seats communicates this as it sounds robust and metallic. He also says that the robust door sound could have this affect. Though, he does not associate the quiet acoustics of the interior with safety. He thinks the stereo sound quality could have an effect on the safety of the car, as a poor sound can make a driver tired. Nils finds the stereo sound in the test car to be poor,

mainly because the bass is too loud. The car stereo is very important to him as he always listens to music on his way to work and it helps him prepare for the day.

Nils says that sounds that others can hear may matter in a social context, but is something of more interest when it comes to sport cars. He does not think that Volvo is an obvious brand that can be used to show status. Instead, Nils focuses on the affect that sounds have on him. He says that sounds are among the first things you notice in a car and that they are an important aesthetic part of the driving experience. A completely silent engine would lessen his driving experience, he says.

Nils thinks that it would be really interesting to be able to personalize and adjust car sounds. He says, for instance, that it could be good to adjust the volume of the blinkers when you change to winter tires.

In Nils view the test car targets middle class people above 40 that focus on practical transportation when they purchase a car. Though, he thinks that the sounds in it differ from other cars in the same category as it sounds more youthful.

### 4.1.6 Sebastian

Sebastian thinks that the blinker sound and the hazard sound in the test car are typical Volvo sounds as they remind him of older Volvo models. Otherwise, there are no other sounds that he can connect with Volvo. He values these sounds that remind him of Volvo's history. One sound he recognizes as a SAAB sound, and that is the seatbelt warning sound.

Sebastian's general impression of the sounds in the test car is that they communicate stability, safety, quality, but not luxury. In his view, the sounds in this car have a reasonable quality, but not anything remarkable. He feels that the sounds are mainly functional and not aesthetic, and that they fulfill what is expected from a Volvo car. Sebastian thinks that Volvo differs from more exclusive brands, such as BMW and Audi, in the sense that Volvo's sound profile is not consistent. For instance, he believes that the door of the test car sounds cheap and clunky compared to more expensive Volvo cars. Though, he thinks that the door of the test car does sound good, but yet not impressive.

Sebastian connects low frequency sounds with quality and thinks that most sounds in the test car provide an impression of good quality. For instance, he mentions that the sound of the opening of the trunk created a feeling of quality in him. Though, the closing of the trunk sound lessens his overall impression somewhat, as it sounds metallic and old, which reminds him of older cars. It gives him an impression that the material that is used is cheap and that it is not durable. He says that it is the sound that made him feel this way. Something that sounds positive to him is the mechanical locking sound, as he would not trust a synthetic beep. He states that the muffled and distinct mechanical sound of the locking function sounds good.

Sebastian perceives that the engine sound of the test car sounds weak, and he associates it with a smaller car. He suggests that weaker engines sound more hot-tempered. Though, he does not think that engine sounds are always linked to their performance. To Sebastian it is not important that the car sounds impress bystanders. The most important thing with these sounds is that they do not sound bad, he says. As an example he mentions a SAAB that he used to drive, which had an embarrassingly loud and synthetic locking sound. Sebastian values a good stereo sound as it is important for him to be entertained when driving and he

perceives the sound in the test car to be satisfying. Sebastian does not miss the possibility to adjust or personalize sounds.

## 4.2 The Departments of Volvo

This section presents empirical material from interviews with the Volvo departments that are involved with sound issues. The interviews are divided and presented systematically according to each responsible department.

## 4.2.1 HMI Department

The sounds which are present in today's cars are according to the HMI Department mainly focused on technical and safety issues. This is because safety is part of Volvo's heritage and the HMI Department believes that it is important to focus on warning signals because they communicate safety. Currently, the HMI Department believes that Volvo has managed to provide a safety image with the support of its sounds. The HMI Department says that Volvo has changed the image of being boring with help of its new design as well as with the support of its product sounds. According to the HMI Department, the most important thing regarding warning signals is that they provide a warning when there is a need for it and also that they are not irritating. The HMI Department has not considered developing an impressive and distinguished sound that might increase the product experience. However, they are making an effort to communicate a feeling of quality as well as avoiding poor sounds. To exemplify, the HMI Department state that the doors sound is qualitative. The HMI Department perceives this sound to be really important since it is one of the first sounds that a consumer is exposed to and it is not unusual that consumers spend time opening and closing the car door in a purchase situation. Another example of a sound that signals quality is according to the HMI Department the blinker sound. It is described as a synthetic sound that has not changed since the Volvo 940. By having a sound that is similar with the older models, the HMI Department believes that it consistently over time have signaled quality. An overall goal with the product sound is presently to communicate that Volvo delivers a premium product. The HMI Department defines a premium product as one that is sophisticated and free of cheap sounds.

It is stated that Volvo aims for their sounds to be sophisticated, premium, and pleasant. This is thought to be accomplished by having sounds with an acceptable quality level that as well are not irritating. According to the HMI Department, the overriding aim for the Volvo brand is that it should be perceived as safe, caring of humans, qualitative, premium, and fun.

The HMI Department states that the issue of sound profile is really important for Volvo. This is something that they are currently working with in order to connect the brand with a unique sound, and to define what a Volvo sound actually is. As it is today, the HMI Department believes that the seatbelt warning sound is unique and can be connected to the Volvo brand by consumers. However, the department also describes that this sound is irritating for certain users even if it is an informative warning sound. Regarding public sounds, such as the door closing sound and the central locking sound, the HMI Department believes that these have a pleasant sound that does not disturb bystanders. According to the HMI Department, these sounds are triggered at the right moment and create awareness for the bystanders. The warning sound that appears when the driver leaves the car without bringing the keys is however described as a sound that may disturb bystanders. The HMI Department is not sure if it is of importance for bystanders to hear public sounds, such as the central locking sound. Therefore it may not be worth the investment to create a sound that is different from other brands while still confirming that the doors are locked.

The HMI Department states that the ringtones in the phones and the voice in the navigation system are sounds that could be altered as well as that there are others that could be turned off, such as the parking warning signal. In relation to this the department believes that the possibility of customizing sounds may create engagement for the consumers. They also point out the importance of having sounds with a good default setting that can be associated with Volvo. Furthermore, the HMI Department believes that sounds can enhance the total experience of the car. They state that the sound from adjusting the volume on the car stereo and the navigation voice are sounds that both signal quality and enhance the product experience. The HMI Department summarizes by saying that it is important to have some type of audio profile with common characteristics that indicates quality and enhances the total product experience.

# **4.2.2 Brand Department**

The Brand Department believes that Volvo must make sure that all the product sounds in the car are on a certain volume level, not too loud and not too quiet. Also, they need to have a high degree of recognition from a marketing point of view. Furthermore, the Brand Department states that it would be great if the sounds communicated a Volvo image. The Brand Department states that the most important thing is that they sound premium and do not in any way signal a bad image. The Brand Department exemplifies by stating that an empty sound from the closing of a car door would signal a bad image since it is not linked to safety. According to the Brand Department, safety is Volvo's primary core value and safety is also closely connected to quality. Currently, it is believed that the sounds in the cars are linked to this core value and that a good example is the sound of the car door. The car door sound is aimed at providing a qualitative, compact, and solid sound to increase perceived safety and feeling of quality. The car door and the engine sound are also the two most public sounds in the car according to the Brand Department. It is stated that these sounds are aimed towards the driver, but that they simultaneously provide an affect for others that hear it.

Regarding warning sounds, such as the blinker, the Brand Department believes that those sounds signal safety and that they transmit clear informative signals at a proper volume level for the driver. Furthermore, the Brand Department states that it is important that these warning sounds do not annoy the driver. It is also important that the various warning sounds are separable and that the driver knows which ones to prioritize. The Brand Department describes that the SMS signal is an example of a sound that they have not succeeded with. It is too loud and hence can be distracting while driving. Also, the Brand Department states that all sounds cannot be premium since they need to have a strong signal level because of their importance. The sound for forward collision warning is given as an example. Furthermore, the Brand Department believes that the warning sounds do not need to necessarily convey a Volvo image, but that they must signal quality. The blinker sound is then given as a good example of Volvo sound that signals qualitative and premium aspects.

The Brand Department also points to the importance of consistent sounds that are recognizable when sitting in a Volvo and that these must convey that it is a premium car. If the sounds are completely different in all Volvo models, the Brand Department believes that the consumers will start to associate the sounds with other cars. They feel that a consistent sound is an easy method of creating brand awareness for Volvo. However, the Brand Department points out that some sounds differ between car models because of different target groups. The Brand Department exemplifies this with the different phone signals on the S80 and the C30. Older successful consumers that demand one type of signal drive the S80, and

younger consumers that demand another type of signal mostly drive the C30. Another example made by the Brand Department is the engine sound, which is different between the car models. According to the Brand Department, Volvo's comfort car models, such as the V70, have a quieter engine sound compared to the S40, which is racecar inspired and therefore has a louder engine sound. This is something that the Brand Department feel can be associated with user groups and usage situation, for instance that younger people prefer a car with a louder engine sound. However, The Brand Department does not see a need for having different signals for the warning sounds. The most important aspect for the warning sounds is that they are premium.

The Brand Department believes that sound plays a big part in the total experience of the car because consumers continually hear different sounds while performing car driving functions. For example when starting the car, the engine sound is heard which adds to the total experience since, according to the Brand Department, it conveys expectations of a nice driving experience. Furthermore, the Brand Department believes that consumers will react if the sounds are not premium. On the other hand, if the sounds are spot on it is believed that they will not cause a reaction. The Brand Department claims that a place where the car is evaluated is in a car showroom when consumers are about to purchase a new car and in this occasion, they might also evaluate the product sounds. In this situation, consumers often try to slam the car door and the Brand Department believes that this could be a way for consumers to evaluate the quality. The Brand Department believe that consumers should feel that it is worth investing money in a Volvo since it is an exclusive car, and that this is what premium is all about. Volvo's aim is to position the brand in the premium segment, and the Brand Department believes that customization of sounds is a way of achieving this. According to the Brand Department, customization of sounds is a way for consumers to personalize their cars, which can help position the brand in the premium segment.

## 4.2.3 Design Department

The Design Department states that sounds are important and that they facilitate emotional feelings to a higher degree than visual aspects do. They describe that safety is a common guideline concept for Volvo, and that this is something that they attempt to communicate through the product sounds. The warning sound that appears when you are not wearing a seatbelt is used as an example. The sound is thought to be sophisticated, but still encourages you to be safe and use the seatbelt. The Design Department also tries to align sounds with the actual car model and the Volvo brand. For the Design Department, the Volvo brand stands for safety, comfort, durability and practical solutions. The sound of the closing of the car door is used as an example of a sound that conveys durability. The reason why this sound conveys durability is that it is a low frequency sound, qualitative and compact. A sound like that may be perceived as more expensive in a Volvo S80 than in a Toyota. Furthermore, the Design Department also believes in an overall sound strategy, instead of just having different individual sounds. According to the Design Department, this is something that Volvo already has applied in their cars. However, warning signals are used as an example of sounds that are similar between the various car manufacturers. The Design Department thinks this makes them difficult to associate with Volvo. It is also thought that the Volvo brand is perceived differently in different countries. The Design Department states that consumers that do not want to use a Volvo may associate it with certain negative aspects. Furthermore, consumers in other countries are thought to perceive the brand as quite exotic. However, the Design Department believes that the most common Volvo associations are safety and functional, regardless of country.

The Design Department state that another aspect that Volvo are putting emphasis on, regarding sound, is that the car should be quiet since that is appreciated by certain consumers. The Design Department believes that silence is an aspect that provides a feeling of premium. Thus Volvo focuses on eliminating irritating rattling sounds. This has been achieved in different ways. The Design Department, for example, state that Volvo has been working hard over the years to decrease sounds from the friction between the tires and the road. This strategy aims to enable the possibility for other brand unique sounds in the car. The closing of the door, seatbelt, and blinker sound are all used as examples of brand unique sounds since they are similar in older models and are thus part of Volvos history.

# 4.2.4 Infotainment Department

The Infotainment Department states the most important aspect of the sounds is that they feel premium and luxury. The car sounds are described as informative and that they provide the driver with the right information at the right time, and that they are well coordinated with the other sounds. The Infotainment Department believes that a sound which is not well coordinated is the sound that appears when you are about to crash into something while reversing. Consumers apparently felt that this sound was too loud since they were not able to hear the radio when it appears. The sound is, however, perceived as informative and thus the level needs to be just slightly adjusted. The Infotainment Department says that Volvo is a safety minded firm and that the consumer must not completely succumb to the sound experience. It is important that the consumer does not get too involved in the sound while driving. The volume of the stereo is used as an example since they have restrictions for the volume level because it cannot be too loud and distract the driver. Another safety aspect is that it is important that all sounds are able to separate and distinguish because otherwise, certain driving situations can be dangerous.

The Infotainment Department states that system sounds that are used in the car are called foreground sounds. Examples of such sounds are the voice in the navigation systems and the closing of the door sound. There are currently 20-30 different foreground sounds that the driver needs to be able to keep track of. These foreground sounds are said to be both informative and pleasant sounding. The Infotainment Department says that there are not many possibilities for customizing these foregrounds sounds. It is however stated that it is possible to change the navigation voice as well as the telephone sound.

Volvo's safety system, called IDIS, is closely linked with sounds. The Infotainment Department says that this system waits for certain sounds to appear in the event of a dangerous driving scenario until the situation has stabilized. For example, the system does not signal for an empty gas tank when the driver is about to change file. The Infotainment Department states that the IDIS system is thus closely linked to safety. Other sounds that convey safety are the warning sounds, such as the driver alert control, which keeps track of the speed and that the driver does not fall asleep. The Infotainment Department feels that the most important safety feature of the sounds is that they do not surprise the driver and that the driver does not become annoyed by the sounds. However, the Infotainment Department says that Volvo also has sounds that are not connected to safety, such as the engine sound. This sound is, according to the Infotainment Department, more connected with pleasure which is also the case for road and wind sounds.

The Infotainment Department is not aware of if Volvo thinks of sound in terms of them being public or not. According to the Infotainment Department Volvo mainly concentrates on the driver but recognizes that external aspects can be of importance. For example, if a consumer's

neighbor laughs from the car door sound then you probably will not purchase that car model again. It is also stated that these types of public sounds can be used for marketing. However, they are designed to have a low volume and frequency in order to not disturb the public.

The Infotainment Department also states that it is hard to develop a specific Volvo sound since the question is what does Volvo sound like? However, they are currently working on a solution for this. Volvo has three different audio systems called basic performance, high performance and premium sound. The Infotainment Department has developed a specific type of sound for each set. The premium sound, for example, has a pleasant but still powerful sound and the high performance sound is more mainstream sounding. By controlling these sound aspects, the Infotainment Department believes that they can affect how consumers perceive the sound. The Infotainment Department believes that having the most expensive audio system can be a way for consumers to show off in front of their friends, even if most consumers cannot hear the quality differences between the audio systems. According to the Infotainment Department, Volvo markets the audio system as part of the total car experience. It is stated that they have as well integrated the sounds with the other pieces of equipment so that the consumer will get a consistent total experience, in which all the pieces of equipment fit nicely together. Also, the Infotainment Department believes that consumers do not purchase a car solely for its sounds, but that they may avoid purchasing one if the sounds are considered bad. The Infotainment Department sums up by stating that when a consumer is not complaining about the sound you should be satisfied because then you have succeeded.

## 4.2.5 NVH Department

According to the Noise Vibration Harshness Department, NVH, Volvo is trying to develop a specific Volvo sound instead of just focusing on making the sounds pleasant. The aim of the NVH Department is to create a sound that can be identified with what the Volvo brand stands for, which is safety, environmentally friendly, and Scandinavian heritage. The NVH Department states that this is something that Volvo takes into consideration when developing product sounds. Therefore, they try to create safe and quiet sounds that deliver a feeling of quality and durability. Volvo works with this by attempting to eliminate unwanted sounds in order to create a good sound environment. The NVH Department believes that the silent interior acoustics of Volvo cars provides comfortable conditions for its users and creates associations to Scandinavia. They find a typical Scandinavian soundscape to be dampened and quiet in relation to, for instance, Mediterranean countries. The NVH Department believes that having a good sound environment leads to that the consumers do not reflect over the sounds that much. This is thought to be positive since the driver should not be disturbed by the sounds, and should only hear sounds when information is needed. Another sound aspect that the NVH Department works with is to have sounds that are not stressful and thus do not make the consumer tired. The NVH Department has found that sounds that are continuously present during long periods can make people tired. Therefore, Volvo avoids these types of sounds in their cars.

The NVH Department points out a few examples of how they work with product sounds. One example is the sound that appears when closing the door. This is described as a single low frequency sound. It is also stated that several rattling type of sounds from the car would not be able to signal quality and durability. In fact, the NVH Department states that the absence of rattling sounds is an important indicator of perceived safety, and that safety is closely connected to quality. A second example is the sound that appears when lowering the power windows. This is described as a constant and consistent sound and that this is thought to deliver a feeling of quality and durability. A third example is the engine sound. This is

described as running at a constant rotation and that this as well produces a sound that signals quality. The overall strategy with the sounds is that they should be of a low frequency. The NVH Department feels that it is difficult to create a sound that can be associated to the Volvo brand. However, they state that the blinker sound and the sound of the key chain rattling behind the steering wheel are sounds that can be associated with Volvo since these have been used for a long period of time.

Car sounds are described as being divided into the following three categories: irritating sounds, informative sounds, and impressive sounds. Examples of irritating sounds are roadnoises and rattling sounds from components. These are minimized by various isolation techniques. The NVH Department states that informative sounds include the engine sound and the central locking system sounds. Volvo's engine sound is thought to be a bit sporty, but sophisticated since it must sound safe. The NVH Department says that they have worked extensively with the engine sound in order to develop a European sounding V8-engine. It is described as clean, clear, and quiet while driving at a constant speed. Regarding the central locking sound, the NVH Department says that Volvo has a mechanical sound for this function. It is believed that this sound gives the consumer a confirmation that the door is locked, and therefore the consumer does not need to check this visually. The NVH Department claims that impressive Volvo sounds are those sounds that appear from closing the door as well as the engine sound. It is believed that these sounds do not just impress the driver but also bystanders. The NVH Department takes the showroom as an example where this can happen because consumers tend to slam the doors when they are examining different cars before a purchase. In such a scenario, other people that are visiting the showroom are being exposed to the door sound, which might convey impressive feelings for them. Also, The NVH Department state that these sounds make the consumer feel that the product is worth paying a little extra for. However, the NVH Department describe that these public sounds are kept at a low level because they should not disturb bystanders.

The NVH Department states that Volvo thinks in terms of matching product sounds with product image. The engine sound is used as an example. It is claimed that the engine sound matches the performance of the engine, since a powerful engine is manipulated to have a strong sound and that a weaker engine is allowed to have a softer sound. Furthermore, the NVH Department states that the engine sound is a sound that could affect how fun the driver perceives the driving experience. Also, the NVH Department believes that sounds, such as the one from the car door and the engine sound can make consumers proud when other people hear them since they signal to the environment that you have a good quality car.

### 4.2.6 Telephone Department

The Telephone Department states that there are no telephone sounds that are aimed at being associated with the Volvo brand. However, it is described that Volvo wants to develop a unique sound that can be used as a default recognizable Volvo ringtone. The department does, on the contrary, point out that a person that has used a Volvo telephone may connect sounds such as ringtones and SMS signals with the Volvo brand since these are unique. Furthermore, it is stated that Volvo is currently attempting to create a uniform soundscape for the firm, and that this will eliminate individual sound ideas from the different departments.

Regarding the sounds that are present in the phones today, the Telephone Department claims that they have not thought that much about these sounds. They are apparently basically working with the default ringtone that exists in the telephones today. However, the department feels that the sounds are a bit messy today and that they need to be coordinated

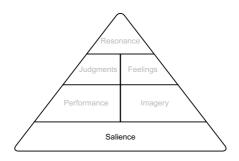
since the amount of telephone sounds are constantly growing. Also, the Telephone Department finds it important to connect sounds to the right type of instruction. It is believed that consumers should be able to customize sounds such as the ringtone, but that it is not a must have feature. A customization feature is thought to be more like a nice extra touch. The Telephone Department does claim that this is an aspect that is appreciated by certain consumers.

It is described that Volvo is currently using the same telephone systems in all car models, and that the telephone sounds change in the car models when Volvo changes telephone supplier. Telephone suppliers have apparently been changed three times and therefore three sets of ringtones exist. According to the Telephone Department, Volvo was using basic Ericsson sounds from 2000 to 2003. Then the basic sounds changed and the signals were developed into melodies. The Telephone Department however felt that this was problematic because the melodies were not well made. This is an important issue and the Telephone Department is currently having discussions in regards to creating a sound that provides meaning for the consumer.

# **5 ANALYSIS**



### 5.1 Brand Salience



#### 5.1.1 Volvo Professionals

The Branding Department mentions that it is important for Volvo cars to have sounds with a high degree of recognition. They speak of the consistency of the sounds. It is thought that completely different sounds in the car models will confuse the consumer. The Branding Department states that keeping sounds consistent is an easy way to create brand awareness. The Design Department also speaks of the importance of keeping sounds consistent and as well having an overall sound strategy. However, they state that the warning sounds from the different car makers today sound very similar to each other. This is thought to confuse the consumer, which suggests certain issues with using the warning sounds to create awareness. The NVH Department agrees with the perspective of keeping sounds consistent. The blinkers are used as an example of a sound that has been consistent for a long time, and that thus can be associated with Volvo. The Telephone Department speaks of the problem of not being able to keep their phone sounds consistent over the years. This is an issue that they are currently working with, which suggests that they want a consistent recognizable sound in order to create awareness.

The aim of the NVH Department is to create sounds that can be identified with Volvo. This is however thought to be a difficult task. The closing of the door, seatbelt warning, and blinker sound are described as brand unique sounds by the Design Department. The Telephone Department states that they have phone sounds that are unique and can be identified with the Volvo brand. The sound of the seatbelt warning sound is described by HMI as a unique sound that can be connected to Volvo by the consumers. This sound is however also believed to be annoying for some of the consumers, which hints that there may be a plus minus type of

awareness affect with the seatbelt sound. Nonetheless, the uniqueness of these described sounds implies that they may be easy to recognize and recall for the consumer.

Several of the departments speak of the fact that cars have public sounds. The HMI Department mentions the door closing sound and the central locking sound as examples. These are described as sounds that are deliberately used to create awareness by bystanders. The car door and the engine sound are described as public sounds by the Branding Department. From their perspective, these are sounds that both target the driver and bystanders. The NVH Department agrees with this perspective and states that public sounds both impress the driver and bystanders. The HMI Department describe that the warning sound that appears when the keys are left in the car is however thought to be a sound that is disturbing to bystanders. This may thus create negative awareness. However, there seems to be certain skepticism toward utilizing public sounds for bystander awareness. The HMI Department states that it may not be worth investing too many resources into developing public sounds for awareness purposes. The Infotainment Department has a somewhat similar attitude towards public sounds as the HMI Department. They are not sure if Volvo actually thinks in terms of the sounds being public or not since most focus of the sound is aimed at the driver. These public sounds are also described as being kept at a low volume in order to not disturb others by both the Infotainment and NVH Department. However, the Infotainment Department does recognize the marketing possibilities of public sounds.

From the discussion, we find that there are several deliberate sound applications in the car that create what Keller (2001b) refers to as brand depth. These sounds aid the consumer's ability to recall and recognize the brand. Romaniuk and Sharp (2004) speak of the importance of the amount of cues that can be associated with a brand. A brand is more likely to be thought of in a buying situation the more cues that it is linked to (Romaniuk & Sharp, 2004). From the above analysis we see that Volvo has a vast amount of unique sounds that are deliberately used as cues to create depth and in turn affect Brand Salience. We have however not found any product sounds that can be connected to breadth aspect of Block 1 (Keller, 2001b). There does also seem to be certain negative awareness affects that may be attributed to the sounds in the cars. As far as public sounds are concerned there seems to exist some degree of discrepancies between the department's views on public sounds.

### 5.1.2 Volvo Consumers

The majority of our consumers that were interviewed in our study appeared to have brand awareness via various Volvo product sounds. They speak in terms that can be related to Keller's (2001b) concept of depth. Overall what the consumer comments show is that sounds has a strong ability to be recognized and understood. This is in line with Clarke's (2005, p.7) explanations of the capabilities of sound recognition by individuals. Herman connects the sound of the closing of the door and the blinker sound to Volvo. He describes them as unique and that he would be able to recognize them. Elias speaks in similar terms, in regards to the sound from pulling the door handle and as well the engine sound. Nils describes the horn sound as loud and distinct. The sound from closing the trunk is also described as a typical Volvo sound by Nils. He describes that he can link both these to older Volvo models. In fact, Nils also recalls sounds from older models that are non-existent in the test car. Sebastian speaks of the sounds in the test car in a similar way to Nils. The blinker and hazard sound are described as typical Volvo sounds that he can as well link to older models. Sebastian goes so far as to claim that the seatbelt warning sound in the test car sounds like a SAAB. This sound recognition is obviously not beneficial to Volvo, but it does confirm the extent of recognition that can be created via sounds (Clarke, 2005). Aaker (1996) speaks of different levels of brand awareness. The above awareness descriptions imply that a Top-of-Mind brand awareness scenario is created via the Volvo product sounds (Aaker, 1996). For example, if the sounds were heard without knowing that they were Volvo sounds in a recall situation then Volvo may be the first-named brand (Aaker, 1996). Romaniuk and Sharp (2004) speak of the importance of having several cues linked to a brand in a buying situation. The above consumer statements show that Volvo has several product sounds that may be useful cues in buying situations. Another important aspect of the cues is how fresh and relevant they are (Romaniuk & Sharp, 2004). Judging from the statements and the strong ties that a lot of the sounds have to older models we interpret that this implies that the cues are relevant and fresh. The consumers have however not alluded to any product sounds that may be linked to Keller's (2001b) concept of breadth. It is also worth mentioning that some of the consumers were not able to link and recognize the product sounds. Nonetheless, the quality and the quantity (Romaniuk & Sharp, 2004) along with Clarke's (2005, p.7) explanations of the capabilities of sound recognition by individuals confirm the importance of product sounds for achieving Brand Salience.

### 5.1.3 Comparison: Professionals and Consumers

Consistency of the product sounds is one main method that Volvo uses in order to create Brand Salience. Keeping product sounds consistent is described as an easy way to create consumer brand awareness. Many of the departments describe the importance of consistency, however only the blinker sound is brought forth as an example of a consistent sound. When we analyze which product sounds are recalled and recognized by the consumers we can confirm that the blinker sound is one of these. The consumers describe the blinker sound as a typical Volvo sound that they can recognize and recall from older Volvo car models. We can see that the idea of keeping the product sounds consistent positively affects the brand depth aspect of the Brand Salience Block (Keller, 2001b). However, only the blinker sound is described as a sound that is kept consistent. The consumers on the other hand have fairly long list of sounds that they can recall and recognize: the closing of the door sound, closing of the trunk sound, the door handle sound, the engine sound, the horn sound, and the hazard sound. The consumer product sound list confirms Clarke's (2005, p.7) statements of the capabilities of sound recognition by individuals. This suggests that Volvo underestimates how important it is to keep these product sounds consistent over time. It may however also be the case that Volvo unconsciously and non-deliberately uses these other product sounds as audio branding tools. In light of Romaniuk and Sharp (2004) discussion of the importance of having several fresh and relevant cues in purchasing situations there may as well be other product sounds that can benefit from this consistency treatment.

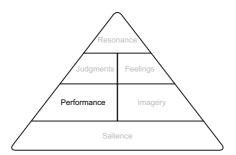
The Design Department talks about the issues with the warning sounds. It is thought that these sound very similar between the different car firms, and that this confuses the consumers. This is partially confirmed by the consumers since the seatbelt warning sound is recalled and recognized as a product sound from SAAB. However, the Design Department and the HMI Department describe the seatbelt warning sounds as unique and that the consumers thus can connect it to Volvo. This suggests some inconsistency between departments and even within departments in regards to warning sounds. Another interesting aspect of the warning sounds is that some of our consumers recalled and recognized the hazard warning sound as a product sound that can be linked to earlier Volvo models. This implies that there as well exists inconsistencies between Volvo the company and the consumers. It should however be kept in mind that the warning sound statements were made by only one of the consumers.

Developing unique product sounds is another method that Volvo utilizes in other to create Brand Salience. Volvo describes the closing of the car door sound, the seatbelt sound, the blinker sound, and the telephone sounds as having unique sound characteristics. The NVH department states that developing unique sounds is a difficult task. However, judging from the consumers' descriptions of the sounds that they can recall and recognize Volvo appears to be managing this quite successfully. The consumer list of recalled and recognized product sounds used adjectives such as unique, distinct, and typically Volvo to describe the sounds. The descriptions along with a fairly extensive consumer list suggest that Volvo's method of developing unique sounds in order to create Brand Salience has positive consumer affects.

Volvo also speaks of using the public product sounds to create Brand Salience. As mentioned earlier, there seems to exist some degree of discrepancies between the department's perspectives on public sounds. This paper did not aim to collect empirical material on the reaction of bystanders to public sounds. Furthermore, the consumers that did speak on the topic of public sounds did not state anything that would imply that public product sounds would be effective in creating Brand Salience.

We have not found any product sounds that can be connected to the breadth aspect of Block 1 (Keller, 2001b). Neither Volvo nor the consumers mention product sounds in a context that would imply that they can be used in order to create breadth. This may be problematic since Keller (2001a) states that in order to be highly salient a brand must have both depth and breadth. Keller (2001a) claims that it is not enough to simply be remembered, the consumer must do so at the right time and place. When we move on to the other blocks in the CBBE-Model we will see if this results in issues with using product sounds to build Consumer-Based Brand Equity.

#### 5.2 Brand Performance



### 5.2.1 Volvo Professionals

We have found several indications that Volvo uses product sounds in a matter that can be related to the Brand Performance dimension Style and Design (Keller, 2001b). Several of the Volvo Departments describe the product sounds as being premium. The HMI Department state that the overall goal with the product sounds is that they sound premium, in order for Volvo to communicate that they deliver a premium product. The door closing sound and the central locking sound are described as pleasant sounding. Efforts are also made to avoid poor sounds. The Branding Department and the Infotainment Department states that the most important thing is that the product sounds are premium. However, The Branding Department believes it to be difficult for all the product sounds to be premium since some of them need to be very loud. The blinker sound is given as an example of a premium sound. The Brand Department claims that consumers will react if the product sounds are not premium sounding, but not necessarily if the sounds are spot on. The Infotainment Department furthermore describe that Volvo has three audio systems, and that one of these is developed to sound

premium. We see that there exists and underlying theme from the Volvo departments for the product sounds to be perceived as being premium. We interpret that the concept of premium stands for something of high value. Therefore we suggest that in order for a sound to be perceived as premium or having a high value it must be aesthetically pleasing. A premium product sound we thus interpret as involving aesthetically auditory pleasing aspects. Product sounds that are aesthetically pleasing are important since Fennell (1978) describes that consumers that are looking to solve consumption related problems expect products to, amongst other aspects, look good. This implies that Volvo uses product sounds that can be related to the CBBE-Model dimension Style and Design, since this dimension goes beyond functional aspects and involves aesthetic considerations (Keller, 2001b).

Several of the departments speak in terms of the product sounds fulfilling functional informative aspects. This may be of importance since Park, et al., (1986) describes that brands can be chosen based on the functional needs that they fulfill. The HMI Department describes that sounds that are part of the warning systems are used sparingly and when there is a need to communicate information and action. For example, there is a warning sound that appears when the driver forgets the keys in the car. This product sound fills the function of being informative and communicates that action is needed. The Branding Department speaks of the sounds that are part of the warning systems as transmitting clear informative signals. The warning sound that appears when the driver is not wearing a seatbelt is used discussed by the Design Department. It is another example of a product sound that communicates information and action. The Infotainment Department describes Volvo's product sounds, for example the IDIS system, as providing the driver with the right information at the right time. The driver alert sounds, which keeps track of the speed and that the driver does not fall asleep, are discussed by the Infotainment Department. This product sound also communicates information and action at the right time and place. The NVH Department speaks of the product sounds as being heard when information is needed. They describe the engine sound and the central locking sound as informative and functional product sounds. The central locking sound is believed to be informative and functional since it confirms that the car is properly locked. The Telephone Department finds it important to connect sounds to the right type of information, which also hints at the functional and informative aspects of Volvo's product sounds. To summarize we can say that the underlying theme from the departments is that the product sounds aid in instructing the consumer how to react when a specific sound is heard. We suggest that the deliberate functional and informational aspects of the described product sounds may be aimed at filling the needs of consumers that search for products that solve consumption related problems (Park, et al., 1986). For example, we imply that the product sound that appears when a driver forgets the keys in the car is aimed at helping consumers avoid what Park, et al., (1986) describes as preventing a potential problem. In other words, the intrinsic properties of the product sounds meet the consumers' functional needs (Keller, 2001a).

There exist indications that Volvo deliberately uses product sounds that involve the Brand Performance dimensions Product Reliability and Durability (Keller, 2001b). The NVH Department describes that they make deliberate attempts at providing safe and quiet sounds that the consumers can link to quality and durability. Rattling sounds are avoided since the existence of these types of sounds would not allow for the Volvo brand to signal quality and durability. The power window is described as a constant and consistent sound, and is used as an example of a product sound that the consumer can link to quality and durability. The HMI Department speaks of the synthetic blinker sound as a sound that communicates quality. The low frequency sound from the closing of the car door is described as a sound that signals

quality by the Design Department. They are in agreement with the NVH Departments statement about Volvo's deliberate attempt of avoiding rattling sounds. We thus have found several indications that Volvo deliberately works with developing product sounds that convey durability and as well quality. Quality is a term that we interpreted as representing both product reliability and durability. Keller (2001b) refers to reliability as performance consistency over time and durability as the expected economic life of the product. Therefore it is assumed that a product that is not reliable and not durable will as well most likely not be considered a quality product. Furthermore, reliability and durability can be of importance for Brand Performance since Sheth, et al., (1991) describes that functional value is derived from these dimensions. Product quality can be a means to solve consumption related problems, which is significant for this block. Fennell (1978) state that consumption related problems involves consumers expecting that a product should work right, look good, be durable, and perform as expected and promised.

Keller (2001b) speaks of the Brand Performance dimension Price and states that brand-pricing policy can dictate in what price category the consumer perceive the brand to be in. It can as well dictate how the consumers perceive price discounts. Sivakumar and Raj (1997) found that high-quality brands are less unfavorably affected by price increases and that the overall effects of short-term price changes favor high-quality brands. We have found inconsistent empirical material in regards to the deliberate utilization of product sounds in relation to the Price dimension of building Consumer-Based Brand Equity. The Infotainment Department states that consumers may avoid purchasing a car if the product sounds are bad. The NVH Department describes that product sounds may signal to the consumer that the car is worth paying a little extra for. These statements somewhat suggest that product sounds may play a deliberate and active part in Volvo's brand-pricing policy.

#### 5.2.2 Volvo Consumers

We have seen various, but somewhat inconsistent, indications of the dimension Style and Design (Keller, 2001b) from the consumers. Herman plainly states that he has not interest whatsoever in the aesthetics of product sounds. Sebastian confirms this statement when he claims that none of the product sounds in the test car have aesthetic aspects to them. Jonna, Elias, Christine, and Nils on the other hand state that the aesthetics of product sounds are important to them. This can be linked to Fennell's (1978) statements on consumption related problems. Fennel (1978) state that consumers with consumption related problems expect products to, amongst other things, look good which is what the above comments hint at. Jonna speaks of the blinker sound as being pleasant sounding, which suggests aesthetic satisfaction. Elias believes that poor sound can ruin a car's aesthetics, but he does not necessarily see cars as aesthetic objects. Christine is not completely satisfied with the aesthetics of the test cars product sounds. Product sounds that she is unhappy with aesthetically are the various handles and the blinkers.

The consumers speak of the product sounds in terms that can be related to Keller's (2001a) concept that intrinsic product properties can meet consumers' functional needs. The consumers discuss the concept of the product sounds providing information and suggesting certain actions. The discussions on the topic hint that the consumers are looking for the product sound to fill what Fennell (1978) describes as functional needs. Product sounds that provide confirmation that a function has been completed are discussed as something of importance to the consumers. Herman, Jonna, Nils, and Sebastian bring forth the mechanical locking sound confirmation from the central locking system as examples of this working in a

proper manner. However, Jonna would prefer for this confirmation sound to be a bit louder. This would allow for her to not have to visually check if the car doors are locked. However, not all the consumers are satisfied with this functional product sound. Elias believes that a synthetic beep for the confirmation sound of the central locking sound would give him a better indication that the doors are locked, instead of the existing mechanical sound. Christine is as well not satisfied with the central locking system sound. It is described as being too quiet and that a synthetic confirmation would be a more appropriate information indicator. We have found various other indications of successful product sound confirmations from the consumers. Herman exemplifies with the suction sound from the power window closing. He does however not want confirmation sounds from all car functions. Nils states that the clicking sound from turning up the volume on the stereo gives him proper confirmation of his actions. The functional aspect of the engine sound is also discussed. Jonna states that the sound response from a running engine is an important indication that the engine is performing for her. Elias speaks of the engine sound as being informative and letting him know when it is time to shift gear. However, he states that he does not connect a loud engine as an indicator of better performance. Sebastian, on the other hand, describes that he does not think that the engine sounds are always linked to their performance. Elias furthermore describes that he is not completely satisfied with the functional aspects of the closing of the trunk sound. This product sound is not fulfilling its functional requirement according to Elias. He describes it as sounding as if that something is getting in the way of it closing properly. Contradictory to this description Christine states that the closing of the trunk sound gives her a proper confirmation that the trunk is closed. The warning sound for open doors is claimed to be too quiet for Christine. The above descriptions of sounds ability of to fulfill functional needs is in line with DeNora's (2000, pp.11-13) descriptions that sound can help make sense of situations and make individuals aware of how to react. From the above-descriptions we find that the majority of the product sounds appear to affect the consumers positively. The described product sounds can thus be said to partially solve externally generated consumption needs (Park, et al., 1986). This may be a key for building Consumer-Based Brand Equity since it is possible that externally generated consumption needs can dominate purchasing decisions (Sheth, et al., 1991).

We have found indications from the consumers that the product sounds fulfill aspects of the dimension Product Reliability and Durability (Keller, 2001b), since they often speak of product sounds in the context of them signaling quality. As reasoned earlier quality is a term that we suggest represents both product reliability and durability. Reliability and durability is of importance for Brand Performance since consumptions related problems can involve consumers expecting products to work right, look good, be durable, and perform as expected and promised (Fennell, 1978) Herman, Jonna, and Sebastian state that overall the product sounds in the car indicate good quality. Herman and Sebastian describe that it is the existence of low frequency sounds that function as quality indicators. Jonna and Elias also talks in terms of low frequency product sounds being indicators for quality. Jonna exemplifies this with the engine sound. Elias exemplifies with the closing of the door sound and the gearshift sound. Herman speaks of the non-existence of rattling sounds as quality indicative. Sebastian ads that the product sounds overall indicate stability, which we suggest is a term that is interchangeable with both Product Reliability and Durability (Keller, 2001b). Herman, Nils, and Sebastian exemplify with the closing of the car door as a quality indicative product sound. Nils states that product sounds strongly affects his durability impressions of a car since you cannot see how cars are constructed. The sound from shifting the gear and the AC-fan sound are described as robust without unwanted sounds. Nils also describes that the sound from adjusting the seats and that the closing of the door sound communicates that they are robust. We interpret his description of robust as being synonymous with the Reliability and Durability dimension (Keller, 2001b). However, Nils describes certain sounds as being counteractive to the quality impression. The interior light switch sound and the engine sound are used to exemplify this statement. Jonna describes that the rattling sound of the closing of the glove compartment and that the loudness of the closing of the trunk sound does not signal quality. Sebastian agrees with Jonna in regards to the closing of the trunk sound. Elias explains that the plastic aspects of the closing of the glove compartment affect his impression of the car's quality. Furthermore, Elias states that the sound from door handle of the test car signals a high quality product. From the above-described sound scenarios we see various indications that functional value is being derived from reliability and durability via the product sounds for the consumers (Sheth, et al., 1991). Furthermore the dimensions of reliability and durability that are being evoked by the product sounds can be seen through Hultén, et al., (2008, p.76) descriptions that sound can trigger memories that in turn suggest certain associations.

# 5.2.3 Comparison: Professionals and Consumers

We have found that Volvo deliberately develops product sounds that are aesthetically pleasing. It is stated by the HMI Department, the Infotainment Department, and the Branding Department that the most important thing about the product sounds is that they are premium sounding. The sounds were often described as premium by the departments, which we argued as signaling aesthetically pleasing product sounds. The Volvo departments exemplified with the door closing sound, the central locking sound, the blinker sound, and one of the audio systems. The deliberate development of these sounds seems to have a fairly inconsistent affect on the consumers. Herman, Sebastian, and Christine found no interest in the aesthetics of the test cars product sounds. Christine described that the sounds from various handles and that the blinker sound were not aesthetically pleasing. However, Jonna, Elias, and Nils found the aesthetics of the test car's product sounds to be of importance for them. Jonna, contrary to Christine, perceived the blinker sound to be aesthetically pleasing. From Volvo's list of aesthetically pleasing sounds the consumers mentioned only the blinker sound, which received inconsistent reviews. From the comparison between Volvo and the consumers we see that the aesthetic value of the product sounds appear to affect the consumers both negatively and positively. Volvo deliberately develops aesthetically product sounds that seem to partially have the desired affect on the consumers. We cannot find any discrepancies between the departments on this topic that would explain these results. However, what is or is not aesthetically pleasing may be too much of a subjective evaluation by the consumers to get consistent answers. This may explain the inconsistencies by the consumers. Overall, the Style and Design dimension (Keller, 2001b) does appear to play a somewhat important role for the consumers.

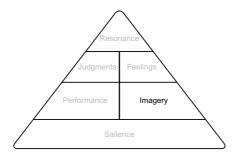
An underlying theme from the departments, in regards to the sounds filling functional needs, is that product sounds are developed to aid in instructing the consumer how to react when a specific sound is heard. This involves Keller's (2001a) concept that intrinsic properties of products can meet consumer's functional needs. This appears to be a consistent and deliberate approach from all of the Volvo departments. The majority of the sounds brought up by the departments in this context deal with the various warning sounds. The warning sounds that are described as being deliberately used to serve functional purposes are: the forgetting the keys in the car sound, the seatbelt sound, and the driver alert sound. Other sounds that are described as deliberately serving functional purposes are the engine sound and the central locking sound. The consumers appear to be positively affected by the functional attributes of the product sounds. However, only one of the consumers mentions warning sounds as being

functional. Maybe the reason for this is that the consumers take sounds from warning signals as a given and therefore do not reflect over them. The warning sound that is mentioned is the sound from a door being open. Instead the consumers speak of the functional attributes of product sounds that give confirmation that an action has been properly completed. Product sounds that are spoken of in this context by the consumers are: the central locking system, the closing of the power window sound, the clicking sound from adjusting the volume on the car stereo, the engine sound, and the closing of the trunk sound. As described-above Volvo uses the central locking sound and the engine sound as examples of product sounds that deliberately serve functional purposes. These sounds are also part of the consumer product list. However, the consumer product sound list is more extensive than these two product sounds. An explanation may be that Volvo during the interviews focused more on the warning sounds while speaking about product sound's functional purposes. Another explanation may be that they unconsciously develop these other product sounds to serve functional purposes. Overall the sounds appear to affect the consumers positively, though there are minor discrepancies between the consumer affects of these functional product sounds. In light of Park, et al., (1986) statement that brands can be chosen based upon the functional needs that they fill this appears to be an important aspect for Volvo when building Consumer-Based Brand Equity.

In regards to the product sounds fulfilling aspects of the dimension Product Reliability and Durability (Keller, 2001b) we have found that Volvo uses product sounds that signal quality, durability, and reliability. This is thought to be achieved by avoiding rattling sounds, keeping sounds constant and consistent, and as well developing low frequency sounds. Product sounds that are used to exemplify this are the power window, the blinker, and the closing of the car door. The consumers in turn often speak of the product sounds in terms that signal quality, reliability, and durability. The consumers appear to be in line with the Volvo department that the avoidance of rattling sounds and that the usage of low frequency sounds signals quality, durability, and reliability. The product sounds that are mentioned in this context are the closing of the car door sound, the gear shifting sound, the AC-fan sound, the seat adjustment sound, the engine sound, and the door handle sound. There are as well certain sounds that are described as being counteractive to the other sounds that signal quality: the interior light switch sound, the engine sound, the closing of the glove compartment, and the closing of the trunk sound. As a whole, there seems to be a fairly good fit between Volvo and the consumers in terms of the dimension Product Reliability and Durability. The consumer mentions a few more sounds then that of Volvo in this context. This may mean that Volvo either unconsciously develops more sounds for this dimension or that they simply forgot to mention them.

We found somewhat minor suggestions that Volvo works with the dimension Price in building Consumer-Based Brand Equity. However, nothing in the empirical material from the consumer hints that this is having any consumer affect. Therefore we may have a discrepancy in this dimension between Volvo and the consumers. But since the empirical material from Volvo is fairly inconsistent in this context it may also be fair to say that this dimension is just not deliberately being worked on.

# 5.3 Brand Imagery



### 5.3.1 Volvo Professionals

According to the HMI department Volvo has a tradition of producing safe cars and they claim that it is important to sustain this image. In other words they desire a connection with the brand's past as they attempt to link to tradition and credibility in this case. Volvo deliberately attempts to reinforce this link in the consumers' mind via the blinker sound in their current car models, since the blinker sound is similar to their models from the early nineties. According to Keller (2001b), history is a component that can be used to create brand image and in this case Volvo has designed a product sound that is meant to trigger memories from using previous products and thus Volvo's history. Furthermore the NVH Department recognizes that the blinker sound creates associations to older Volvo cars even though this sound is not their responsibility. A part from that, no other department seems to have a clear-cut focus on history when influencing the design of product sounds.

Safety is an important image for the Volvo brand according to several departments. Aaker (1996) and Keller (2001b) state that the human-like personality traits of a brand is what makes a brand interesting and which partially decides whom wants to use the product. In our view safety can be connected to a personality that is stabile, protecting and sophisticated which is somewhat similar to Keller's suggested personality traits. A safe brand in his terms would be sophisticated and sincere, according to us. Though if we focus on Keller's general description of Block 3 which is that it shows how a brand meets consumers' psychological needs and social needs it becomes clearer. A well-known basic psychological need is safety and it appears likely that the Volvo brand could be connected to this need. The HMI Department tries to reinforce the safety image by the serious style and tone of the warning signals. They claim that several other brands have used a more lighthearted style, and therefore it seems that Volvo has found a way to differentiate from competitors by reinforcing one of their personality traits with the use of a specific sound style. Furthermore the Design Department thinks that Volvo's warning signals reinforces the safety image by fulfilling the intended functions in a sophisticated way. It appears that they want to add a positive impression to safety improving sounds in order to make the presence of warning signals into something positive. For instance, the seatbelt warning sound could have been just irritating in order to make you put the seatbelt on. Instead they appear to nurture an important aspect of their brand by adding a positive style to warning signals that are meant to increase safety. The Branding Department claims also to be engaged in trying to make warning signals possible to associate with safety. Though, they also focus on the connection between durability and safety. In their belief durability and safety are strongly connected. They exemplify and state that the Volvo doors are meant to sound safe since they sound compact. The NVH Department also sees the connection between perceived safety and durability. They as well mention the door sound as they deliberately try to signal safety by shaping this sound into one low frequency type of sound. Hence, Volvo seems to use product sounds to reinforce one of their images in more than one way. According to Aaker's (1996) statements, these product sounds also have the affect that they illustrate an organization that cares for humans' wellbeing.

Several Volvo departments' mention that they have tried to give Volvo's product sounds an overall premium impression. The word premium could likely have several meanings seen from our theoretical perspective. For instance it could imply aesthetic values, high quality or sophistication. According to Keller (2001b), sophistication is one intangible, or personality trait, that can shape an image. It appears likely that a sophisticated sound style indicates a more refined product and therefore a premium product. Also the HMI Department connects a premium product with being sophisticated. The Brand Department sees the blinkers sound, which is the same in all Volvo cars, as a good example of a premium sound. Hence there is indication that an overall guideline for Volvo's product sounds is that they should provide a sophisticated Brand Image.

The NVH Department wants to create a Scandinavian image for Volvo and this clearly falls under Keller's (2001b) and Aaker's (1996) description of what the personality traits of a brand is. It can also be easily connected to heritage as it says something about the origin of the brand, and origin associations can be linked to memories regarding this origin. They believe that they accomplish to create this association among consumers by producing cars and product sounds that are generally quiet. The department connects Scandinavia with silence. Another personality trait that the NVH Department tries to reinforce with relatively silent product sounds, and which can be connected to Keller's (2001b) reasoning, is being environmentally friendly. Furthermore Aaker (1996) mentions caring as a personality trait that may shape a brand image.

The NVH Department mentions that they want to create a sporty image with their engine sound. Though, they still aim for it to sound sophisticated. Keller (2001b) claims that a brand's personality traits can be similar to the traits of a person and being sporty is a common personality trait. Therefore sporty can also be added to the personality traits that Volvo whishes to create or reinforce by the design of their product sounds.

As Volvo targets different user groups with different cars and do not adapt product sounds to different models, except for telephone ringtones, there is no clear indication that their product sounds are meant to mirror the intended usage situation. Associations regarding the intended usage situation are something that can be a part of brand imagery according to Keller (2001b). Furthermore we have seen no sign that they are aiming at creating an image of the typical user by their design of product sounds. This is also something that Keller (2001b) sees as an intangible in the Brand Imagery Block.

#### 5.3.2 Volvo Consumers

Safe is a personality trait that can be connected to the Brand Imagery Block of Keller's CBBE-Model (2001b) as it meets consumers' psychological needs when it comes to cars. Several consumers mention some sounds or sound scenarios that they perceive to signal safety. To Herman it is the door locking sound, which sounds like an actual mechanical lock, and the moderate engine sound that provides this association. Elias connects the tempo and volume of the blinkers sound with safety, Christine associates the silent interior acoustics with safety, Nils connects safety with the sounds from closing doors and seat adjustments, and

Sebastian thinks that the product sounds of our test car signals safety in general. Though even if they do not all mention the same sounds in relation to safety there is some indication that the product sounds in Volvo cars creates associations to a safe brand. According to Hultén, et al., (2008, p.76) sounds in general can evoke memories and therefore it seems likely that our consumers can connect their notion of what safety is with Volvo's product sounds. It is possible that they connect previous sounds that they have associated with safety or a feeling they get from the product sounds with a safety image.

Jonna connects the silent interior acoustics with something typical Swedish and Elias says the same thing about the tempo and volume of the blinkers sound. As stated earlier this can be seen as both an association to heritage and personality. This is the case since consumers link their knowledge and memories of Sweden, which affects the perception of what Volvo is. According to Keller (2001b) Step 2 in the CBBE-Model illustrates what the brand is and in this case it would be Swedish. In this context it is likely, according to statements by Hultén, et al., (2008, p.76), that the silent soundscape in our test car reminds them of a sound scenario that they have stored in memory as Swedish.

Jonna, Elias and Christine connect the general silence of the car to older people and families, as they think that younger people would appreciate a louder and sportier sounding car. According to Keller (2001b), associations to typical users can shape the image of a brand. Therefore it seems that the general silence of our test car appears to affect Volvo's brand image. It is noteworthy that Nils perceives the engine sound to be sportier when considering his view of the expected image of the car. Even here it appears likely that our consumers have stored a specific soundscape with an association, which in this case would be the relationship between loud sounds and young people.

Christine expected our test car to sound exclusive, though her impression is that there are product sounds that sound cheap and plastic, which she exemplifies with the sound from handles, blinkers and stereo. As Keller (2001b) claim that Step 2 is about what the brand is, exclusivity could be a personality trait with Volvo. Though, according to Christine our test car does not deliver this association. Neither Sebastian thinks that the general soundscape sounds exclusive, or premium as he puts it. It appears that our consumers have different memories that they associate with an exclusive or aesthetic sound, which makes them perceive the exclusivity of Volvo's product sounds in different ways if we consider the connection that Hultén, et al., (2008, p.76) makes between memory and sounds.

None of our consumers make an apparent connection between product quality and safety. Even if it appears likely that product quality is necessary to signal safety and the same goes for exclusivity. Jonna talks a lot about the good quality that the test car's sounds signal, which can be interpreted to in some degree reinforce previous statements regarding both exclusivity and safety. Though there are some sounds in the car that takes her impression of quality in the opposite direction, as for instance the glove compartment sound. Also Herman talks about his impression of the good quality that he gets from our test car's sounds. Though he is not as convinced as Jonna, he claims that other cars signal higher product quality which means that his statement cannot be interpreted as an association to exclusivity. We assume exclusivity to mean that consumers perceive product sounds to be generally better than that of other cars. Instead it may reinforce the safety image to some degree even if he does not express that connection himself.

Two of our consumers mention that they connect product sounds in our test car with older Volvo models. Nils recognizes the horn sound from a Volvo 240 that he has had and Sebastian recognizes the blinker sound from older models. According to Hultén, et al., (2008, p.76) it is possible to make connection between memories and sound in this way and Keller (2001b) mentions that history can be part of Brand Imagery.

Volvo claims not to be working with the design of product sounds in order to create associations to a typical user, which could have been a part of Keller's (2001b) Brand Imagery. Though, several of our consumers associate the general silence of our test car with an older target group and families. This can likely be viewed as a bi-effect that Volvo has not considered. It is likely that a sound can give several impression and different impression to different consumers.

## 5.3.3 Comparison: Professionals and Consumers

Volvo attempts to make a history association by keeping a blinker sound that is similar to older models. We have found that consumers respond to this as one of our consumers recognized this, which is an indication that it can have the desired affect. Though, the other five did not reflect upon it, which can be attributed to numerous things. They all have had experience with older Volvo models. The case can however be that they generally have a weaker memory of sounds than the one who remembered it. Furthermore the product sound can have been altered too much so that it hard to recognize, or that they did not manage to describe it during the interview as they had numerous of other things to reflect upon. In addition, Nils recognized the horn sound from older Volvo models, which also is a sign of a historical connection accomplished by product sounds. Though, this was not mentioned by any Volvo Professionals, which can depend on that they have done this unintentionally.

We have shown that Volvo Professionals are engaged in reinforcing their safety image by the design of warning signals and low frequency sound when, for instance, the car door closes. The consumers have show response to this ambition even if they do not all mention the door sound and warning signals in relation to safety. Though Nils explicitly mentions the sound of the car door closing in relation to safety, which is an indication that Volvo's attempts regarding that sound is working. Moreover the interior audio signals are said to communicate safety. The consumers also mention other sounds that the Volvo Professionals did not. For instance, they associate the sound from adjusting the seat and the silent interior acoustics with safety. It could be that Volvo forgot to mention this, or that they have developed sounds that communicate this unintentionally. It is also stated by one consumer that the interior sounds from one of the handles affects her safety image impression negatively. Furthermore as Volvo claims that quality and safety are closely connected when it comes to cars, this can probably be viewed as a unsuccessful for Volvo, even if involves one detail in the car.

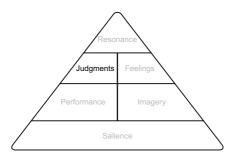
As we have stated earlier an overall guideline for Volvo's product sounds is that they should sound sophisticated which can be a part of the Brand Imagery Block. Though, the consumers that have reflected upon the sounds in our test car in these terms have found that the products sounds do not contain any sophistication aspects. Therefore we can see no sign that Volvo manages to provide a sophisticated image by the use of product sounds. It can either be that it is not possible or that Volvo has failed in doing so.

The NVH Department attempts to affect Volvos Brand Imagery by creating a Scandinavian image by making the soundscape in the cars generally quiet. Interestingly, as this is a rather detailed association to aim for, one of our consumers claimed to perceive this quietness as

Swedish, which is quite close to appearing Scandinavian. Another consumer perceived the blinker to sound Swedish because of its soothing impression. This might be the result of something Volvo has done unintentionally that reflects Scandinavian preferences. Though there is indication that Volvo's efforts of creating Scandinavian associations, which is part of the Brand Imagery Block, can have the desired affect on consumers.

As another part of creating Brand Imagery, Volvo desires their engines to sound sophisticated but still a bit sporty. One of our consumers describes its impression of the engine sound almost identical to this. He claims that it sounds surprisingly sporty for a car not expected to be sporty. This is a sign that Volvo's attempt can work and that it is possible to trigger this image with product sounds. Though, several other consumers find the car too quiet to claim that they perceive it as sporty. As several consumers have registered the sound and perceived it differently it appears that this factor is dependent on the individual. It is also a fact that the consumer who perceived the engine as a bit sporty was the one who accelerated the most while test-driving the car and therefore experienced the engine sound the most.

# 5.4 Brand Judgment



### 5.4.1 Volvo Professionals

Keller's (2001b) Consumer Judgment Block concerns how consumers evaluate a brand based on their perception of the Brand Performance Block and the Brand Imagery Block. It is a cognitive process where consumers put together impressions from these blocks in order to shape their Brand Judgment. Therefore it is not a block with focus on acquiring new information about a brand. In order to develop an understanding of how product sounds can affect consumers in this block we have chosen to focus on those car sounds that are typically present during a concentrated cognitive evaluation process. In our view consumers are engaged in such a process when they visit a showroom, and according to several Volvo Departments the car door sound is important in a car showroom as it tends to be the first sound consumers hear when reviewing the car and also the brand. It also appears likely, to us, that the sound of opening and closing the trunk can fulfill the same function because it is easily triggered from outside the car, the same goes for the door sound. These statements together with what the Volvo Professionals said about the purpose of the door sounds and the trunk sounds can therefore give us insight into how Volvo influences the consumer judgmental process via product sounds. As Hauser and Wernerfelt (1989) state that the process of consideration largely determines choice of purchase and Howard, et al., (1969) claim that consumers engage in this just before a point of purchase, it appears that a concentrated evaluation process like the one in a car showroom can be very important. It appears likely that impulses that are experienced in relation to this process can affect the consumer's cognitive process and that the door and trunk sounds therefore are worth analyzing from this point of view.

A majority of the Volvo Departments mentions the car door sound in relation to audio branding which indicates that they find it important in this context. However, none of the department mentions the trunk sound from this perspective. The NVH Department states that they view the door sound as an impressive Volvo sounds which can make an owner proud over his or her product. Our general impression is that Volvo describes the sound as being compact and solid due to its low frequencies. By utilizing this type of sound design they aim for it to signal pleasantness, quality, safety, and durability. Keller (2001b) claims that attitudes towards a brand are an important aspect of Block 4, Consumer Judgments. Furthermore Volvo mentions that the door sound should be pleasant, which we interpret as being positive, this may indicate that Volvo tries to affect aspects of this block with the help of product sounds. This is done by attempting to influence a cognitive process were consumers' attitudes towards a brand is largely set. Priester, et al., (2004) claim that attitudes towards brands strongly influences brand consideration, which stresses the importance of affecting consumers' judgments positively in a car showroom. This indicates the importance of letting the potential buyers experience positive product sounds in that situation. Another part of the Consumer Judgment Block is perceived quality (Keller, 2001b). Pappu, et al., (2005) claims that this contains consumer value that gives consumers reasons to buy the brand. The major part of consumers' evaluation regarding quality is according to Keller (2001b) a cognitive summary of Block 2 and Block 3. Though if product sounds that reinforce Volvo's perceived quality are present in the concentrated evaluation process that we have mentioned here, it is likely that they can still have an affect under Block 4. Volvo mentions that they want their door sound to signal quality, which according to our interpretation, means that they want to give an impression of durability and reliability. We believe those qualities to be a self-evident part of quality and can thus help to make sure that consumers evaluate the Volvo brand positively in a showroom. Furthermore the other qualities that Volvo wants to communicate with the door sound is aligned with aspects that they want to achieve in Block 2 and Block 3, it thus appears likely that the door sound can reinforce the cognitive summary of these blocks if the sound is heard by a potential consumer at car showroom.

Keller (2001b) also mentions that superiority and credibility are aspects in Block 4. We have however not collected any empirical material from the Volvo Professionals that clearly indicate that they deliberately attempt to affect the cognitive evaluation process of consumers on a long-term basis. These are more long-term aspects of Block 4 according to our interpretation. Therefore it also appears likely that it would be generally harder to isolate and understand which affect product sounds can have on these aspects in this block.

#### 5.4.2 Volvo Consumers

First off we once again have the question of when product sounds influences the consumers' cognitive evaluation process of brands. As stated earlier, the Brand Judgment Block is a cognitive process were the consumers put together impressions of Block 2 and Block 3 in order to shape Brand Judgment. It is therefore not self-evident when product sounds can influence this process due to the fact that it is an aspect that happens in consumers' minds and mainly based on memories. Concerning our Volvo Professionals we stated that it was likely that a consumer review at a car showroom could be such an occasion. As our consumers were given the possibility of reviewing our test car before we interviewed them, they were in a similar scenario as a potential consumer in a showroom. They experienced the test car for the first time and were given instruction to investigate the car. Although one difference is that they were asked to reflect extensively on the product sounds of the car, which would not be the case for potential buyers at a showroom. Therefore we will focus our consumer analysis

regarding this block on the sounds that according to the reasoning in the Volvo Professionals section can be important in an evaluation process at a car showroom, and which Volvo recognizes as important in such a situation. This means that we will analyze what our consumers said regarding the door sound and the trunk sound in order to understand how Volvo's brand equity is affected by product sounds in Block 4.

Regarding the door sound all our consumers have said that it gives them an indication of quality which we interpret to mean durability and reliability as consumers are generally not aware of more complex definitions of quality found among academic marketing researchers. According to marketing theorists Pappu, et al., (2005) quality is the total value, including intangibles, which a consumer perceives to receive from a product. Even if our consumers only mean durable and reliable when they talk about quality, those characteristics are a natural part of quality. In addition, as potential buyers experience the door sound during an evaluation process, this is a sign that this affects Volvo's brand equity positively in Block 4.

Furthermore, as the consumers' impression of the car door sound is aligned with their opinions regarding Volvo's product sounds in Block 2 and Block 3, the door sound is likely to reinforce and ease their recollection of Volvo memories and associations in a critical concentrated evaluation process. For instance, we have seen that impressions created by Volvo's product sounds in Block 2 and Block 3 are durability and safety, which are associations that the door sound evokes. According to Povasac, et al., (1997) and Nedungadi (1990), it is important that consumers can recall brand qualities and characteristics in order for the brand to be considered as an alternative. This is an indication that the door sound can have a positive affect on potential Volvo buyers in their evaluation of the Volvo brand at a car showroom. Several of our consumers have stated that the durability and reliability impression they get from the door sound is caused by the low frequencies and according to sound theorists this type of sounds can evoke associations such as majestic and strong (Hodges, 1996, pp.310-312; Wedin, 1972; Hevner, 1936). It therefore appears that our consumers could be affected positively by the door sounds of Volvo at a showroom as the low frequencies would reinforce their impressions from Block 2 and Block 3 and also ease their recollection of them.

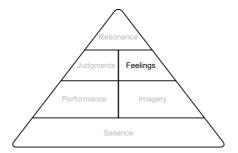
The opinions about the trunk sound differ among our consumers. One half finds it to give a distinct confirming impression and the other half claims that it lessens their product experience, as it sounds metallic and old. Hence there is an indication that the trunk sound can have separate affects depending on the individual and that it therefore can have both the same consumer affect as the door sound and as well the opposite affect.

### 5.4.3 Comparison: Professionals and Consumers

Volvo attempts to influence the cognitive evaluation process of potential buyers by affecting their quality judgment, which according to Keller (2001b) is an important part of Block 4. As a bi-effect they also ease the recollection of memories and associations from Block 2 and Block 3, which according to Nedungadi (1990) is important in order for a brand to be considered, by a door sound design that affects the consumers during such a process. In Block 2 we have described how Volvo tries to create associations to a durable and reliable product, and in Block 3 how they perceive it to contribute to giving Volvo a safety image. Our consumers, who have found themselves in a similar situation to a car showroom visit during our interviews, have responded to this as several of them have stated that the sound gives them an impression of safety and quality. As earlier stated, quality to consumers is likely to mean durable and reliable. Furthermore our consumers registered the trunk sound during their

review of the test car and their judgments differed among them. Some found it to be qualitative and some found it to lessen their impression of quality. Hence it can be stated that Volvo's attempts to affect consumers in evaluation processes with the door sound affects their Consumer-Based Brand Equity positively in Block 4, but that the trunk sound is not as successful as it can have both positive and negative consumer affects.

# 5.5 Brand Feelings



### 5.5.1 Volvo Professionals

Keller (2001b) states that security, or elimination of worries, is a typical brand feeling that can help build brand equity. The Design Department claims that product sounds are important tools for Volvo in order to evoke consumer feelings. They see sounds as more effective than physical design when it comes to this. Several Volvo departments claim that it is important for them to make the users of their products feel safe. They mention several ways in which they try to create this feeling by the use of products sounds. The HMI Department and the Brand Department claim that their design of warning signals contributes to a feeling of safety, which is similar to the connection between safety and personality traits, which was found in the Brand Imagery Block. Also the solid low frequency door sound is claimed to be providing a feeling of safety. Hence it can be stated that Volvo Professionals attempt to build Consumer-Based Brand Equity by evoking feelings with the design of their product sounds.

Other feelings that Keller (2001b) mentions as brand equity building are soothing feelings. Hirschman & Holbrook (1982) says that emotive responses can have both psychological and physiological effects and when it comes to soothing feelings it appear likely to us that they can result in both these affects. For instance, a calm person is likely to be less stressed and become less tired. Both the HMI Department and the NVH Department tries to affect the emotions of consumers by creating a peaceful soundscape, which illustrates that Volvo is engaged in affecting consumers' emotions with their product sounds. The HMI Department says that try to only use sounds when there is an important need for it and that they avoid irritating warning signals, in order to create a soothing soundscape. The focus of the NVH Department lies on the absence of frequent disturbing sounds and a relatively quiet and smooth sound profile.

Several Volvo Departments, such as the Infotainment Department, the Brand Department and the HMI Department claim that they are attempting to make all product sounds premium and pleasant. This is, according to us, a description that can be interpreted in several ways. Though, it appears logic that it requires some aesthetic element with the sounds and some kind of emotional enjoyment within consumers in order for them to be perceived as premium and pleasant. Keller (2001b) says that upbeat and joyous feelings are a part of the Brand Feelings Block and that the block in general contains sensory pleasure. As these feelings can

be linked to the aesthetic enjoyment that Volvo is trying to evoke it indicates that they are trying to make their product sounds increase the brand-building feeling fun that Keller (2001b) mentions. The HMI Department also claims that Volvo has had an image of boring historically, which is likely to also mean that the joyous emotional response to Volvo has been poor with their consumers, as a link exists between the Brand Imagery Block and the Brand Feelings Block. Though the HMI Department claims that they have managed to turn this around and that they now create more fun feelings with their consumers with the help of the design of the product sounds that they are responsible for. This is another sign that Volvo tries to evoke a joyous emotional response by the design of their product sounds. Lastly, the NVH Department states that they intentionally label the engine sound and the door sound as impressive sounds when planning their work. Logically there is a need to evoke an emotional response if the goal is to impress. This is also an example that Volvo attempts to evoke feelings by product sounds.

#### 5.5.2 Volvo Consumers

Keller (2001b) mentions that security is an emotional response to a brand that can help build its equity. All our consumers have stated that they get feelings of safety from different product sounds even if they do not mention the same sounds. This might depend on that individuals are likely to perceive the same sound in different ways, or that they were unable to describe all their responses to the test car's sounds during the interviews. The solid door sound, the mechanical locking sound, the tempo and the sound of the blinker, the sound from adjusting the seat, and the silent interior acoustics are all sounds that are described to give a safe feeling. Sound theorists confirm that different tonalities can evoke for instance calm and majestic feelings, which are as well likely to be connectable with a safe feeling (Hodges, 1996, pp.310-312; Wedin, 1972; Hevner, 1936).

According to Park, et al., (1986) consumers may buy products based on both experiential needs and functional needs, and Keller (2001b) describes that sensory pleasure can be a part of Brand Feelings. Therefore it appears logical that aesthetic enjoyment could be a brand feeling. This is also confirmed by Holbrook and Hirschman (1982) who mentions that consumers by products for aesthetic values. Though, some of our consumers claim to not see any aesthetic values in the sounds of our test car. However, Elias enjoys the low frequencies of the closing of the door sound, and Jonna speaks of the blinker sound as being pleasant sounding, which we, as earlier mentioned, suggests means aesthetic satisfaction. Some consumers mention sounds that they disapprove of, as the plastic sound from the glove compartment which can indicate affects that are the opposite of aesthetically appealing.

As mentioned regarding the Volvo Professionals view on Brand Feelings and product sounds, Keller (2001b) sees soothing feelings as typical brand-building feelings. It is also shown that sounds can evoke solemn emotions (Hodges, 1996, pp.310-312) Both Jonna, Christine and Elias get calm feelings from sounds in the test car and this appears to fit well with both sound theory and Keller's (2001b) Brand Feelings Block. Our consumers mention the blinkers sound and the interior acoustics as soothing.

Sound theorist Wedin (1972) mentions that sound can activate joyous emotions and Keller (2001b) claims that feelings of fun and excitement are a part of the Brand Feelings Block. Holbrook and Hirschman (1982) say that these emotional reactions can result in leisure activities that strengthen brands. As a common impression among the consumers is that the soundscape of the test car is calm it does not appear that they experience excitement from them. Though Nils claims that the engine sound is surprisingly sporty for this type our car,

which can indicate that some element of excitement is evoked. Christine finds our test car too quiet in order to provide an interesting driving experience.

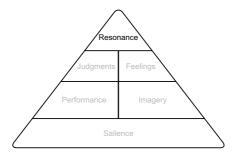
## 5.5.3 Comparison: Professionals and Consumers

As stated earlier, Volvo mentions that they try to evoke feelings of safety with their consumers via the sound of closing a Volvo door and as well with the design of their warning signals. We have found consumer responses that indicate that both these efforts can work by evoking the desired feeling. The consumers have described the door to give a safe impression because of the solid sound it produces and the blinker sound have been claimed to give a safe feeling due to both its tempo and sound. Though there are several other warning signals in Volvo cars that none of the consumers mentioned regarding the feelings that they got from the product sounds. Either they did not manage to reflect on all sounds that they experienced during the test run or Volvo has not managed to design all their warning signals to evoke a safe feeling. Interestingly, some of our consumers claimed to feel safe when hearing other Volvo product sounds, as the silent interior acoustics and the mechanical sound from locking the car, which Volvo themselves did not mention in regards to this. It is possible that Volvo's product sounds can have affects that they have not considered and that the style of some product sounds can be contaminated by their general ambitions regarding product sounds without their intent. It is also possible that the consumers are well aware of what image Volvo has and that this made them look for sounds that reminds them of their notion of safety without creating an actual feeling of safety. Though there is a clear indication that our consumers feel safe due to Volvo's deliberate attempts to create this feeling with the product sounds.

The NVH Department and HMI Department are trying to create soothing feelings by the design of the soundscape in Volvo cars by applying a general quietness to the cars, which means that sounds are only triggered when there is a clear functional purpose for it and that their design is not irritating. Several of our consumers claim to get a calm feeling from both the quiet interior acoustics and the blinker sound. The reason that the consumers mention the blinker sound often might be that it is a commonly triggered sound and therefore is easy to use as an example to explain something. Furthermore here we can state that Volvo's deliberate attempts to build brand equity by the design of the product sounds can have the desired affect on their consumers.

According to our previous reasoning, there is a general strive among the Volvo Professionals to make the aesthetics of their product sounds result in some form of sensory pleasure with the consumers. Though, among our consumers there is a mixed response to this aspect. Even if several sound theorists (Hodges, 1996, pp.310-312; Wedin, 1972; Hevner, 1936) have suggested that it is possible to create enjoyable sounds there is no clear indication that this works as a way to build Consumer-Based Brand Equity, in the case of Volvo. Volvo claims to have applied a new design on the product sounds in order to create feelings of fun and as well to improve their historical impression as a producer of boring products. Even if it is likely that their product sounds have been improved in this aspect, there is no clear sign among our consumers that they experience feelings of fun from the products sounds in our test car. The common impression among them is that the car sounded calm but not fun. Though Nils claimed that the engine sound was surprisingly sporty which can be an indication that Volvo has managed to avoid boring feelings, which they claim to have suffered from in the past. In other words there is no indication that they have managed to create fun feelings but maybe that they have managed to improve a negative Brand Feeling that has damaged the brand previously.

### 5.6 Consumer-Brand Resonance



### 5.6.1 Volvo Professionals

Several of the departments bring up the idea of the consumers being able to customize the sounds in the car. The HMI Department states that the ringtones and the navigation system can be altered. It is thought that this can create engagement in the consumers towards the brand. The Infotainment and the Telephone Departments also speak of the possibilities for consumers to alter these sounds. This type of behavior of altering sounds can be related to what Keller (2001a) describes as Active Engagement. Altering sounds and thus getting more involved in the brand suggests that a certain degree of Active Engagement via product sounds can be achieved in Block 6. Furthermore, we suggest that active and strong consumer engagement may in turn create behavioral ties between the consumers and Volvo (Fournier, 1998). This is logical in the sense that the more a consumer is active and engaged in a brand, then the more a consumer's behavior gets tied into the brand. However, the Infotainment Department and the Telephone Departments downplay the importance of this type of feature a bit compared to the HMI Department.

The Brand Department talks in terms of consumers customizing sounds as a method to personalize their cars. Personalization of this kind can be related to Keller's (2001a) concept of Attitudinal Attachment. Attitudinal Attachment is, according to Keller (2001a) achieved when a consumers has strong personal attachment towards a brand. We thus suggest that a consumer that spends time customizing the sounscape in a car will develop a more personal attachment towards the product and thus possibly create Consumer-Brand Resonance. Once this is achieved this personal attachment may lead to a passionate consumer love towards the brand (Keller, 2001a; Fournier, 1998), since the car then is not just another impersonal product amongst many that the consumer uses day-to-day.

Sound is described as an important component in enhancing the overall driving experience. The sound that appears when adjusting the volume on the car stereo and the navigation voice are described as experience enhancing sounds by the HMI Department. The Brand Department states that consumers continually hear different sounds while driving. This is believed to be the reason that sound is such an important part of the total driving experience. They mention the start up sound of the engine as an example of an experience enhancing sound. The Infotainment Department also speaks of the engine sound in terms of its possibility to enhance the overall driving experience. The Infotainment Department believes that the car stereo is another sound aspect that contributes to the total experience. In order to create Attitudinal Attachment, Keller (2001a) states that a brand must be perceived as something special in a broad context. The Volvo department's descriptions of sounds ability to enhance the overall driving experience suggest that this may create a unique driving experience for the consumers. This is suggested since sounds that enhance the total

experience may turn the driving experience and thus the brand experience into something special in a broad context. According to Keller (2001a) this in turn may influence a Volvo consumer's Attitudinal Attachment and thus Block 6. It is obvious that in order for this to be achieved the product sounds must however be fairly essential to the overall driving experience.

The Design Department speaks of the Volvo product sounds as playing a role in what Keller (2001a) describes as Behavioral Loyalty. It is stated that consumers may avoid purchasing a Volvo if its product sounds are considered bad. This we interpret as meaning that Volvo deliberately develops a positive soundscape in order to affect behavioral loyalty. Behavioral Loyalty contains the aspects repeat purchase and share of category volume (Keller, 2001a). The Design Department's statement thus suggests that avoiding purchasing a Volvo, because of a bad soundscape, would affect Behavioral Loyalty since the aspects repeat purchase and share of category volume would obviously be affected. This in turn implies that a consumer perceived positive soundscape may positively affect behavioral loyalty and in turn Consumer-Brand Resonance. However, we have only found indications of this from one of the Volvo departments.

#### 5.6.2 Volvo Consumers

The consumers bring the quality of the sound of the stereo system forth as something that appears to be very important for the overall driving experience. Herman, Sebastian, and Christine say that the sound quality of the car stereo can turn the car into a form of entertainment. Jonna also states that the sound quality of the stereo is important for her. Herman, Christine, and Jonna speak of a bad sounding car stereo as being disturbing to the driving and lessening the overall product experience. An underlying theme in the above statements is the ability of the quality of the stereo sound to make the brand experience something special. The sound transforms the car from merely being a mode of transportation into a place for entertainment. This is in line with Keller's (2001a) descriptions of what is necessary to create Attitudinal Attachment in Block 6.

Nils speaks of the car stereo in terms that can be related to what Fournier (1998) calls strong behavioral ties. Fournier (1998) describes behavioral ties as involving the consumer frequently interacting with the brand through consumption rituals. Nils describes that the car stereo sound is very important to him since he always listens to it on his way to work. It becomes a ritualistic way for him to prepare for the day. Furthermore, he states that the sounds are among the first things you notice in a car. Nils's ritualistic behavior can also be seen through the Keller's (2001b) perspective of the consumer being in sync with the brand. He has a day-to-day type of relationship with the brand as it helps him prepare for the day. This thus suggests that Nils is in sync with the brand, which is important to create Consumer-Brand Resonance.

We see that the sound quality of the car stereo is of high importance for the consumers in Block 6. However, Jonna, Christine, and Nils are not completely satisfied with the sound quality of the test car's stereo. Furthermore, Sebastian is the only consumer that outwardly states that he is specifically satisfied with sound quality of the test car's stereo. This may then downplay the role of the actual quality of the sound in the test car's stereo a bit for Block 6. Nonetheless, in light of Rothenberg and Ulvaeus (2001, p.14) descriptions that individuals are attracted to sound since our whole being is connected to sounds, we still do presume that the quality of the sound of the car stereo can be of importance for Block 6.

The idea of being able to personalize or customize the sounds in the car has been discussed by the consumers. Herman and Elias get excited about being able to personalize the sounds. Herman, for example, mentions the unlocking of the car door sound. He thinks that it would be easier to find your car at a public parking lot if a consumer can personalize the sound. Christine likes the possibility of being able to personalize certain sounds in the car. She feels as if this will enable her to get a more personal relationship with the brand. Nils also speaks of customizing and adjusting the sounds as way for him to personalize the sounds. This customization and personalization process that is described by the consumers can be related to Keller's (2001b) concepts of Attitudinal Attachment and Active Engagement. Spending time altering and adjusting the sounds in the car and thus getting more involved in the brand than the average consumer, shows signs of the consumer having an Active Engagement towards the Volvo brand. This can as well be seen as creating behavioral ties between the brand and the consumer (Fournier, 1998). The concept of personalizing the sounds in order to achieve a more intimate relationship with the Volvo brand is closely related to Keller's (2001b) concept of Attitudinal Attachment. However, it must be noted that both Jonna and Sebastian appeared to be fairly neutral towards the possibility of personalizing and customizing the sounds. Even so, we believe that the above suggestions regarding Attitudinal Attachment, Active Engagement, and behavioral ties are reasonable in light of Turax's (2001, p.29) explanations of how individuals can be highly passionate towards sound and thus develop relationships with them. This implies that personalization and customization is an important aspect of creating Consumer-Brand Resonance.

### 5.6.3 Comparison: Professionals and Consumers

We have found that Volvo deliberately utilizes customization and personalization of product sounds in order to create Consumer-Brand Resonance. The idea is that certain sounds in the car can be adjusted and altered by the consumers. Volvo claims that this creates engagement in the consumers and that the brand as well becomes personalized. The product sounds that are mentioned in this context by Volvo are the ringtones and the navigation system sound. The consumers' reactions towards customization and personalization of product sounds seem very favorable. However, none of the consumers mention the product sounds that Volvo describes as customizable. Instead the consumers express excitement about customization and personalization more on a general and sometimes currently non-existing level. The consumers describe scenarios which we suggest hints at Attitudinal Attachment, Active Engagement (Keller, 2001b) and behavioral ties (Fournier, 1998) between the brand and the consumer. This implies that Volvo's deliberate attempts at engaging the consumer and creating a personalized brand via the product sounds is not affecting the consumers. The consumers appear receptive to the idea and we therefore suggest that Volvo is not utilizing product sounds properly for engaging the consumer. There also exist certain inconsistencies from the different departments in regards to the importance of customization and personalization. This we believe may be one of the reasons that this aspect is not utilized properly.

Product sounds are stated by Volvo to be an important aspect in the total driving experience since consumers continually hear different sounds while driving. Volvo deliberately utilizes the engine sound, the sound quality of the car stereo, the car stereo volume adjusting sound, and the navigation voice in order to enhance the overall brand experience. The consumers only mention the sound quality of the car stereo as a sound that enhances the overall driving experience. The sound quality is mentioned in terms that imply that it turns the brand experience into something special, which we suggest show signs of Attitudinal Attachment (Keller, 2001a). One consumer even speaks of the sound quality of the car stereo in terms of it

creating behavioral ties (Fournier, 1998) and brand synchronization (Keller, 2001b). However, Volvo appears to have a problem in this area because some of the consumers speak in general terms and not in terms of the actual test car. In fact, only one consumer outwardly states that he is satisfied with the sound quality of the car stereo. The sound quality of the car stereo falls under the Infotainment Department's responsibility and it is only this department that mentions its importance in this context. Maybe Volvo as a whole does not prioritize the sound quality of the stereo. We therefore suggest that this may be one of the reasons we have some discrepancies between Volvo and the consumers in this area of Block 6.

We have found minor indications that Volvo deliberately utilizes product sounds in ways that implies Behavioral Loyalty by the consumers. The Design Department claims that consumers may avoid purchasing a Volvo if its product sounds are considered bad which would affect behavioral loyalty. However, we cannot find any indications of this affecting the consumers.

Finally, Sense of Community (Keller, 2001a) is the one dimension in Block 6 that we cannot find any evidence of Volvo deliberately attempting to affect via their product sounds. We also cannot find any hints from the consumers in regards to product sounds being able to affect this dimension.

# 6 CONCLUSIONS



# **6.1 Answering the Million Dollar Questions**

Based upon the analysis of the collected Empirical Material we will now hold a discussion and present conclusions in relation to the research questions. In order to uncover how firms, that manufacture and market public consumer products, utilize product sounds in building Consumer-Based Brand Equity we formulated the following research question in Chapter One:

In which steps of building Consumer-Based Brand Equity, and how, do firms that manufacture and market public consumer products attempt to utilize product sound as an audio branding tool?

Since we were analyzing Consumer-Based Brand Equity it was also of interest to study whether these brand-building efforts had an affect on the consumers. The following research question was therefore also formulated in Chapter One:

How is Consumer-Based Brand Equity affected by the impact that deliberately designed product sounds has on the users of public consumer products in regards to the steps of building Consumer-Based Brand Equity?

We have found that product sounds affect certain aspects of the consumers' awareness for Volvo. To achieve this Volvo deliberately utilizes consistency and uniqueness in their product sounds as a method to create Brand Salience. The consumers produced a long list of product sounds that were recalled and recognized which suggests that Volvo successfully creates brand depth. Volvo however only describes a few sounds as being consistent and unique. This suggests that Volvo either unconsciously utilizes other product sounds for this purpose or that they underestimate the apparent power of these other product sounds. Nonetheless, we have found that keeping product sounds consistent over time and developing them into unique sounds positively affects consumers' capabilities of recall and recognition of product sounds. There appears to be some inconsistencies between the Volvo departments, and as well between Volvo and the consumers in regards to the brand depth capabilities of the warning sounds. It was also found that none of the Volvo departments deliberately attempt to utilize product sounds to create brand breadth. In turn we found no evidence of any product sounds that had an affect on consumer brand breadth. From this we can conclude that Volvo efficiently uses, in terms of its affect on the consumers, the theoretical potential of product sounds for creating the brand depth aspect of Brand Salience. However it is apparent that product sound is not utilized to affect brand breadth, which may as well aid the process of building Consumer-Based Brand Equity.

Several indications have been found that Volvo deliberately develops product sounds in efforts to affect Brand Performance and thus meet consumer's functional needs. We have found this to have an affect in several dimensions of Brand Performance. Creating product sounds that are aesthetically pleasing partially affects the consumer's Brand Performance associations positively. We have found that developing product sounds that communicate information and that suggest action, and as well utilizing sounds that can be linked to reliability and durability affects the consumer's associations to Brand Performance positively. Only minor inconsistencies exist between Volvo and the consumers in the Brand Performance context. Furthermore, most of these inconsistencies are found in regards to the aesthetically pleasing sounds. We have found that Volvo via product sounds attempts to stimulate what the consumers abstractly think about the brand. The study has seen that Volvo deliberately via product sounds tries to link heritage and safety to the consumer's Brand Imagery associations. By keeping product sounds the same as that of older models the consumers' appear to fairly well be able to link to Volvo's heritage. Product sounds have also been found to trigger consumer associations of brand safety imagery. There does exist some inconsistencies between what product sounds the consumers bring forth as affecting these brand safety imagery associations and what Volvo deliberately utilizes. We have also found indications of successful and deliberate Scandinavian image associations by the development of a generally quiet soundscape and as well by utilizing soothing product sounds. It can thus be concluded that Volvo to a large degree utilizes the theoretical potential of product sounds in terms of its on affect consumer's Brand Performance and Brand Imagery associations. However, it is evident that there are other unused, and also unsuccessfully used, product sound associations of Brand Performance and Brand Imagery that as well may be helpful in building Consumer-Based Brand Equity.

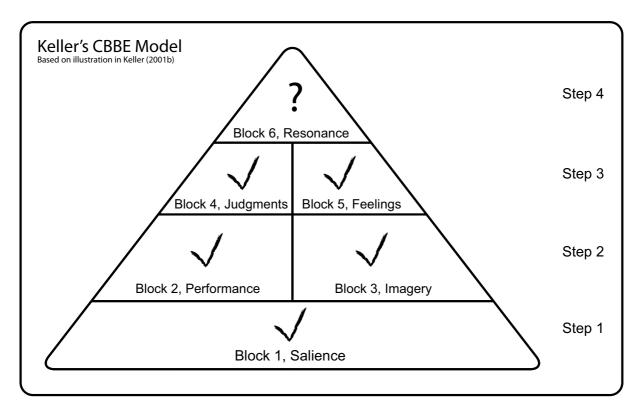
The study has found that the consumer's personal opinion and evaluations of the Volvo brand are influenced by the choice and design of product sounds. In order to stimulate Brand Judgments Volvo deliberately influences the cognitive evaluation process of consumers in purchasing scenarios by affecting their quality judgment. We have found that the closing of the door sound and the closing of the trunk sound affect the consumers' cognitive evaluation processes during purchasing scenarios. The door sound gives impressions of safety and quality while the trunk sound received mixed reviews in terms of its qualitative sound characteristics. We can therefore conclude that Volvo partially uses the theoretical potential of product sounds in terms of its affect on consumer Brand Judgments. It is however apparent that there are other unused, and also unsuccessfully used, product sound dimensions of Brand Judgments that as well may aid the process of building Consumer-Based Brand Equity. The study has also found that product sounds can influence the consumers' emotional responses and reactions towards the Volvo brand. Volvo deliberately works with the product sounds in ways for them to evoke specific Brand Feelings in the consumer. We found that emotional responses and reactions of safety and soothing feelings were achieved by the car door sound and the warning signals. Volvo deliberately works with evoking safety feelings with all their warning sounds but the consumers only attribute safety feelings to the blinker warning sound. This points to some inconsistencies between deliberate attempts and consumer affect. Volvo also wants to achieve sensory pleasure in the consumers from the product sound aesthetics. We have however not found any indication that the product sounds are affecting the consumer in a matter than can be linked to sensory pleasure. From this we can thus conclude that Volvo in part utilizes the theoretical potential of product sounds in terms of its affect on consumer Brand Feelings. However, it is evident that there are other unused, and also unsuccessfully used, product sound dimensions of Brand Feelings that may as well be helpful in the process of building Consumer-Based Brand Equity.

It was found that Volvo deliberately uses product sounds to stimulate the consumer's relationship and identification with the brand. We have seen that Volvo attempts to use customization and personalization of product sounds in order to create consumer engagement and a personalized brand. However, these attempts are not successfully affecting the consumers. It is not the case that the consumers are uninterested in the idea. On the contrary, they get rather conceptually excited about the concept of customization and personalization of product sounds in the car. Though none of the product sounds that currently have these possibilities seems to be affecting the consumers in the desired manner. Volvo as well deliberately works with several product sounds in the car to enhance the overall driving experience. For the consumers the sound quality of the car stereo is an important aspect for enhancing the overall driving experience. However, the consumers are not necessarily satisfied with the actual sound quality of the test car's stereo. We therefore have a fairly large gap between deliberate product sound utilization and actual consumer affect. Inconsistencies between departments in terms of what product sounds are important for creating Consumer-Brand Resonance have been found that may to some degree explain the gap between deliberate and actual affect. The study has therefore found that consumers appear enthusiastic and receptive to the idea of using product sounds to stimulate brand relationship and brand identification but that Volvo does not fully take advantage of this theoretical possibility.

# 6.2 Product Sounds for Building Consumer-Based Brand Equity

The purpose of this thesis was to explore, describe, and analyze how firms that manufacture and market public consumer products utilize the potential of product sound, as an audio branding tool, in building Consumer-Based Brand Equity. From the above conclusions we can confirm that the theoretical potential of product sound, in terms of its affect on consumers, are overall used quite well in five out of the six building blocks of Consumer-Based Brand Equity. This widens and extends the existing theoretical work and academic research on product sounds since these only show partial signs of the applicability of product sound in Block 2, Brand Performance, and Block 5, Brand Feelings. Lyon (2000) reasoned that product sounds can affect the perception of a products performance. Jekosch's (2005) study found that product sounds can as well communicate messages. The results from the Lyon (2000) and Jekosch (2005) studies hint that product sounds may be useful audio branding tools in Block 2 Brand Performance. Our study has found that Volvo partially uses the theoretical potential of product sound, in terms of its affect on consumers, in Block 2 and can thus verify Lyon (2000) and Jekosch (2005) findings. Furthermore, the result from the Lyon (2000) study also showed that product sounds can affect the enjoyment of using products. In addition Ozcan (2008) found that product sound can affect consumer's feelings. The Lyon (2000) and the Ozcan (2008) findings suggest that product sound may be useful audio branding tools in Block 5, Brand Feelings. We can verify these findings since our study found that Volvo partially uses the theoretical potential of product sound, in terms of its affect on consumers, in Block 5, Brand Feelings. Our study thus confirms these prior academic works but also adds to the theoretical picture since our findings are related to the building blocks of Consumer-Based Brand Equity. The Lyon (2000), the Jekosch (2005), and the Ozcan (2008) academic works were not related to building Consumer-Based Brand Equity and did as well not take into account firms' efforts of utilizing product sounds to reinforce a brand in relation to how the consumers perceive the sounds in their products. We suggested that the results from these studies may be applicable on isolated dimensions of the Consumer-Based Brand Equity

building blocks. However, our study in addition contributes to the theoretical picture since we focused on the product sounds affects on all the building blocks simultaneously. In other words, not simply the possibility of product sounds to affect isolated dimensions of the building blocks. In regards to this our study thus found that one single product sound can simultaneously have an affect on the consumers in several of the blocks. This has the implication that the comprehensive process of building Consumer-Based Brand Equity must take the block-spreading phenomenon of product sounds into account in order to manage the overall desired brand affects. In addition to Block 2, Brand Performance, and Block 5, Brand Feelings, we found that Volvo in part uses the theoretical potential of product sound, in terms of its affect on consumers, in Block 1, Brand Salience, and Block 4, Brand Judgments. Our findings in Block 1 Brand Salience can partially be related to Fulberg (2003) study, which indicated that music can be used to trigger consumer's recollections of previous brand memories. However, our study focused on product sounds and not music and therefore adds product sound to the theoretical picture of Block 1 Brand Salience. The deliberate utilization of the product sounds in five out of the six blocks has overall had the desired brand-building affect on the consumers. Product sounds can thus be manipulated in various ways by firms that manufacture and market public consumer products in order to build Consumer-Based Brand Equity. Minor inconsistencies have however been discovered between both Volvo and the consumers, and to a certain degree between the departments of Volvo. Furthermore, in Block 6, Consumer-Brand Resonance, a noteworthy gap was found between the deliberate product sound usage and its non-affect on the consumers. Interestingly enough, our study has found signs that there does appear to exist potential for product sound to positively affect the consumers as well in Block 6. This verifies Jekosch (2005) findings that product sounds may affect overall product experiences, which we in turn suggest may partially be related to dimensions of Block 6. However, Jekosch (2005) study was not related to brand-building or to a comprehensive view of all the Consumer-Based Brand Equity building blocks. Below is an illustration of the basic findings and conclusions of the study in relation to the CBBE-Model.



# 6.3 Managerial Implications

We have shown that product sounds can fill a function in five out of the six brand equity building blocks in Keller's (2001b) CBBE-Model. It has also been indicated that consumer's appear receptive to the idea of using product sound to affect Block 6, Consumer-Brand Resonance. The strongest brands are those that excel in all six building blocks. Our findings thus have the managerial implications that in Block 6, the most valuable block, product sound may represent a critical source for firms that manufacture and market public consumer products to reach the top of the CBBE-Model's pyramid. This in turn has the managerial implication that a totally harmonious relationship between the consumers and the brand may be reached via product sounds.

Our findings differ from past research as it sheds light on that product sounds can fill extensive brand equity building functions. Past academic research has not focused on products sound as an audio branding tool for brand-building and practitioners have mainly seen audio branding as a tool for creating awareness. Our findings imply that it can be beneficial for firms with public consumer products to review the sounds produced by their products in relation to the different stages of building brand equity in order to understand the affect they have on consumers. If such a review finds undiscovered brand-building possibilities, and if the estimated costs of developing a product sound strategy is reasonable, then product sounds can in fact function as a new brand-building tool for firms that manufacture and market public consumer products. This study in other words presents managers with a new audio branding tool for building Consumer-Based Brand Equity.

This study's findings suggests that firms that manufacture and market public consumer products such as cars, mobile phones, and other electronic equipment, should perform a review of their product sounds due to several factors. First, it is indicated in our study that poor or mismatched product sounds can harm brand equity, and if product sounds currently exists, it can be valuable to be aware of the potential weaknesses they thus have from a brand equity perspective. Second, it can be assumed that a certain amount of resources are spent on existing sounds even if their affect on Consumer-Based Brand Equity has not been analyzed. Therefore, it can be beneficial to verify that these resources give the highest possible return on investment from a brand-building perspective. As shown by our case study, technical sound departments sometimes take extensive initiatives when it comes to the design of product sounds without having access to guidelines from branding departments. Therefore an overall branding perspective on creating and developing product sounds is not always recognized. This implies that firms that manufacture and market public consumer products should have a responsible department that oversees all the different product sounds from a brand-building standpoint, in order to fully take advantage of the possibilities that this study has found with using product sounds as audio branding tools for creating Consumer-Based Brand Equity.

### 6.4 Future Research

This paper is a detailed and qualitative study on the non-researched area of using product sounds as audio branding tools for building Consumer-Based Brand Equity. It shall serve as both a conceptual framework for future studies and as laying an academic foundation for future research on the topic. Since this is a case study based on the car industry, studies on the relationship between product sounds and Consumer-Based Brand Equity in other industries with public consumer products would be of interest. Another aspect of interest for future research would be to supplement the qualitative consumer part of the study with a quantitative

data collection process and analysis. However, we do suggest that future research should focus on qualitative approaches since the phenomenon is largely unstudied.

Keller's CBBE-Model is comprehensive and extensive with its six blocks and respective dimensions. In order to gather more in-depth knowledge on each building block, future studies may therefore benefit from analyzing just one of the blocks relations to product sounds and brand-building. For example, as mentioned earlier our study found no signs of a product sound relation to the breadth dimension of Block 1. Block 1 is the foundation of the CBBE-Model and in order to effectively build Consumer-Based Brand Equity a brand needs to have both depth and breadth. It would therefore be of interest for future research to study product sounds relation to this building block further. Another interesting block to study further is Block 6. In this block, as mentioned earlier, we found a gap between the deliberate product sound usage and its desired consumer affect. However, the consumers appeared receptive to product sound concepts that may trigger Consumer-Brand Resonance in the block. Therefore, the relationship between product sounds and Block 6 would as well be of relevance to study in further detail.

# 6.5 Methodological Considerations

According to Bryman and Bell (2007, p.410) is it not self-evident that the methodological criteria reliability and validity are suitable to determine the quality of qualitative research. However, Guba and Lincoln (1994, in Bryman & Bell 2007, pp.411-415) instead suggests that qualitative researchers make an adaptation of reliability and validity, which they refer to as trustworthiness and authenticity. According to their suggestion, trustworthiness consists of four criteria; credibility, transferability, dependability and confirmability. We will now discuss our data collection based on these criteria and lastly also the generalizability of our study.

The issue of credibility concerns how well the researcher has understood the social world of study in order to gain acceptability by others. A technique that can be used to increase the level of credibility is respondent validation which means that you let interviewees review the researcher's interpretation of what he or she said. (Guba & Lincoln, 1994, in Bryman & Bell 2007, p.411) In order to achieve a satisfying level of credibility, we have used this technique with each interviewee.

As LeCompte and Goetz (1982, in Bryman & Bell, 2007, p.410) say, a problem for qualitative research is that a social setting cannot be frozen and that therefore issues arise regarding the replication of such studies. Geertz (1973, in Bryman & Bell, 2007, p.413) suggests that a thick description can solve this problem and this means that details regarding the study object are presented. The fact that we have chosen to focus on one in-depth case study have enabled us to collect more detailed material than if we had chosen several, and this is therefore in line with Geertz statement. Noteworthy is that our interviews with the Volvo Professionals are more likely to be replicated with success as those respondents have answered our question based on their continuous work procedures and therefore a certain amount of inelasticity can be connected with that. However, the answers of our consumers may differ from other consumers and they could as well have been affected by special conditions during the interview even if we tried to avoid that by letting them talk freely and investigate the test car freely.

According to Guba and Lincoln a qualitative researcher should keep complete records in order to gain trustworthiness by affecting the dependability of his or her study. We have made

attempts to do so by presenting all phases of our research process including problem formulation, selection criteria, interview transcripts and our interview guide.

Guba and Lincoln state that in order to achieve confirmability a researcher should stay objective and not influence respondents or other data sources. They also mean that it is impossible to do so completely but that one can show that it has not been done deliberately. Therefore we will present our attempts of trying to avoid affecting our respondents. Firstly, the one who led our interviews tried not to seem unusually optimistic or negative when answers were given by our interviewees. Secondly, we only gave our respondents the most crucial information regarding our study which was needed to hold the interviews before they were held.

Regarding authenticity, Guba and Lincoln (1994, in Bryman & Bell, 2007, p.414) argue that fairness is important which refers to if the research fairly represents different viewpoints among members of a social setting. We conducted interviews with both male and female respondents which own a new Volvo car. Also, the interviews with the professionals at Volvo were fairly widespread since we interviewed people from six different departments. Based on these reasons, we suggest that the fairness of our research has increased. Furthermore, our study influences the ontological and educative authenticity, which refers to that members of a social setting can understand their own milieu and also understand the perspective of other members (Guba & Lincoln, 1994, in Bryman & Bell 2007, p.414). This study provides the consumers with information regarding how the professionals at Volvo work with product sounds and also what they are trying to communicate. Also, this study provides the professionals at Volvo with information regarding how the consumers perceive the sounds and what features they prefer.

Our study has focused on a case firm that is active on a global market, which would indicate that our findings regarding our study of Volvo would be generalizable on a global level. Though our study has included empirical material from Swedish consumers only, and assumingly there are differences between consumers of different nationalities. To be fully generalizable, empirical material from consumers of other nationalities should be collected and analyzed. Though the main purpose of our study has been to develop an understanding of how the potential of product sounds can be used in consumer products, as an audio branding tool for creating Consumer-Based Brand Equity. As Volvo is a global company and we have shown that there is consumer response to their efforts on at least one market, the utilized potential of product sounds has still been indicated even there is a need to perform other studies regarding what sounds create desired associations in other cultures or markets. Assumingly, there can be differences between how a product sound is perceived and interpreted in different cultures.

# REFERENCES

#### **Books**

Aaker, D. & Joachimsthaler, E., 2000. Brand Leadership. New York: The Free Press.

Aaker, D., 1991. Managing Brand Equity. New York: The Free Press.

Bryman, A. & Bell, E., 2003. *Business Research Methods*. New York: Oxford University Press Inc.

Bryman, A. & Bell, E., 2007. *Business Research Methods*. New York: Oxford University Press Inc.

DeNora T., 2003. Music in everyday life. Cambridge: Cambridge University Press.

Eagly, S., 1993. The Psychology of Attitudes. Fort Worth: Harcourt Brace Jovanovich.

Easterby-Smith, M., Thorpe, R. & Lowe, A., 2006. *Management Research*. London: SAGE Publications Ltd.

Clarke, E., 2005. Ways of Listening. New York: Oxford University Press.

Hodges, D., 1996. *Handbook of Music Psychology*. San Antonio: IMR Press.

Howard, J. & Jagdish, S., 1969. The Theory of Buyer Behavior. New York: Wiley.

Hultén, B., Broweus, N. & Van Dijk, M., 2008. *Sinnesmarknadsföring*. Kristianstad: Kristianstads Boktryckeri AB.

Kapferer, J., 2008. The New Strategic Brand Management. London: Kogan Page Ltd.

Lindstrom, M., 2005. Brand Sense. London: Kogan Page Ltd.

Treasure, J., 2007. Sound Business. Gloucestershire: Management Books 200 Ltd.

Jackson, D. & Fulberg, P. (ed.), 2003. Sonic Branding. Hampshire: Palgrave Macmillan

Jacobsen, D.I., 2000. Vad Hur och Varför? Om Metodval i Företagsekonomi och andra Samhällsvetenskapliga Ämnen, Lund: Studentlitteratur

Kapferer, N., 2008. The New Strategic Brand Management. Bodmin: MPG Books Ltd.

Keller, K., Apéria, T. & Georgson, M., 2008. *Strategic Brand Management*. Essex: Pearson Education Ltd.

Malhotra, N. & Birks, D., 2003. *Marketing Research An applied approach*. Essex: Pearson Education Limited.

Saunders, M.N.K., Lewis, P. & Thornhill, A., 2007. *Research Methods for Business Students*. Essex: Pearson Education Limited

Sherrington, M., 2003. *Added Value: The Alchemy of Brand-Led Growth*, Basingstoke: Palgrave Macmillan.

Nykänen, A., 2008. Methods for product sound design. *Doctoral Thesis, Luleå University of Technology* 

Rothenberg, D. & Ulvaeus, M., 2001. *The Book of Music & Nature*. Middletown: Wesleyan University Press.

Toop, D., 2004. Haunted Weather, Music, Silence and Memory. London: Serpent's Tail.

Truax, B., 2001. Acoustic Communication – Second edition. London: Ablex Publishing.

Woods, W., 1981. Consumer Behavior, New York: North Holland.

### **Electronic sources**

Auto Motor & Sport, 2009. *List of Prices on New Cars.* (Auto Motor & Sport Website) [internet] Available at:

http://www.automotorsport.se/uploaded/document/2009/3/24/Nybilsprislista\_mars2009.pdf [Accessed 01 May 2009].

Franus, N., 2007. *Building Brand Value Through the Strategic Use of Sound*. (AIGA Website) [internet] Available at: <a href="http://www.aiga.org/content.cfm/building-brand-value-through-sound">http://www.aiga.org/content.cfm/building-brand-value-through-sound</a> [Accessed 08 April 2009].

Genius, 2009. *Product description of headphones HS-04SU*. (Genius Website) [internet] Available at:

http://www.geniusnetusa.com/newdetaprodtw.php?idsubcate=16&idcate=5&idprod=12 [Accessed 10 April 2009].

Jekosch, U., 2005. *Assigning Meaning to Sounds – Semiotics in the context of product-sound design.* (Springerlink Website) [internet] Available at: <a href="http://www.springerlink.com/content/p7383v9ht7087p35/">http://www.springerlink.com/content/p7383v9ht7087p35/</a> [Accessed 18 April 2009].

Intel, 2009. *Intel Inside Program*. (Intel Website) [internet] Available at: <a href="http://www.intel.com/pressroom/intel\_inside.htm">http://www.intel.com/pressroom/intel\_inside.htm</a> [Accessed 2 April 2009].

Keller, K. (a), 2001. *Building Customer-Based Brand Equity: A Blueprint for Creating Strong Brands*. (Marketing Science Institute Website) [internet] Available at: http://www.msi.org/publications/publication.cfm?pub=35 [Accessed March 20 2009].

MusicThing, 2009, *TINY MUSIC MAKERS: Pt 4: The Mac Startup Sound*. (MusicThing Website) [internet] Available at: <a href="http://musicthing.blogspot.com/2005/05/tiny-music-makers-pt-4-mac-startup.html">http://musicthing.blogspot.com/2005/05/tiny-music-makers-pt-4-mac-startup.html</a> [Accessed 26 April 2009].

Nokia, 2009. *Product description of Nokia 5800 XpressMusic*. (SonyEricsson Website) [internet] Available at: <a href="http://www.nokia.se/hitta-produkter/produkter/nokia-5800-xpressmusic/specifikationer">http://www.nokia.se/hitta-produkter/produkter/nokia-5800-xpressmusic/specifikationer</a> [Accessed 15 April 2009].

Nzherald, 2009. Mobile operators seek higher sound quality. (Nzherald Website) [internet] Available at:

http://www.nzherald.co.nz/technology/news/article.cfm?c\_id=5&objectid=9001947 [Accessed 11 April 2009].

Ozcan, E.V., 2008. TU Delft researcher helps to design product sounds. (Science Centric Website) [internet] Available at:

http://www.sciencecentric.com/art\_style/article.php?q=08100601-product-sounds [Accessed 5 April 2009].

Physorg, 2009. Philips delivers enhanced sound quality and advanced audio power for flat televisions. (Physorg Website) [internet] Available at: http://www.physorg.com/news3984.html [Accessed 22 April 2009].

Toyta, 2009. *Product description of car model Prius*. (Toyta Sweden Website) [internet] Available at: <a href="http://www.toyota.se/cars/new\_cars/prius/index.aspx">http://www.toyota.se/cars/new\_cars/prius/index.aspx</a> [Accessed 10 April 2009].

### **Articles**

Aaker, D., 1996. Measuring brand equity across products and markets. *California Management Review*, 38 (3), pp. 102-120

Algesheimer, R., Dholakia Utpal, M. & Herrmann, A., 2005. The Impact of Undesired Self-Image Congruence on Consumption-Related Attitudes and Intentions. *Journal of Marketing*, 69 (3), pp. 19-34

Allan, D., 2008. A content analysis of music placement in prime-time television advertising. *Journal of Advertising Research*, 48 (3), pp. xx

Alpert, M., Alpert, J. & Maltz, E., 2005. Purchase occasion influence on the role of music in advertising. *Journal of Business Research*, 58 (3), pp. 369-376

Belk R., Wallendorf M. & Sherry J., 1989. The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey. *The Journal of Consumer Research*, 16 (1), pp. 1-38

Beverland, M., Ching Lim, E., Morrison, M. & Terziovski, M., 2006. In-store music and consumer-brand relationships: Relational transformation following experiences of (mis)fit. *Journal of Business Research*, 59, pp. 982-989

Bosnjak, M. & Bran, C., 2008. The Impact of Undesired Self-Image Congruence on Consumption-Related Attitudes and Intentions. *International Journal of Management*, 25 (4), pp. 673-683

Davis, S.M., 2000. The Power of the Brand. Strategy & Leadership, 28 (4), pp. 4-9

Escalas, E., 2004. Narrative Processing: Building Consumer Connections to Brands. *Journal of Consumer Psychology*. 14 (1-2), pp. 168-180

Feldwick, P. 1996. What is brand equity anyway and how do you measure it? *Marketing and Research Today*, 23 (2), pp. 86-95

Fennell, G., 1978. Perceptions of the Product-in-use Situation. *Journal of Marketing*, 42, pp. 39-47

Fournier, S., 1998. Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *The Journal of Consumer Research*. 24 (4), pp. 343-373

Fulberg, P., 2003. Using Sonic Branding in the retail Environment- An Easy and Effective way to Create Consumer Brand Loyalty While Enhancing the In-Store Experience. *Journal of Consumer Behaviour*, 3 (2), pp. 193-198

Ghodeswar, B., 2008. Building brand identity in competitive markets: a conceptual model. *Journal of Product & Brand Management*, 17 (1), pp. 4-12

Hauser, J. & Wernerfelt, B., 1989. *The Competitive Implications of Relevant-Set Response Analysis*. Journal of Marketing Research, 26 (4), pp. 391–405

Herbig, P. & Milewicz, J., 1997. The relationship of reputation and credibility to brand success. *Pricing Strategy & Practice*. 5 (1), pp. 25–29

Hevner, K., 1936. Experimental Studies of the Elements of Expression in Music. *The American Journal of Psychology*, 48 (2), pp. 246-268

Hirschman, E. & Holbrook, M., 1982. Hedonic Consumption: Emerging Concepts, Methods and Propositions. *The Journal of Marketing*, 46 (3), pp. 92-101

Holbrook, M. & Hirschman, E., 1982. The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *The Journal of Consumer Research*, 9 (2), pp. 132-140

Keller, K. (b), 2001. Building customer-based brand equity. *Marketing Management*. 10 (2) pp. 14-20

Keller, K. & Lehmann, D., 2006 Brands and Branding: Research Findings and Future Priorities. *Marketing Science*. 25 (6), pp. 740–759

Kleine, S., Kleine, R. & Allen, C., 1985. How is a Possession "Me" or "Not Me"? Characterizing Types and an Antecedent of Material Possession Attachment. *The Journal of Consumer Research*. 22 (3), pp. 327-343

Lawrence, C., Marr, N. E. & Prendergast, G. P., 1992. Country-of-Origin Stereotyping: A Case Study in the New Zealand Motor Vehicle Industry. *European Journal of Marketing*. 26 (3), pp. 37-52

Lindström, M., 2005. Broad sensory branding. *Journal of Product & Brand Management*, 14 (2), pp. 84-87

Ludden, G. & Schifferstein, H., 2007. Effects of visual-auditory incongruity on product expression and surprise. *International Journal of Design*, 1 (3), pp. 29-39

Lyon, R., 2000. Engineered sound quality: coupled subjective reactions to engineering choices. *IEE Industry Applications Magazine*, 6 (6), pp. 20-25

Meunier, S., Habault, D. & Canévet, G., 2001. Auditory evaluation of sound signals radiated by a vibrating surface. *Journal of Sound and Vibration*, 247 (5), pp. 897-915

Nedungadi, P., 1990. Recall and Consumer Consideration Sets: Influencing Choice without Altering Brand Evaluations. *Journal of Consumer Research*, 17 (12), pp. 263–276

North, A., Hargreaves, D. & McKendrick, J., 1999. The influence of in-store music on wine selections. *Journal of Applied Psychology*, 84 (2), pp. 271-276

Oakes, S., 2000. The influence of the musicscape within service environments. *Journal of Service Marketing*, 14 (7), pp. 539-556

Oakes, S., 2003. Musical tempo and waiting perceptions. *Psychology & Marketing*, 20 (8), pp. 685-705

Oakes, S., 2007. Evaluating empirical research into music in advertising: A congruity perspective. *Journal of Advertising Research*, 47 (1), pp. 38-50

Pappu, R., Quester, P. & Cooksey, R., 2005. Consumer-based brand equity: improving the measurement – empirical evidence. *Journal of Product & Brand Management*. 14 (3), pp. 143–154

Park, C., Jaworski, B. & MacInnis, D., 1986. Strategic Brand Concept-Image Management. *The Journal of Marketing*, 50 (4), pp. 135-145

Posavac, S., Sanbonmatsu, D. & Fazio, R. 1997. Considering the Best Choice: Effects of the Salience and Accessibility of Alternatives on Attitude-Decision Consistency. *Journal of Personality and Social Psychology*, 72 (2), pp. 253–261

Priester, J., Nayakankuppam, D., Fleming, M. & Godek, J., 2004. The A2SC2 Model: The Influence of Attitudes and Attitude Strength on Consideration and Choice. *Journal of Consumer Research, Inc.*, 30 (3), pp. 574-587

Roehm, M., 2001. Instrumental vs. vocal versions of popular music in advertising. *Journal of Advertising Research*, 41 (3), pp. 49-58

Romaniuk, J. & Sharp, B., 2004. Conceptualizing and measuring brand salience. *Marketing Theory*, 4 (4), pp. 327-342

Schouten, J. & McAlexander, J., 1995. Subcultures of Consumption: An Ethnography of the New Bikers. *Journal of Consumer Research*, 22 (1), pp. 43-61

Sheth, J., Newman, B. & Gross, B., 1991. Why We Buy What We Buy: A Theory of Consumption Values. *Journal of Business Research*, 22 (1), pp. 159-170

Sivakumar, K. & Raj, S., 1997. Quality Tier Competition: How Price Change Influences Brand Choice and Category Choice. *The Journal of Marketing*, 61 (3), pp. 71-84

Sweeney, J. & Wyber, F., 2002. The role of cognitions and emotions in the music-approach-avoidance behavior relationship. *Journal of Service Marketing*, 16 (1), pp. 51-69

Wedin, L., 1972. A MULTIDIMENSIONAL STUDY OF PERCEPTUAL-EMOTIONAL QUALITIES IN MUSIC. *Scandinavian Journal of Psychology*. 13, pp. 241-257

Zeithaml, V., 1988. Consumer perceptions of price, quality, and value: a means-end model and synthesis of the evidence. *Journal of Marketing*. 52 (3), pp. 2-22.

### **Book reviews**

Dinnie, K., 2004. 'Sonic Branding'. Journal of Brand Management, 12 (1), p. 68