

#### Elusive intangibles

#### Exploring the experience of authenticity in product development

Kristav, Per

2019

Document Version: Publisher's PDF, also known as Version of record

Link to publication

Citation for published version (APA): Kristav, P. (2019). Elusive intangibles: Exploring the experience of authenticity in product development . [Doctoral Thesis (compilation), Innovation]. Department of Design Sciences, Faculty of Engineering, Lund University.

Total number of authors:

Creative Commons License: Unspecified

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study

- You may not further distribute the material or use it for any profit-making activity or commercial gain
   You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 18. Dec. 2025

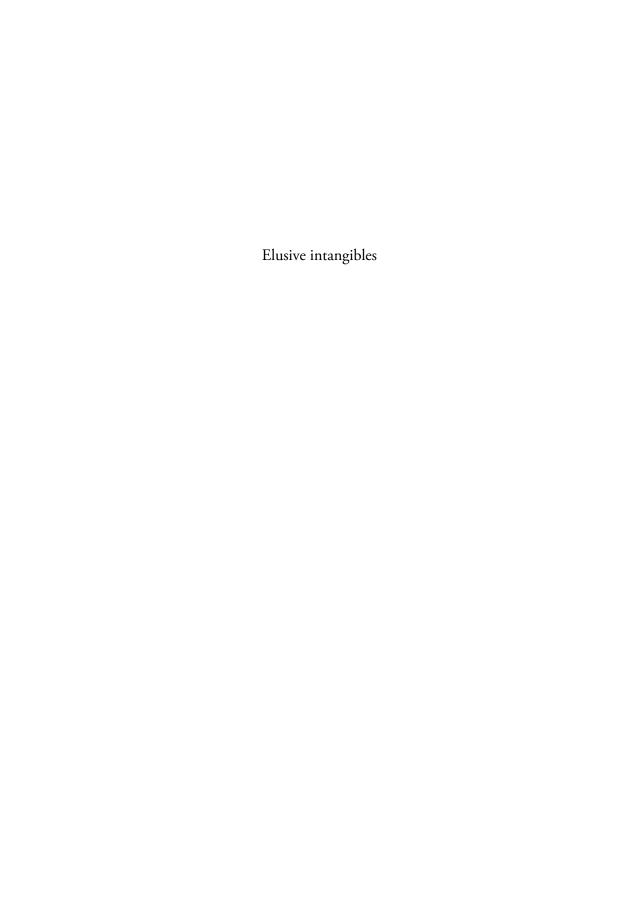
# Elusive intangibles

Exploring the experience of authenticity in product development

PER KRISTAV

FACULTY OF ENGINEERING LTH | LUND UNIVERSITY | 2019





# Elusive intangibles -

# Exploring the experience of authenticity in product development

Per Kristav



#### DOCTORAL DISSERTATION

by due permission of the Faculty of Engineering, Lund University, Sweden. To be defended at Lecture Hall Stora Hörsalen, Ingvar Kamprad Designcentrum, Sölvegatan 26 Lund. Date September 18, 2019 at 09.15 a.m.

External reviewer
Associate Professor Torben Lenau, DTU Copenhagen

Organization LUND UNIVERSITY	Document name: DOCTORAL DISSERTATION
	Date of issue 2019-08-23
Author(s): Per Kristav	Sponsoring organization

Title and subtitle: Elusive Intangibles - Exploring the experience of authenticity in product development

#### Abstract

When consumers buy a new product, they have expectations about what that product will deliver. The consumer's rational reasoning may try to ascertain whether the technical performance of the product will be fulfilled. Nevertheless, the final word is often subjective. Does it feel right? Is the product attractive, is it worth paying that much for? It is well established that human perception is highly subjective and elusive in nature. Although reason might tell us to go for the "sensible" choice, if the product is not experienced as attractive or exciting enough, the choice might go to something else or lead to disastisfaction with the chosen product. This is why intangible experiences are important to consider when developing highly valued consumer products.

The research in this thesis represents a journey. Along its path, I have studied how one might understand, elicit and capture intangible product value. How are intangibles relevant to industry, and how might they support product development in the quest for developing products that are highly valued on the market? The initial research, when this thesis began, was concerned with a new way to elicit, capture and assess this type of value. The value of this research lies in the development and validation of a new type of internet tool for the elicitation and assessment of product intangibles that are intended to capture consumer response in a different way from traditional internet tools for product assessment. The latter and greater part of this research has attempted to describe what intangibles are, how professionals talk about them, and what significance they have for product value and product development. What type of value are product developers trying to integrate into the products they develop, and how do they reason? This research has particularly focused on describing and understanding the intangible quality of product and brand authenticity.

One contribution of this thesis is its review of how authenticity is described by literature in the fields of product development, branding and marketing management. Thus, it describes the ongoing debate on authenticity as a leading determinant of market value. However, it remains unclear what saying that a product or a brand is authentic means within product development. This has been analysed in this thesis.

The thesis also gives an account of what qualities different professions within product development and industrial design have found to be important when developing highly valued consumer products.

This thesis also makes a contribution by proposing a new, multidimensional construct for authenticity that explains how market value relates to authenticity. This multidimensional construct of authenticity is a framework that explains how different fields related to product development may be used for companies in creating and maintaining product offerings with a high market value.

Keywords: product and brand experience, product and brand value, product and brand authenticity, product and brand meaning, product intangibles.

Classification system and/or index terms (if any)

Supplementary bibliographical information

Language: English

ISBN print 978-91-7895-201-4

ISBN pdf 978-91-7895-202-1

Recipient's notes

Number of pages 100

ISRN LUTMDN/TMKT-19/1033SE

Security classification

I, the undersigned, being the copyright owner of the abstract of the above-mentioned dissertation, hereby grant to all referenced sources permission to publish and disseminate the abstract of the above-mentioned dissertation.

Signature

Date 2019-06-11

# Elusive Intangibles -

# Exploring the experience of authenticity in product development

Per Kristav



#### Copyright 2019 Per Kristav

Division of Product Development, Department of Design Sciences Faculty of Engineering LTH, Lund University P.O. Box 118 SE-221 00 Lund Sweden

ISBN 978-91-7895-201-4 ISRN LUTMDN/TMKT-19/1033-SE

Printed in Sweden by Media-Tryck, Lund University Lund 2019



"The consumer just expects all the functional bits to be there, this is why it is so important to bring along the emotional aspects of the brand; I mean to say that the last choice we make, even though we may think that our brain makes a rational decision, we make an emotional decision in the end!"

Market Manager at Ifö participating in the third study

"This authenticity thing must be really deep, because everyone is talking about it. I keep waiting for it to blow over, but like the Internet fad, it just won't go away"

Blair Enns author and founder of Win Without Pitching consulting services for creative professions

"This above all: to thine own self be true, and it must follow, as the night the day, thou canst not then be false to any man."

Shakespeare, Hamlet Act 1, Scene 3

"You don't look at it as one million units sold. You look at it as one unit sold a million times. Every time someone picks up these headphones, it is a different experience and that matters so much to us. We think about how to build that emotional connection...not how to sell more products"

Seth Combs Co-Founder of Sol Republic

"I think the brand heritage and where the brand is today is one of the key factors why we still are where we are and generally explains why things are going ok. What we need to do is to build on that and develop products people almost feel that they cannot live without because they are so right for their needs, or perceived needs."

Market Manager at Bang & Olufsen participating in the third study

"-I developed a plastic panel with a wooden look that was undistinguishable from the real thing. It was rely advanced and of extremely high quality, but it was not considered as genuine and honest. We had to replace it by a poorer panel covered by a thin layer of real wood that in turn had to be covered in a thick layer of plastic varnish. The result was appalling and it looked less real, was more expensive, but it did contain real wood and was therefore considered as more authentic and genuine. But the real question is if the panel in full plastic wasn't more genuine and honest. That is a really hard question!"

Industrial Designer, former employee at Ford Cars in the second study

# Table of contents

Ackn	owled	lgements	. 11
Popu	ılärvet	tenskaplig sammanfattning	. 13
Abst	ract		. 15
Appe	ended	Papers	. 17
Also	publis	shed by the author but not included in this thesis	. 19
1	Intr	oduction	. 21
	1.1	Studying intangible product experiences?	21
	1.2	Research questions	23
	1.3	Assumptions and limitations	24
	1.4	Outline of the thesis	25
2	Fran	ne of reference	. 27
	2.1	Object perception and object experience	27
	2.2	Product experience and product value	28
		2.2.1 Industrial implications of product experiences and product value	30
	2.3	Product and brand identity	30
	2.4	Classification of product experiences	31
	2.5	The structure of product experiences.	35
	2.6	How to define the tangible and the intangible	36
	2.7	Modern tangibles and postmodern intangible value	
	2.8	Concluding the frame of reference and defining the research gap	43

3	Rese	arch app	proach	45
	3.1	Researc	ch process	45
	3.2	The m	ethods used	48
		3.2.1	Methods used in paper I	48
		3.2.2	Methods used in papers II, III and IV	53
4	The	appende	ed papers	55
	4.1	The sco	ope and the findings of the papers	55
		4.1.1	Paper I. Remote assessment of intangible product	
		experie	nces –challenges and implications	55
		4.1.2	Paper II. Defining authenticity in product design	61
		4.1.3	Paper III. Incorporating the intangible values of produc	ct
		offering	gs into the product development process	64
		4.1.4	Paper IV. A Multi-Dimensional Framework for the	
		Develo	pment of Authentic Consumer Products	66
5	Disc	ussion o	f the findings	71
	5.1	Conclu	isions and contributions	71
	5.2	Contri	butions of the thesis to future research	75
	5.3	Limita	tions of the research and the studies	77
		5.3.1	The first study	78
		5.3.2	The second, third and fourth studies	79
	5.4	Epilog	ue - contemplating authenticity	80
		5.4.1	Personal reflections about consumer lifestyle and valual	
		intangil	bles	84
Refe	ences			87
10101			raphy	•
		2.01108	r/ ·····	//

# Acknowledgements

The research presented in this thesis has been carried out at the Division of Product Development, Department of Design Sciences LTH, Lund University.

I would first like to thank Professor Anders Warell who has been my supervisor since my research began and has reviewed most of my work. His knowledge in the field of product experiences and experience of scientific conduct has been of great importance. He is co-author of some of the publications included in this thesis.

I also want to thank Axel Nordin who has been a most helpful supervisor too. He is coauthor of one of the publications included in this thesis.

I would also like to direct my greatest thanks to my main supervisor Professor Olaf Diegel. He is co-author one publication included in this thesis, and has provided valuable support.

I am also grateful to my colleague Damien Motte. He provided me with most valuable feedback and support concerning everything from pure research formalities to methodological advice.

Finally, I would like to mention Professor Robert Bjärnemo as a tribute to his confidence in my work and research over the years.

Lund 23 08 2019

Per Kristay

# Populärvetenskaplig sammanfattning

När konsumenter köper en produkt så har de förväntningar på vad produkten kommer att kunna leverera. Rationella argument försöker försäkra sig om att produktens tekniska egenskaper kommer att bli till belåtenhet. Men det är ändå ofta känslan som får sista ordet. Känns produkten rätt, tillräckligt attraktiv, eller är den ens värd att betala så mycket för? Det är väl känt att människans perception i hög grad är subjektiv till sin natur. Allt förnuft må försöka få oss att göra det "vettiga" valet, men om produkten inte upplevs som attraktiv eller "rätt" så kanske valet faller på något annat eller leder till missnöje med det som valts. Detta är anledningen till varför subjektiva produktupplevelser är viktiga att ta med i beräkning vid utveckling av nya konsumentprodukter.

Den första studien i denna avhandling behandlar ett nytt sätt att försöka framkalla, fånga och sedan mäta sådana värden. Värdet av den forskningen och dess bidrag ligger i utvecklingen och valideringen av en ny typ av internetverktyg för att framkalla och mäta produktupplevelser som antas vara mer effektiv än traditionella internetverktyg för denna typ av produktutvärderingar.

De resterande studierna i denna avhandling försöker beskriva dessa "intangibla" värden, hur yrkesfolk talar om dem, vilken betydelse de har samt hur de implementeras. Vilken typ av värden försöker produktutvecklare integrera i de produkter de utvecklar, och hur gör de? Och hur tänker de sig att deras konsumenter kommer att uppleva dessa kvaliteter?

Forskningen har speciellt intresserat sig för att försöka beskriva och förstå den "intangibla" kvalitén autenticitet. I litteraturen har denna form av värde beskrivits som ledande och avgörande för att kunna skapa ett högt marknadsvärde. Det har emellertid varit oklart vad det egentligen betyder när någon inom produktutveckling säger att ett varumärke eller en produkt är autentisk. Detta förhållande har analyserats i denna avhandling.

Forskningen bidrar även med att redovisa vilka kvalitéer som olika professioner inom produktutvecklingsprocessen finner viktiga när de utvecklar högt värderade konsumentprodukter. Forskningen behandlar även den pågående debatten kring autenticitetsbegreppet kopplat till marknadsvärde.

Forskningen bidrar även med att föreslå en ny flerdimensionell modell som förklarar hur marknadsvärde hänger ihop med autenticitet. Denna flerdimensionella modell förklarar hur forskningsfält som relaterar till produktutveckling kan bidra till att skapa och bibehålla ett högt marknadsvärde för produkter.

**Nyckelord:** Produkt och and varumärkesupplevelse, produkt och varumärkesvärde, produkt och varumärkesautenticitet, produkt och varumärkesbetydelse, abstrakta produktegenskaper.

## **Abstract**

When consumers buy a new product, they have expectations about what that product will deliver. The consumer's rational reasoning may try to ascertain whether the technical performance of the product will be fulfilled. Nevertheless, the final word is often subjective. Does it feel right? Is the product attractive, is it worth paying that much for? It is well established that human perception is highly subjective and elusive in nature. Although reason might tell us to go for the "sensible" choice, if the product is not experienced as attractive or exciting enough, the choice might go to something else or lead to dissatisfaction with the chosen product. This is why intangible experiences are important to consider when developing highly valued consumer products.

The research in this thesis represents a journey. Along its path, it has been studied how one might understand, elicit and capture intangible product value. How are intangibles relevant to industry, and how might they support product development in the quest for developing products that are highly valued on the market? The initial research, when this thesis began, was concerned with a new way to elicit, capture and assess this type of value. The value of this research lies in the development and validation of a new type of internet tool for the elicitation and assessment of product intangibles that are intended to capture consumer response in a different way from traditional internet tools for product assessment. The latter and greater part of this research has attempted to describe what intangibles are, how professionals talk about them, and what significance they have for product value and product development. What type of value are product developers trying to integrate into the products they develop, and how do they reason? This research has particularly focused on describing and understanding the intangible quality of product and brand authenticity.

One contribution of this thesis is its review of how authenticity is described by literature in the fields of product development, branding and marketing management. Thus, it describes the ongoing debate on authenticity as a leading determinant of market value. However, it remains unclear what saying that a product or a brand is authentic means within product development. This has been analysed in this thesis.

The thesis also gives an account of what qualities different professions within product development and industrial design have found to be important when developing highly valued consumer products.

This thesis also makes a contribution by proposing a new, multidimensional construct for authenticity that explains how market value relates to authenticity. This multidimensional construct of authenticity is a framework that explains how different fields related to product development may be used for companies in creating and maintaining product offerings with a high market value.

**Keywords:** Product and brand experience, product and brand value, product and brand authenticity, product and brand meaning, product intangibles.

# Appended Papers

This thesis includes the following appended publications:

#### Paper I

Kristav, P., Warell, A., Sperling, L. (2012). Remote assessment of Intangible product experiences –challenges and implications. *The International Journal of Product Development*. 16(3/4), 243-262 (Triple blind review).

Per Kristav was the primary author regarding the structure and content of this publication. Anders Warell contributed as supervisor and in a revisionary capacity. Lena Sperling contributed to the set-up of the situated usability test for the mock-up tool.

#### Paper II

Kristav, P. (2016). Defining authenticity in product design, *The International Journal of Product Development*. 21(2/3), 117-143 (Triple blind review).

Per Kristav is the sole author of this paper. The design of the study, literature review, execution of interviews and analysis of the results were consequently carried out by the author. However, Anders Warell and Olaf Diegel provided valuable feedback during the course of the study.

#### Paper III

Kristav P. Incorporating the intangible values of product offerings into the product development process. This paper has been accepted for review in the *International Journal of Product Development* (Triple-blind review).

Per Kristav is the sole author of this publication. The design of the study, execution of interviews and analysis of the results were consequently carried out by the author. However, Anders Warell and Olaf Diegel provided valuable feedback during the course of the study.

#### Paper IV

Kristav P., Bäckström I., Nordin A., Warell A., Diegel O. (2018). A multi-dimensional framework for the development of authentic consumer products. *Journal of Marketing and Consumer Behaviour in Emerging Markets*, JMCBEM. 2(8) (Double-blind peer review).

Per Kristav is the primary author regarding the content of this publication. He was responsible for the interviews, the coding of the empirical material, the conclusions and the contributions. Izabelle Bäckström contributed her knowledge from the field of marketing, brand management and grounded theory methodology. Anders Warell and Axel Nordin gave valuable feedback on the validation of the results and the structure of the paper. Olaf Diegel contributed linguistically.

# Also published by the author but not included in this thesis

Kristav, P. (2005). Cultural probes. Paper at the 4th Nordcode Seminar & Workshop, Trondheim, Norway.

Kristav, P. (2005). Cultural probes. In the proceedings of the first Nordic design conference – In the making, Copenhagen, Denmark (Peer review).

Kristav, P. (2005). Probing for the Recreational Home: The cultural probe as a communicative tool for researcher and user", full paper at the Joining Forces International conference on design research, Helsinki, Finland (Double blind review).

Sperling, L., Kristav, P., Olander, E., Lekeberg, H., Eriksson, J. (2006). Exploring emotions for design of your future chair. Proceedings of the International scientific conference Design & Emotion, Gothenburg, Sweden (Double blind review).

Kristav, P., Sperling, L., Warell, A. (2007). Towards An Internet Based Visual Tool for Communication with Customers in Early Phases of the Product Development Process. Full paper at the 10th QMOD Conference, First European Conference on Affective Design and Kansei Engineering, Helsingborg (Peer review).

Kristav, P. (2008). Towards an implementation of VIPET in industrial design practice: A visual Internet based tool for customer assessment of product appearance. Paper published at the 7th Nordcode Seminar, Paradoxes within Design Research – Mechanisms and Contradictions, Lund, Sweden (Double blind peer review).

Kristav, P., Warell, A. (2009). Towards Remote Assessment of User Experiences of Visual Product Representations. The International Conference on Designing Pleasurable Products and Interfaces, DPPI09, Compiegne, France (Triple blind refereeing)

Kristav, P., Hiort af Ornäs, V. (2012). Exploring negotiated determinants of product form. The 11<sup>th</sup> Nordcode Conference, Helsinki, Finland.

Although this paper is not included in this thesis, it may be of particular interest to the reader who has an interest in how different professions within product development and industrial design may determine intangible product value. This paper describes the influences of product form in design practice based on interviews with five industrial designers in southern Sweden. Participants were asked to list and compare different designers, and to explain how their respective characteristics influenced product form. The findings indicated that designers were influenced by traditions and did not act solely to serve their clients/employers, but that their actions also related to others in the profession. Designers make decisions based on the strength and novelty of expression, but behind a seemingly rational product design process, they also interpret and implement practices based on their own agendas, which may sometimes contrast with commercial goals.

Diegel, O., Kristav, P., Motte, D., & Kanian, B. (2016). Additive manufacturing and its effect on sustainable design. In S. S. Muthu, & M. M. Savalani (Eds.), *Handbook of Sustainability in Additive Manufacturing* (Vol. 1, pp. 73-99). Singapore: Springer. http://dx.doi.org/10.1007/978-981-10-0549-7\_5

Diegel, O., Kristav, P. (2016). Authenticity in Product Development. Full paper at the DESTECH conference, Geelong, Australia (Single review). http://dx.doi.org/10.18502/keg.v2i2.595

## 1 Introduction

This chapter outlines and explains the focus of this thesis, why it is important and how it all fits together. This chapter also gives an introductory account of the background to the field of intangible product experiences. In addition, it presents the research questions, some limitations and finally the outline of this thesis.

### 1.1 Studying intangible product experiences?

Products may or may not deliver what we expect from them. A new computer might be slower than what the packaging promised, and the perfect fit of a new jacket may, or may not, survive the washing process. These exemplified product qualities are tangible product qualities. They can be measured with great precision provided that the correct measuring equipment is used. But it is equally important to know how we experience the performance of the new computer, and how much we like to wear the jacket once it is no longer new. These are intangible qualities that characterise a product and may be much harder to measure.

The meaning and value of the products around us depend on how we subjectively experience them (Gilmore & Pine, 2007). For example, the experience you may have when the door trimming comes loose on one of your cars depends on the trust you have in that car and its brand. If it happens to be your favourite car, you may explain it by thinking that this particular experience constitutes a very rare fault. You go to customer support, they treat you well, you explain the problem, and they fix the car. At the end of the day, you will still have had a good experience and still value that product highly. But if the door trimming comes loose on a less preferred car, whose brand you do not believe in, the incident and the inferior treatment you may receive before the car is fixed would just confirm that this car, and its brand, are inferior and of low value. Another person, however, may have a diametrically opposed experience of the same course of events. This is why even the most elementary of product experiences are so elusive (Desmet 2002, 2007; Driskill, 2015; Hekkert, 2009).

We live in an age where there is an abundance of products that fulfil our basic needs. Manufacturers are therefore more apt than ever to try and differentiate their products in the market (McDonagh et al., 2002, p. 232). The products that we set apart are the ones that have a positive meaning for us; the ones we like and prefer, the ones we value, and feel an attachment to (Mugge et al. 2009).

In line with environmental concerns, we are also inclined to look after these products with greater care and keep them longer. Products that are dear to us in this way often provide us with memorable experiences that support our personality and personal lifestyle. They help us to attain personal goals and dreams when they deliver, fulfilment, social status, style, and support personal convictions (Crilly, 2010). Producers must take account of these valuable functions. They are therefore more interested than ever before in exploiting new and innovative approaches to elicit data and assess how products are subjectively experienced (McDonagh et al., 2002, p. 232). Products may live up to their target costing, a certain build quality, quality assurance, etc. In isolation, these factors do not, however, create high consumer value (Jönsson, 2004).

Plenty of successful products have been developed without considering consumer experiences. However, the price then becomes a greater risk factor than would be the case if these experiences were incorporated (Hackos & Redish, 1998, p. 25). When given the choice between two products equal in price and tangible quality, consumers tend to buy the one they experience to be the most attractive (Kotler & Rath, 1984). This trend is increasing in importance, as consumers are becoming more and more discerning (Jordan 2000, p. 205).

Consumer products are given a low evaluation when the nature and significance of intangible product experiences are not correctly considered or understood. This can lead to unprofitable, unsustainable, and undesirable products being developed. This research is intended to assist the product development industry in developing consumer products that are experienced as authentic and highly valued on the market.

Products that we recognise normally have a brand and a logotype attached to them. They have a known brand to which we attach meaning and value before we even come into physical contact with them. It is important to study under what circumstances this occurs. The product development industry is dependent for its survival on how we attach positive meanings and experiences to what it offers. Product developers are increasingly aware of this, and companies are working harder than ever before to create positive, trustworthy and authentic consumer experiences. It is revealing that today's consumer market is sometimes designated as 'the experience economy' (Sutherland, 2011).

This thesis has taken radical constructivism as its epistemological stance. This form of constructivism is a philosophical viewpoint about the nature of knowledge that sees human meaning making in relation to the interaction between human experiences and human ideas. Knowledge is seen in line with Immanuel Kant's rejection of an objective reality independent of human perception or reason. Instead, theories and knowledge

about the world are regarded as generated constructs (Glasersfeld, 1995). The efforts of product developers to give a certain meaning and value to products is regarded as transferring external meaning and value by eliciting an association to them when the characteristics of a product are perceived by an observer. What lies within the observer as a social and cultural being relates to society as a whole. Consequently, product expression, product meaning, product experience and product value are all dependent on social and cultural context (Bourdieu, 1994). Even though this thesis focuses on how to understand intangible product experiences, it only intends to cover small and limited parts of the behavioural sciences.

This thesis deal with authenticity as a positive intangible product value. This focus has been chosen because authenticity has been described by various fields and literature relevant to product development as the most comprehensive consumer value in the market. The contribution of this thesis can therefore also be applied to other types of intangible value. In this thesis, all types of intangibles and tangibles are considered to be important contributing factors to building product and brand authenticity.

### 1.2 Research questions

Three main research questions have been formed to study how we might explore the intangible experience of authenticity in product development. The research questions investigate the concept of authenticity in a way that is intended to serve the product development industry. This is achieved by looking at intangibles and authenticity from three major directions. Product developers have to be able to correctly elicit, capture and assess product intangibles. They also have to correctly understand the nature of what they are assessing. Finally, they have to implement intangibles and the concept of authenticity in their work practices in order to develop competitive and highly valued products.

Following on from this, the three main research questions are:

#### How can we understand authenticity in relation to product development?

This has been investigated through consulting product development theory in the form of brand management and market management literature. How this literature describes consumer value and how it describes authenticity has been investigated along with the relationship between consumer value and authenticity. Product developing practitioners in the form of Industrial designers have also been asked what authenticity is about.

#### • How can we measure the authenticity of a product?

One important part of finding out what authenticity is about is to be able to measure its presence, or lack of presence, and to what degree it is present in a

product. However, even with well-designed assessment tools, do we really understand the meaning of what we are measuring? What is measured if complex intangible constructs are experienced diametrically differently by consumers and product developers? Capturing and assessing product characteristics is not the same as understanding the meaning of these characteristics (Krippendorf, 1989). Assessing the degree of a specific intangible product property experienced by the consumer is not meaningful unless it is well known what this intangible property means to those who have assessed it. This is also dealt with by the first research question.

#### How is authenticity treated within product development?

This has been answered by investigating how different professions within product development reason about tangible/intangible value, and finding out how this relates to authenticity.

### 1.3 Assumptions and limitations

A concern of this thesis is market value in relation to products. And, as the perception of brands affects how products are experienced, the perception of brands is also relevant. This thesis does however only look into limited parts of the field of brand management, marketing management and consumer research.

The overall focus of this thesis is to elicit, assess and understand consumer experiences of intangible product value in general and authenticity in particular. Intangible product experiences give products their value, and consumers may experience this value. This means that a product and a brand can achieve a high market value through value transfer by association to, for example, a famous person with high status, an exclusive setting, or other pleasurable context. This thesis treats this condition as axiomatic.

This thesis distinguishes between 'value' and 'values'. Value is regarded as the outcome of an evaluative judgement process, whereas the term values is regarded as referring to the ideological standards, rules, criteria, norms, goals or ideas that serve as the basis underpinning such an evaluative judgement.

This thesis separates consumer value from customer value. The value of customer and consumer experiences is seen in line with Albert Wenben's division between these two concepts (Wenben, 1995, p. 384). Customer value is seen as focusing on the buyer's informed evaluation of a product at the time of purchase, while consumer value also includes people's valuations of products during their consumption, use and possession.

The studies in this thesis have not included consumers as a direct empirical source. Their views are only represented by secondary sources. The main intention of this thesis has not been to investigate consumer attitudes. Instead, this thesis investigates the views

of product development practitioners and literature about consumer value. An exception to this however is the first study, which includes user feedback from consumers about a tool interface for eliciting and assessing consumer experiences.

Market value is considered to be the collective value that consumers assign to a product, service or a brand on the market. The market value is the highest estimated price that a buyer would pay and a seller would accept for an item in an open and competitive market (Business Dictionary, 2019).

#### 1.4 Outline of the thesis

Chapter 1. **Introduction**. This chapter introduces the topic area. It includes the main field of interest, the limitations and structure. It also presents the research questions.

Chapter 2. Frame of reference. This chapter provides a description of the different lines of application, their theories and research areas, upon which this research is based. The theoretical frame of reference is a cluster of overlapping explanatory models that constitute the conceptual basis for the research questions and the research approach.

Chapter 3. Research approach. The purpose here is to provide the reader with a description of the present research and its process in order to facilitate the reader's own judgement of the scientific value of the research. The methods used are also described here.

Chapter 4. The appended papers. Here the scope and the findings from the studies in the appended papers are briefly summarised.

Chapter 5. **Discussion about the research results.** This final chapter answers and draws conclusions from the research questions, discusses the contributions, provides proposals for forthcoming research and outlines the limitations of the research. This chapter ends with some thoughts about the phenomenon of authenticity.

Parts of these chapters have been part of a previous licentiate thesis (Kristav, 2011)

## 2 Frame of reference

This chapter gives an account of the body of research upon which this thesis is based. It also explains its context. This chapter starts with a broad description of how we perceive objects in Section 2.1. The chapter narrows down as it progresses. The link between product experience and product value is introduced in Section 2.2. Product and brand identity are treated in Section 2.3. Further on, product experiences are ordered and classified depending on what functions and roles they play for consumers, which are described in Section 2.4. Tangible and intangible product qualities are defined in Section 2.5 before going on to structure consumer experiences of them in Section 2.6. In Section 2.7, consumer value is looked at in relation to modernity, postmodernity and industry. Finally, authenticity is introduced as a comprehensive form of postmodern value before the chapter is concluded and the research gap is defined in Section 2.8.

### 2.1 Object perception and object experience

We become conscious of the world around us through the arousal of our senses; this is how we grasp and perceive our world. Humans without disabilities have five major senses or modalities. An object experience accrues when someone comes into contact with, interacts with, or remembers an object (Mather, 2009). As humans, we experience objects through our senses: vision, hearing, smell/taste, touch and balance (Mather, 2009, p. 25). Which senses are deployed depends on the characteristics of the object, the context, and on the capacities of the subject.

The complexity of our object experiences may be exemplified by Marcel Proust and his famous account of his experiences triggered by a simple bite of a Madeleine biscuit. His experience took a running metre of books to retell in detail (Proust, 1981, p. 48). Also, from a physiological point of view, the sensorial organ, in this case taste receptors, has a complex connection to the higher order cortical regions where our most elaborate associations reside. First there is the sense organ whose receptors register stimuli. These stimuli are then transferred to intermediate neurons. Here the signals leave the sense organ behind and enter the sensory pathway by means of a chain of newly

interconnected intermediate neurons. Before leaving the sensory pathway, the signals are relayed by the thalamus. In the brain, the signals reach their final destination. In doing so, the signals are sent back and forth between the thalamus, primary, secondary and the higher order cortical regions (Mather, 2009, p. 14).

When an object is experienced, intrinsic factors such as colour, shape and surface properties are registered. Our mind then tries to add meaning by associations with extrinsic factors. This is to include the viewpoint of the observer relative to the object (Riesenhuber & Poggio, 2000, pp. 1199-1204). Objects are experienced simultaneously on both the aesthetic and semiotic levels. This implies that sensory impressions of products go hand-in-hand with meaning making (Vihma, 1995).

### 2.2 Product experience and product value

Object representations can be divided into three steps (Mather, 2009, pp. 283-284). Firstly an object is identified. The identification tags the object as belonging to a particular class. If the object is a product, it will be tagged as belonging to a product category (e.g., a sailboat or a mobile phone). Secondly, the identified product is compared and distinguished. It is recognised and compared in relation to other products in the same category. For example, it might be distinguished as "my simple and slow sailboat" versus "your fast and sophisticated sailboat" (Mather, 2009, pp. 283-284). The third step represents the actions we perform as a consequence of having identified and distinguished the product.

A product must first be experienced to be assigned a value. The consumer constantly evaluates and negotiates the value of a product while interacting with it. The more positive the consumer's experience is, the higher the consumer value of that particular product. Hence, the product experience will result in a positive or negative valuation of the product, and the value of that product is in consequence a result of how it has been experienced (Warell, 2008). Product experience is the overall value of a product or service to a consumer. This in turn is defined in terms of consumer perceptions as the consumer uses the product or service in a variety of contexts. Product experience is a component of consumer experience, a broader concept that includes all interactions between a company and the consumer (Spacey, 2017; Steiner & Harmon, 2009).

This thesis regards product experience and product value as mutually attached to and dependent on each other. Thus, it regards the two terms as two sides of the same coin. Consequently, a product does not have a value unless it and its properties are experienced and evaluated. Thus, an experience of a product will unconditionally result in an evaluation of that product. Likewise, an evaluated product will elicit experiences.

A relevant model for mapping product experiences is Desmet's framework for product experience. According to Desmet (2002 p. 123), all product emotions are preceded and

elicited by an appraisal. Appraisal is an evaluative process that serves to diagnose whether or not an experienced stimulus is relevant. If considered relevant, an appropriate emotional response is evoked (Figure 2.1). An appraisal mediates between products and our emotions towards them. Different individuals who appraise one and the same product may experience diametrically opposed emotions. However, the way in which emotions are elicited is universal. Desmet (2002) points out that our product appraisals also lie outside the scope of direct product stimulus, as product appraisal is dependent on our product concerns. Our product concerns are our attitudes and aspirations in relation to products. Our product concerns are social status, self-fulfilment, personal challenge, self-control and self-esteem (Desmet, 2002, pp. 108-109). The variety of human concerns is vast and intangible. Product stimulus and our product concerns are what lead to a product appraisal. The appraisal then generates a pleasant or unpleasant emotion. According to Desmet and Hekkert, these emotions of ours, in their turn, constitute our behavioural motivation to act (Desmet and Hekkert 2007, pp. 57-66).

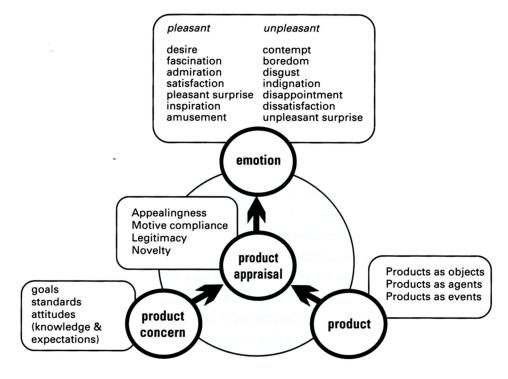


Figure 2.1 Desmet's (2002, p. 123) elaborated model of product appraisal.

#### 2.2.1 Industrial implications of product experiences and product value

Understanding intangible consumer experiences of products has become increasingly important for producers in global market (Jones, 1997). Consumers of today demand more from products than purely functional benefits (Jones, 1997). Hence, it is seen as increasingly important to capture, assess, and understand the impact of intangible consumer perceptions and experiences of products (Pine II., 1998, pp. 97-105). Companies often experience the early phases of product development as "fuzzy" (Kaulio et al., 1996), as there are a number of obstacles that have to be negotiated. According to Kaulio et al. (1996), one of these obstacles is the absence of efficient and easy-to-use methods that can provide companies with information at an operational level that can be used as the foundation for decision-making concerning product characteristics.

An additional complication is that studies indicate that products are experienced differently depending on whether one is the designer behind the product or the consumer that the product is intended for (Shang et al., 2000, pp. 375-391). For instance, designers may seek a higher level of novelty and impact in a product shape than the consumer is willing to accept (Bloch, 1995, p. 19), or add colours that have a different meaning to non-designers (Ng & Chan, 2018). The consequence of this is that products may be more attractive and valuable to design practitioners than to the product's target audience (Kristav, Hiort af Ornäs, 2012). This can be avoided however if reliable assessments and knowledge about intangibles can be provided.

However, capturing product preferences is not to be confused with simply asking consumers about what sorts of product configurations or product characteristics they might value (Kotro, 2005). Consumer experiences of product intangibles are especially difficult to capture and understand for researchers and product developers, as these values are often difficult to convey. Consumers may not even be consciously aware of the intangible requirements they have (McDonagh et al., 2002, p. 232).

### 2.3 Product and brand identity

When used and experienced, products help to define a sense of identity. Consumers remind themselves and others of who they are and who they would like to be experienced as. They protect and enhance their self-concept (Belk, 1988, pp. 139-168; Wallendorf & Arnould, 1988, pp. 531-547). But products are not only a means for the consumer to express identity and lifestyle; products also express their own identity, or even personality (Mugge, 2009) and convey specific brand values. The individual product's identity differentiates it in relation to products of other brands. Brands are, in turn, a strong motivating factor behind why product developers and designers have distinct intentions in relation to how products should be interpreted (Crilly, 2009). Building product identity is one of the key tasks of design practice (Warell, 2015, p.

2119). The visual design of the product is seen as the physical implementation of the brand; hence the term tangible branding (Warell, 2015, p. 2119). In this way, visual design features contribute to the brand value by serving as references for recognition of the product brand. This in turn allows consumers to attribute meaning to the brand related to its heritage and character (Karjalinen, 2010, pp. 6-22).

Product shape incorporates the ability to communicate product integrity (product integrity is a product's sustainable and competitive advantage over other products) and a quality image of a company; this is often referred to as corporate identity (Clark & Fujimoto, 1990). Studies by Yamamoto and Lambert (1994, pp. 309-324) support the idea that product appearance exerts an influence which, in some circumstances, even exceeds the influence of tangible product performance and price attributes. Yamamoto and Lambert also stated that attention paid to product aesthetics have a payoff in terms of sales performance (1994, pp. 309-324).

### 2.4 Classification of product experiences

A physical product can be described as a hierarchy of physical attributes such as, for example, shape, colour, texture and weight. When perceived, this product will elicit experiences. Those experiences will, in turn, build a lifestyle that will be a part of the human condition (cf. Woodruff & Gardial, 1996, p. 64, 70). Perceptions and experiences of products have not always been sufficiently understood or considered in the product development process (Keitsch, 2008). As a consequence, product requirements used during the design process may not sufficiently take into account perceived value to actual consumers, thereby missing important user needs and market targets (Keitsch, 2008). Products defined and developed through accurate consumer input have a competitive edge over their competitors (Wei Yan et al., 2002, pp. 59-71).

This is why it is important to study and to understand how products are experienced. Creusen and Schoormans (2005, pp. 63-81) have classified how product appearance influences consumer experiences (**Figure 2.**). They have constructed six different roles of product appearance explaining their influence consumer experiences. Creusen and Schoormans (2005) claim that these roles are relevant for consumers and are sufficient to describe the influence of product appearance and consumer choice. Note also that the symbolic appearance role is considered important.

APPEARENCE ROLE	INFLUENCE ON CONSUMERS
Attention drawing	Draws consumer attention in-store
Categorization	Influences ease of categorization. Offer possibility for differentiation from the product category
Functional	Shows features/functionalities. Serve as a cue for features/functionalities. Serve as a cue for technical quality
Ergonomic	Shows parts for consumer-product interaction
	Shows consequences of use of overall appearance aspects (e.g., size, roundness)
Aesthetic	Serves as a basis for aesthetic appreciation Fit with home interior and other products owned
Symbolic	Serves as a basis for symbolic product associations Communicate brand image

Figure 2.2 Creusen and Schoormans's (2005, pp. 63-81) classification of six different roles of product appearance and explaining their influence on consumer experiences.

Wenben proposes a similar but slightly more elaborate typology that includes eight generic 'product benefits' that consumers may experience from their possession/consumption of products (Wenben, 1995, pp. 383-384). The different types of positive product benefits (or experiences) may be correlated and combined, or there may be a trade-off between them. The eight benefits are:

- Functional benefits, which refer to the product's capacity for utilitarian or physical performance. The functional benefits derive from tangible and concrete attributes that the consumer may experience directly when using or consuming a product.
- 2.) Social benefits, which are the perceptual benefits acquired from a product's association with social status, social class or a specific social group. Social benefits often accompany highly visible products.
- 3.) Affective benefits, which refer to the perceptual benefit acquired from a product's capacity to arouse feelings or affective states. These benefits are often associated with cultural-ethnic meanings such as Christmas or other cultural events. However, personal memories and childhood experiences with products may also arouse affective benefits of this kind.
- 4.) Epistemic benefits, which refer to the benefits acquired from a product's capacity to satisfy curiosity, provide novelty, and/or meet a desire for knowledge. Explanatory, novelty-seeking consumption behaviours are examples of epistemic value pursuits.
- 5.) Aesthetic benefits, which are benefits acquired from products that present a sense of beauty or enhance personal expression. Fashion followers are examples of consumers that are pursuing aesthetic benefits.

- 6.) Hedonistic benefits, which are benefits that derive from a product's capacity to meet a need for enjoyment, relaxation, fun, pleasure or as a distraction from work or anxiety.
- 7.) Situational benefits, which are benefits that are acquired from products that have a capacity to meet situational needs in specific circumstances. A product acquires situational value in the presence of antecedent physical or social contingencies that enhance its functional, social, or other benefits. Situational benefit is measured on the profile of a particular consumption situation.
- 8.) Holistic benefits, which refer to the perceptual benefit accrued from the complementarity, coherence, compatibility, and consistency in a product constellation as a whole. Holistic product benefits are also the result of "synergy" derived from product combinations.

How "objective" can the classification of product experiences be? Product experiences can be classified slightly differently. Wenben's framework describes different forms of product benefits, whereas Creusen and Schoorman divide the appearance roles of products into classifications. However, both frameworks of classifications do resemble, and appear to be in accord with, each other. This consistency between classifications renders them reliable as a platform for further research. To elucidate this consistency even further, Holbrook (1999, pp. 12-24) developed an adjacent classification or typology containing eight interrelated ways to describe product experiences, but since he focused on consumer value, he called them eight different types of consumer value. Their content is similar in nature however, and these different frameworks of classifications mostly differ in the way they are structured in relation to each other.

Holbrook's eight types of consumer value are efficiency, excellence, status, esteem, play, aesthetics, ethics and spirituality (see Figure 2.). His division is based on how these values relate to extrinsic versus intrinsic value, and if they are self-oriented versus otheroriented. He further divides self-oriented and other-oriented depending on whether they are active or reactive. An extrinsic value means using a product to achieve something else, like getting a clean car or fixing a shelf. An intrinsic value is when the consumption experience is appreciated as an end in itself, for its own sake, such as listening to a symphony.

The self-oriented versus other-oriented concerns whether a product is consumed for the effect it has on my own experience and *me*, or if it is consumed for the effect it has in relation to others. One might drive a BMW for the impressive effect it might have on others, or simply because one enjoys the smooth ride. The difference between active and reactive value is that active value occurs when a consumer acts in relation to a product, while reactive value occurs when the consumer is physically passive in relation to a product. One might admire a painting or ponder the qualities of a camera in this fashion.

Each value is shown in **Figure 2.**. Two forms of consumer value might need to be clarified further. Efficiency is a product's tangible and instrumental function in fulfilling a practical task such as locking a door or preventing heat transfer. Excellence is the value that arises when someone experiences satisfaction, or admires or prizes how excellently a product fulfils such a functional, tangible task. (Holbrook 1999, p. 12).

		Extrinsic	Intrinsic
Self-oriented	Active	EFFICIENCY (Convenience)	PLAY (Fun)
	Reactive	EXCELLENCE (Quality)	AESTHETICS (Beauty)
Other- oriented	Active	STATUS (Success, Impression management)	ETHICS (Virtue, Justice, Morality)
	Reactive	ESTEEM (Reputation, Materialism, Possessions)	SPORITUALITY (Faith, Ecstasy, Sacredness, Magic)

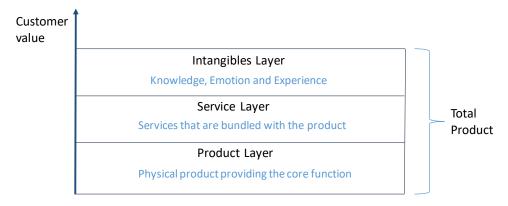
Figure 2.3 Holbrooks typology of consumer value (Holbrook, 1999).

Linn (2002) points out that the product experience also embraces two additional factors that have hitherto not been mentioned. He argues that historical interpretations in the past and expected interpretations in the future also must be taken into account. Thus, each product regarded in the present is experienced with both expectations, aspirations for the future and with memories and experiences from the past (Linn, 2002, p. 56).

The selection above marshals the existing classifications of product experiences and covers their main meanings and functions for consumers. They all indicate that product experiences are both versatile and compound. They also all illustrate the condition that product tangibles – designated as functional appearance roles, functional benefits and excellence – are just one of many parts of the full product experience.

## 2.5 The structure of product experiences

Intangible product value may be regarded as one of three aspects of total product value. Steiner and Harmon (2009) state this condition in a model (see **Figure 2.**) in which the tangible value belongs to the product layer, even though this is not explicit in the model. The main focus of this thesis is the intangibles layer that comprises knowledge, emotions and experiences as shown in **Figure 2.**.



**Figure 2.4** Steiner & Harmons' model of total product value (Steiner & Harmon, 2009, p. 2071). Note that the authors grade the different layers in relation to customer value in a bottom-up fashion thus suggesting that the intangibles layer lies on top of the tangible product layer.

Steiner and Harmon (2009) divided the intangibles layer into three internal layers considered essential for instilling a high intangible value in product offerings: knowledge, emotion and experience. Each layer only works in the presence of the others; hence, they work simultaneously within the consumer's interaction with a product.

The first internal layer, the knowledge layer, is the information the consumer has about the product. This information can be supplied in many different ways that are not necessarily acquired through direct use of the product. For example, knowledge can be acquired through talking to friends or browsing the web. Steiner & Harmon (2009) considered it increasingly important that the employees in a company have knowledge about the intangible design process; in fact, the employee needs to expand and update his or her knowledge base constantly in order to stay on top. This is in line with why companies with strong brands today, are making major investments in areas such as research, development and marketing (Driskill et al., 2015). They do this because they are becoming increasingly aware that intangible factors are what gives them their competitive edge. In practice, employees often work in teams. The value of effective teams is that they bring knowledge about the major intangible design factors to the

table that will later filter down to how the consumer emotions will value a more differentiated and competitive product (Driskill et al., 2015).

Secondly, there is the emotional layer. It builds on the knowledge layer. Consumers make buying decisions and value products based on their emotional appeal. It is therefore in the interests of the design team behind a product to ensure that consumers have positive emotions from using their products. Emotional design and pleasurable design are well-established terms in industrial design work practice (Jordan, 2000) and their approach is that emotions, pleasure, aesthetics and attractiveness, etc., all go hand in hand. A consumer reluctantly buys a product that is perceived as ugly or that elicits negative emotions. On the opposite side, if a consumer repeatedly has positive emotions from using a product, there is good chance that he or she will become attached to the product. This is the basis upon which brand loyalty is built (Steiner & Harmon, 2009).

Thirdly in the intangibles layer comes the experience layer. From a consumer point of view, the knowledge and emotional layers culminate in a more comprehensive consumer experience. The consumer experience comprises everything from the first time he or she first heard about the product, shopping for the product, its consumption and finally its disposal. Even the consumer's recollections and fantasies about the product are considered relevant to take into account. In this way, the consumer's extended experience of a product is unique. There is a good probability that a consumer who has had a highly satisfying and unique experience will want to experience it again. In addition, this is also what will set a particular product apart as distinguishable from the potential experiences connected to competing products.

To recapitulate; the product will be experienced through a set of interactions with the tangible product, the company, the sales organisation, and though the use of the product comprised of cognitive, affective, social, cultural and physical factors (Steiner & Harmon, 2009). To develop a consumer product with a high intangibles value is, in other words, to promote and orchestrate these positive consumer experiences as a part of the total product experience (Steiner & Harmon, 2009).

## 2.6 How to define the tangible and the intangible

The tangible and the intangible have been described as dimensions in which different sorts of value reside (Holbrook, 1999, p. 189). Tangibles are technical specifications and are here regarded as measurable entities. Expressions such as 8 megabytes, 9000 rpm, and 3000 km service intervals are all examples of tangible product specifications.

Intangible product value, however, is trickier to define. Intangibles are different; they cannot be touched, or measured by any technical instruments. Intangibles can be regarded as hedonistic forms of value that set them apart from tangible properties. Researchers have sought to define intangible value, but it is still a topic of debate today

because of its abstract properties (Driskill, 2015). It is widely agreed however, that an intangible value has no standard metric and is strictly qualitative. Dictionary.com defines intangible as not tangible; incapable of being perceived by the sense of touch, as incorporeal or immaterial, impalpable, not definite or clear to the mind. Thus, the concept of holistic product functionality is diverse and partly non-physical. Examples of such product functions are functions that fulfil social recognition or aesthetic goals (Crilly, 2010). Steiner and Harmon (2009) have described the intangible as having five properties. Two of them are the most prominent. They stated that intangibles are incorporeal in their existence, that is, not made out of physical matter. They also state that intangibility is abstract and differs from a material object in its manifestations as experience of pleasure, personal fulfilment, etc. Baruch Lev sums it up in the statement: "An intangible asset, like any other asset (a machine or a rental property), is a source of future benefits, but in contrast with tangible assets, intangibles lack a physical embodiment." (in Kempf-Leonard, 2005, pp. 299-300). Individuals often are unable to grasp the idea of intangibility itself, and it must often be experienced personally before one can fully understand it (Homer, 2006, p. 36). It is interesting to note that the research states that it involves a higher order of mental engagement to grasp the benefits and consequences of intangibles than those of tangibles (Homer, 2006, p. 36).

This research takes the view that the meaning and presence of intangible value can be determined and assessed. Even though we cannot see into the minds of others, we can ask others to describe their experiences in different ways. We can elicit experiences of product intangibles by showing products and letting respondents rate, rank or describe them, orally or in writing.

## 2.7 Modern tangibles and postmodern intangible value

To fully understand the nature and value of intangibles in product development, one also has to understand how value relates to tangibles. Doing so is to embrace how society, over time, has developed and changed together with these values.

The twentieth century brought with it an astonishing rise in technology. Products got more compact, efficient and more and more abundant. Industries started to outsource the actual manufacturing. Products in saturated markets started to become more similar in technology and function than ever before, and it became harder and harder to get a competitive edge over competitors. This is the background to why companies began to also focus on intangible value when developing their products. They started to realise that intangible value dictates brand loyalty, higher sales and consumer retention (Driskill et al., 2015).

Gilmore and Pine arranged consumer concerns into four dominant elements that have succeeded each other over the period spanning from pre-industrial epochs until present day (Gilmore & Pine, 2007, p.5):

- 1. Availability: Purchasing on the basis of accessing a reliable supply.
- 2. Cost: Purchasing on the basis of obtaining an affordable price.
- 3. Quality: Purchasing on the basis of excelling in product performance.
- 4. Authenticity: Purchasing on the basis of conforming to self-image.

In practice, it seems prudent to assume that all four of these elements interact with each other. Consumers may possibly buy a premium 'authentic' product, but there comes a point, which differs depending on the individual, when there will be a trade-off between the experience of the real, the authentic, and the more readily available, cheaper substitute with sufficient tangible quality.

It has been suggested that the chronological division between modernity and late modernity/postmodernity is problematic. According to Lash, the two terms might better be considered as a first and a second modernity within which different types of rationality or values reside (Lash, 1999). As not strictly dependent on epochs, the first and the second modernity may exist simultaneously according to Lash, but in different contexts and configurations (Lash, 1999). This thesis will, however, regard postmodernity as sprung from modernity; in essence to be a paradigm shift in a Khunian sense (Khun, 1962). In this we are conscious of the fact that individuals, independently of time and place, may well have had ideas and thoughts characteristic of post modernity. An example of this possibility is Thorstein Veblen who lived from 1857-1929 and introduced the term conspicuous consumption (Veblen, 1975). Conspicuous consumption has later been strongly associated with late modern/postmodern thinking and consumer culture (Prasidh, 2011, pp. 55-88).

The chronology of the term modernity has been debated but it is argued to have been prevalent during the 1920s when production systems and mass production were farreaching industrial aspirations (Irvine, 2013). The advent of late modernity or postmodernity is regarded as being situated any time from the 1960s and onwards (Irvine, 2013).

There is a tension between these two time paradigms. They oppose each other since they differ in character (Firat et al., 1995, p. 43). Below follows a compilation of some typical keywords or focus terms significant for each epoch of modernity (**Figure 2.**).



**Figure 2.5** A selection of phenomena characteristic of modernity vs. late modernity/postmodernity brought together by the author from the following sources:Firat, 1993; Milovanovic, 2009; Wikström et al., 2014; Jordan, 2000; Raaij, 1993.

The paradigm of modernity mainly suggests tangibles as a means to achieve product value and exclusivity, whereas the paradigm of late modernity/postmodernity tends to go beyond purely material qualities, hence it suggests also intangible lifestyle-related, "authentic qualities" as a means to achieve this goal (Gilmore & Pine, 2007). According to Khalifa, expanding benefits for the consumer is the same thing as adding intangibles to the tangibles - to go from solution to experience (Khalifa, 2004, p. 651). Wikström et al. (2014) gives a situated example of how this division of value may look in practice. The example comes from the context of the contemporary food market. It illustrates how consumers and industry may have different positions on what types of value generates product value. Wikström et al. (2014) claim that consumer's value perceptions of Swedish food products have gravitated towards the values of late modernity in contrast to the values of modernity. In detail, their research claims that producers have maintained modern values whereas their consumers have shifted towards late modern values (Figure 2.). This division is suggested as being valid also for a wider range of products. When looking at Figure 2. from a more general point of view, it connects with the earlier Figure 2..

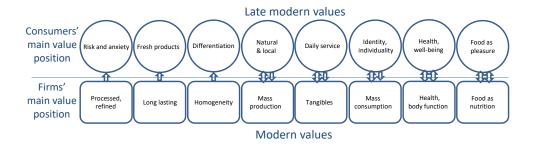


Figure 2.6 Positioning of the value dimensions in food by consumers and firms in the modernity and late modernity domains, respectively, according to Wikström et al. (2014).

The question of consumer value has many facets and its determinants go beyond what producers offer and what consumers experience that leads up to the acquisition of a product. According to Toffer, real value is produced first when consumers add effort, use and appropriate meaning to the products they have bought (Toffer, 1970). During the selection task, consumers may predict perceived value, but during use they actually experience received consumer value (Woodruff, 1997, p. 141). This is why new frameworks of marketing have to include consumers not solely as a target for products, but also as producers of experiences (Firat et al., 1995, p. 52).

Raaij pointed out that it is on the basis of usage rather than on the basis of production or purchase that our personal identity is created and recreated (Raaij, 1993, p. 558). In postmodernity, it is through our consumption activities, hobbies, sports and other preferences that we identify and communicate ourselves rather than through production and our professions (Raaij, 1993, p. 558). Furthermore, it is through this (re)presentation of self-image(s) of ourselves that we begin to conceive "the self" as a marketable entity to be promoted, positioned and customized as a product (Firat et al., 1995, p. 40).

This is the core of postmodern product value creation. It is in the brand and in the image that the true value resides. This aligns well with recent research that reveals that an overall low brand image is more damaging to a company and more difficult to negotiate than low tangible build quality in the products they produce (Homer, 2008, p. 715).

To cite Firat "In marketing practice that is most likely to succeed in contemporary society, image is primary and the product is treated as merely a variable that attempts to represent the image" (Firat et al., 1995, p. 45). Strong premium brands like Nike, Hermes, and Aston Martin are not primarily in the business of selling shoes, ties or cars but of crafting images. They always communicate the image in their marketing, but not always the product. In the postmodern marketplace, products do not even necessarily project images; they fill images (Firat et al., 1995, p. 46). Here it is not the object but the way

that culture signifies and uses the object that structures and organises our needs and the product value (Baudrillard, 1983; Wyver, 1986). These views are the most radical schools of postmodern thought.

The most ardent postmodernist thinkers like Feyerabend and Baudrillard (Feyerabend, 1988; Horrocks, 1999) have argued that postmodernity has blurred the very distinction between what is real and what is unreal. 'Everything goes' is an extreme postmodern and epistemological truth and it even concerns scientific methodology (Feyerabend, 1988). Baudrillard talks about postmodernity as the 'virtualisation of reality', a 'hyper reality' that has a nihilistically coloured view of the world. In this postmodern world, consumption is not merely about goods, but of signs. Commodities are consumed for their sign value and the meaning that is attached to the product. The product has its effect when it is consumed by transferring 'meaning' to the individual consumer. However, consumers not only buy a sign or one meaning, but a whole system of meanings; thus consumption has become a systematic purchase (Kellner & Baudrillard, 1989). Furthermore, they argue that the desirable individual differentiation of postmodernity has become easier due to the steady flow of products that are consumed mainly for their sign value. The search for personal differentiation in relation to other individuals has become fashion-oriented. The newest thing is that the signs have started to separate themselves from their referents. The tangible product has thus been forgotten as the meaning of its signs have taken over and have started to become real. This is the new and the most extreme postmodern relationship of the human with the object (Kellner & Baudrillard, 1989).

## 2.7.1 Authenticity: a comprehensive but problematic intangible value

Valuable offerings and brands are associated with a certain spirit or aura. According to the literature, the authentic is what consumers really want: it is regarded as a predominant determinant of experienced consumer value in the postmodern market (Alexander, 2009; Beverland, M.B., 2005a; Beverland, M.B., 2005b; Björkman, 2002; Brown et al., 2003, p. 21; Boyle, 2004; Gilmore & Pine, 2007; Glenn, 2010; Lewis, 2000; Martinec, 2004; Potter, 2010). According to Gilmore and Pine, goods and services that are not associated with, or are not embracing the concept of authentic experiences will no longer suffice; today's consumers want memorable experiences and engaging events that enrich their personal lives (Gilmore & Pine, 2007, p.1-5). Hence, the business of today is largely about being real, true, having the right aura or spirit, being original, sincere, genuine and authentic (Gilmore & Pine, 2007). Product authenticity, according to Potter (2010) and Lewis (2000), is about finding the authentic in life. Finding the authentic has become the foremost spiritual quest of our time. We tend to regard authenticity as a good thing; it is one of those "motherhood"

words like community, family, natural, engaging, honest and organic that are only ever used in a positive sense (Potter, 2010).

But what is authenticity? This thesis contain literature reviews that present examples of that authenticity might be. One of the most influential attempts is presented by Gilmore and Pine. They founded the company Strategic Horizons and have written two bestselling books treating authenticity and the experience economy (Gilmore & Pine, 2007; Pine, 2014). Strategic Horizons provides help to companies to conceive and design new ways of adding value to economic offerings through innovative strategies that primarily focus on consumer experience. One of their major contributions is that they suggest five forms of authenticity with a focus on consumer value (Gilmore & Pine, 2007, p. 49).

The first is *natural authenticity*, and it refers to customers' perceptions of things that exist in their natural state as authentic. The pure, the raw, the unaltered or unpolished, the organic and the untamed. We see natural elements such as earth, water, air, wind and fire promoted on numerous products, all in order to appeal to natural authenticity.

The second form of authenticity is *original authenticity*. It is about offerings that possess originality in their form, function or brand.

The third form of authenticity is *exceptional authenticity*. It concerns services and a broader context of offerings that may be experienced as inauthentic or authentic depending on how exceptionally well these services are carried out.

The fourth form of authenticity is *referential authenticity*. It is experienced if a product or service refers to some other desirable context, drawing inspiration from human history, or taps into shared memories and longings.

The final and fifth form of authenticity is *influential authenticity*. It influences higher ambitions, calling on higher goals and aspirations of, for example, a cleaner planet, or a better way to live. A coffee offering may feel more authentic if the paper mug has a panda or Fairtrade logo on it just because this connects to a higher cause of our inner aspirations.

But what is authenticity for product development practitioners in practice? Advice given to companies about establishing and maintaining authenticity has often been less straightforward than the advice provided by Gilmore & Pine (2007). Brand development consultancies may give advice such as: "-Projecting an aura of authenticity impresses consumers, attracts clients, and helps to keep employees engaged" (Workdesign, 2014). PDT (a Product Development Technologies, Strategic Design and Innovation Consultancy) (Delman, 2017) writes: "PDT's team predicts that companies who work to bring authenticity into their product development plans will continue to realise success in the marketplace for years to come". None of them, however, reveal anything about what authenticity is and how it is to be implemented in the product development plans that are mentioned. Langnau, Managing Editor of the Design World network writes:

"Authenticity in product design, while not new, is certainly making a comeback. Consumers today seek higher quality, longer-lasting products with a modern aesthetic. Faux materials are out. If it's true to the touch and eye on the outside, it speaks strongly to the quality of engineering and components within" (Langnau, 2010).

Similar concepts have in common that they suggest that authentic products have certain inert intangible qualities, or a high tangible product quality in general. In the quote above, Langnau singled out a certain choice of product materials and aesthetics. Similar statements are problematic as aesthetics is known to be highly subjective. The same is suggested to be true for what specific tangible qualities products must possess to be perceived as authentic. Bridger writes: "-...authentic products and services offer best value for money since they are superior in quality, more reliable in use and likely over time to maintain their value, or even increase it" (Lewis, 2001, p.28). There are also agencies and communication businesses on the global market that list which brands are the most authentic (Authentic 100, 2017; Authentic brands group, 2018; Marketing charts, 2017; Cohn & Wolfe, 2014). Whether these listings are doing little more than just listing the most profitable brands on the market might be debatable, however. What similar statements have in common is that they promote authenticity as a decisive and comprehensive intangible product value.

Suggestions about what authenticity is, in the context of products and brands, are numerous, complicated and span many fields (Grayson, 2002). Beverland states that there is no generally acceptable definition for the term authenticity that is applicable to brands and branded products (Beverland, 2005b, p. 1006). Napoli (Napoli et al., 2014, p. 1090) also suggests that there is no exact scale to measure the meaning of authenticity, and there are no empirical studies presenting pragmatic insights into how companies have maintained images of authenticity over time (Beverland, 2005a, p. 461). The term 'authenticity' is therefore regarded as problematic (Beverland, 2005b, p. 1006), and it has also been regarded with suspicion and as being utopic (Potter, 2010).

# 2.8 Concluding the frame of reference and defining the research gap

The remaining research in this thesis is built on what was learned about product experiences of intangibles and authenticity from the literature search on authenticity in the context of product development. To date, no research appears to have come up with a comprehensive definition, or framework that explains what authenticity, as a dominant factor behind market value within product development and industrial design, is about. There is research describing important aspects of authenticity, but it also looks at the phenomenon without considering all the factors that, together,

constitute the foundations behind market value. There is also very little research about authenticity that is intended to assist product developers holistically in their practice, and to help them align their efforts in their quest to develop highly valued consumer products. This research intends to decrease this gap. It intends to do so by answering the research questions as stated for this thesis.

## 3 Research approach

This chapter gives an account of the research process and the different methods used in the different studies.

## 3.1 Research process

The content of this compilation thesis represents a journey. The overall motive behind this journey has been to gain a deeper understanding of intangible product value in the form of authenticity. One might say that the research has taken three changes of direction but kept one main direction on the course of this journey. The divergence of the research makes this thesis interdisciplinary.

Each of the four papers in this thesis presents a study. The study in the first paper however consists of two pilot studies. Together, the studies in the papers hang together and contribute to answering the research questions.

Initially, the concern of this research was to develop new ways to elicit and measure intangible product experiences. An early lesson learned was how labour-intensive it is to invite or visit interviewees to collect this form of data. One of the first attempts to address this issue was to experiment with cultural probes. An example of such a cultural probe study is to send out small bags to respondents containing pictures, a survey and a camera for capturing parts of everyday life. However, technological breakthroughs have gradually replaced this form of analogue documentation with more efficient digital and internet-based alternatives. Others in the Department of Industrial Design at Lund University had also developed a picture card game to capture product meaning in parallel with the work on cultural probes. Participation in that research involved inviting focus groups to assess products in usability lab environments. The administration of such studies confirmed how time-consuming and labour-intensive assessing intangible product experiences really is.

The first study in this thesis describes an attempt to combine the advantages of playful card games with the effectiveness of internet-based surveys. A new type of Visual Interactive Product Experience Tool (VIPET) was developed through two pilot studies. The tool allowed for immediate statistical analysis from a great number of respondents placing and assessing virtual cards with product pictures.

It appeared to be possible to assess product intangibles remotely, and with accuracy, but doubts about what was actually being measured became increasingly apparent. What did the assessments really mean to those who had made them?

The following question was invented by a panel of participants in one of the pilot studies: "How authentic are the jam jar products?" The question was later put to, and answered by, another set of participants. The answers yielded an assessment of 9 on a scale of 0-10 from one respondent, but what does this mean? What is authentic? Is it the same for the respondent as it is for the researcher? This hermeneutic shortcoming is decisive when complex product characteristics are being assessed, and intangible product characteristics are known to be one of the most elusive and complex entities within product development. This caused the first change of direction of the research in this thesis.

At this point, the question of product value entered into the research. Which product characteristics give products a high value on the market? The literature review presented in study II suggests that 'authenticity' is the most comprehensive factor behind highly valued consumer products on the contemporary market. So what does it mean to say that a product is authentic? Is there a common understanding, and how can such products be developed? Authenticity has proved to be an incredibly complex intangible product quality. The question was further investigated by consulting the literature and through an interview study with industrial designers in study II. A deeper contextualisation of how the work practices of product development practitioners may create valuable consumer products and how this may relate to authenticity led to the second change of direction in the research focus.

What do product developers think about when they aim to develop authentic products that are highly valued on the consumer market, and what is their conception of consumer value? In a third study, product engineers, industrial designers and marketing managers were interviewed about this question, and how they contributed to creating consumer value. A question that emerged in this study was whether representatives from different departments within companies had different assumptions about what consumer value is and how it is generated. In this study, the interviewees where not explicitly asked about authenticity, and they never mentioned authenticity themselves. They did however talk about other factors that generate product value such as branding. Branding appears to have a direct relationship to product value and authenticity.

The fourth study employed the same empirical material as in the third study. However, the material was subjected to deeper scrutiny and had a slightly different focus. In this study, the recorded interviews were subjected to a qualitative content analysis. The research questions were targeted at how we can explain authenticity as a predominant product value. One research question in the fourth study asked how the interview material about consumer value related to authenticity. A holistic approach that also

employed literature from the research fields of marketing and brand management was used to answer this question.

These insights complete the journey of the research included in this thesis. **Figure 3.1** illustrates how the research in this thesis has progressed.

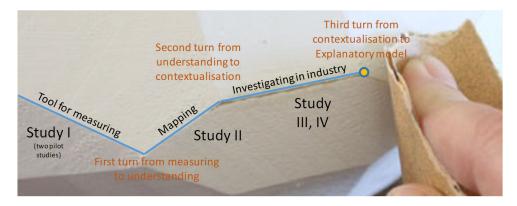


Figure 3.1 Visulisation of the research journey and changes of direction, as described in the text.

The research questions have been investigated using qualitative methods. The reason for this is that the focus of the research has been to investigate attitudes. This also applies to the first study. The internet tool as described in the first study is certainly a quantitative tool, but the methods deployed to investigate its efficiency and how it is perceived are qualitative.

As seen in Figure 3.2, the qualitative studies I, II, III and IV contribute to the exploration of the experience of authenticity in product development. They do this by answering the research questions. Study I answers how intangibles and authenticity can be measured. The theory in Study II, III and IV answers how we can understand authenticity and its relationship to product development. The interviews in Study II, III and IV answer how authenticity is treated within the investigated companies.

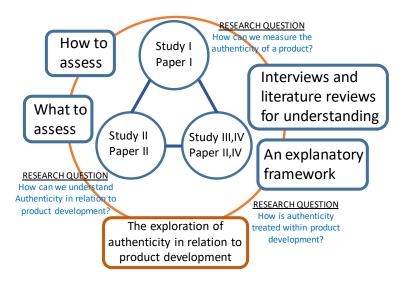


Figure 3.2 Overview of how the four studies, the papers and the research questions are related and compiled.

## 3.2 The methods used

This section contains the methods used in the different studies in the four papers

## 3.2.1 Methods used in paper I

This thesis will treat the two pilot studies in paper I as one study. Their methods are different however, and are therefore described separately. Together, the two pilot studies were carried out to test and evaluate a remote tool for the assessment of visual intangibles.

The first pilot study used a mock-up tool. The objective of the first remote pilot study was to investigate how remote respondents would experience the assessment situation using the concept of a two-dimensional board for product assessment. The mock-up tool was designed and distributed to respondents in five countries via email. The PowerPoint-based mock-up was aimed at imitating the visual and spatial characteristics of a previous physical tool by simulating the spatial movement of pictorial product representations.

The PowerPoint format was chosen as it is a widely available application suitable for visual-verbal presentations. A group of international Masters students were chosen as a test group to evaluate the mock-up tool. They were asked to assess food jars. All the jars

were photographed against a neutral background and the images arranged in four rows and eight columns in a random order as a collage on an A3 size paper.

Instructions on how to rank the jars were attached. Individually, the students were asked to indicate the seven most characteristic and eye-catching jars by circling the seven images they preferred. The respondents were then asked to rank these jars from 1–7 and, in their own words, to describe the three most characteristic features of these jars. Following this, the procedure was repeated for the seven least attractive jars, which were ranked 8–14, and verbally qualified in the same manner.

Subsequently, all ratings were summarised and the seven most and seven least characteristic jars, as rated by the respondent group, were selected as objects for assessment. Parameters to be used on the bipolar assessment scales during the test were extracted. These parameters had to be experienced as relevant from the viewpoint of the respondents. To ascertain this, the extraction of parameters was done using a second group of university students. The respondents were given the task of writing down their associations, thoughts and reflections when they were shown the 14 images. The adjectives written down were consistent with the characteristics as described by the first group of respondents. The adjectives were clustered into categories.

These categories were assigned a title describing the common theme of concern within each category. The parameters for the study derived from the titles of these categories. They were: Reuse-worthy, Gift-worthy, Expensive, Authentic and Appetising. The first pilot study also comprised a tool design assessment.

A representative design quality of chart tools that differentiates them from the traditional web-based form is the spatial potential to move objects and pictorial representations of products for assessment. The test in this first pilot study consisted of a total of 11 PowerPoint slides, including test procedure instructions, and an explanatory example describing the image positioning procedure. This test too was distributed to respondents via email.

In the second pilot study, an interactive prototype tool developed from experiences gained in the first pilot study was emailed to new respondents. But first, ten senior respondents were observed without intervention while they performed the test assessment in order to gain knowledge about how they navigated their way through the test task. The respondents used a small portable PC with a 10-inch screen. The small screen was chosen to test the visibility of the pictures and the usability of the interface under simple conditions.

The respondents were asked to assess pictures of chairs by placing them along an analogue horizontal scale. After the test, the respondents filled in a form. In this form, the respondents were asked to give an account of how it felt to use the tool, if they experienced that they could express their opinion of the products, to what degree they felt that the task was demanding or tiring, and finally what their overall experience was.

After having filled in the form, the respondents were also interviewed about the reasoning behind their answers.

After this, a first HTML software interface was developed from experiences gained in the preceding studies. In this study, chairs were again introduced to the respondents.

The assessment task was divided into more confined, cognitive steps than in the first pilot study. Information about how to proceed to the next step, and what to do in detail, was presented when required during the test task. This was achieved by using push buttons with instructions. To offer a better overview, the test tool had a progress bar indicating the progression of the test as it proceeded (see **Figure 4.3** in the next chapter).

### 3.2.1.1 Rating scales for assessment of product experiences

If a respondent is asked to rate an entity in a survey, then the respondent must have the opportunity to select more than one degree of rating for this entity. When this is provided, we have an assessment scale. There are however different types of scales that can be used for assessment. Most one-dimensional scales can be divided into two main categories: Visual Analogue Scales (VAS) and Discrete Visual Analogue Scales (DVAS) (Marsh-Richard et al., 2009).

Visual analogue scales, also called non-forced analogue scales, do not have fixed alternatives; instead respondents are asked to mark their rating along a continuous line (Marsh-Richard et al., 2009). Discrete visual analogue scales, on the other hand, force respondents to choose from fixed degrees of a parameter. An example of such a fixed scale with four answer alternatives is: "Not at all", "Partly", "Mainly", "Totally". Note that the respondent, in this case, is not able to give a neutral judgement between the "Partly" and the "Mainly" alternatives. This is why discrete visual analogue scales sometimes are named forced analogue scales. A means to reduce this forced effect is to increase the number of alternatives. Chen et al. (2007) have dealt with this by using a 9-point adjective scale in their study of design features on cars. Some scales are a mixture of the two categories VAS and DVAS. The result of this is normally that the continuous line between two anchor words has been labelled with some form of graduation.

Researchers have combined discrete visual analogue scales together into grids (Haines-Gadd et al., 2015). One such procedure is the repertory grid technique as described by Beail (1985, p. 189). The repertory grid can be used and adapted to fit numerous applications, but originally it was designed to capture the dimensions and structure of personal meaning. Quality Function Deployment (QFD) is a process that generates matrixes of Discrete Visual Analogue Scales. QFD is in fact a methodology for defining the preferences of consumers, prioritizing these preferences, translating them into engineering requirements, and establishing targets to meet these requirements (Sullivan, 1986, pp. 39-50).

The discrete visual analogue scale term is a generic term; it covers several subordinated scales. One of those are different sorts of category Likert-type scales. It has therefore been suggested that all Likert-type scales are discrete visual analogue scales, but all discrete visual analogue scales are not Likert-type scales (Flynn et al., 2004, pp. 49-58).

Küller (1975) adapted a method for measuring meaning and significance from the field of psychology for use in the field of architecture. He wanted to measure how architectural environments were experienced. The SMB method measures impressions by employing eight factors: pleasantness, complexity, unity, enclosedness, potency, social status, affection and originality perceived (Küller et al., 2009, p. 144). This semantic model for describing perceived environment became the SMB method.

Osgood scales (Osgood, 1952, p. 229), similar to category Likert-type scales, have been successfully deployed for this type of assessment. However, the method has been adapted for optimal fit to specific studies. For example, Karlsson et al. (2003, pp. 1408-1422) have used the method for measuring how respondents experienced vehicle interiors. The method is nowadays most popular as a basis and facilitator for interviews and discussions concerning experiences of architectural places (Laval, 2004; Laval & Wikforss, 2010).

Another method that has been deployed in an attempt to assess visual product characteristics is the Semantic Differential Method (SDM) (Osgood, 1957). The method is based on a set of Likert-type scales listed on top of each other; one anchor word on each end of each scale. Yannou and Ahmed (2009, pp. 47-72) have assessed car dashboards pairwise using this method whilst Scholz et al. (2010) have assessed mobile phones.

#### 3.2.1.2 Implications of scale assessment

There is a tendency among respondents using scales for assessment to gravitate towards a mean magnitude; the result being that stimuli above a centre point are easily underestimated whereas stimuli under a centre point are overestimated. This tendency has been known to science since the beginning of the 20th century (Hollingworth, 1910, pp. 461-469).

Another implication is the confounding effects that may occur when employing forced-choice scales. As mentioned in the previous chapter, the respondent is constrained by how the choice categories have been designed. This is particularly evident at the scale's midpoint. A respondent is impeded from providing a neutral assessment on a scale that has an odd number of choice categories. Subtle assessments that may be of research interest may also be concealed behind forced-choice scales and mathematical analysis (Hughes, 1969, pp. 223-226).

It is not possible to generalise about the best scale to employ for all types of assessment situations (Hughes, 1969, p. 226). It has been suggested however that visual analogue

scales are more demanding to interpret and administer in quantitative investigations than category scales (Guyatt et al., 1987, pp. 1129-1133). However computers have smoothed out some of these administrative and interpretation-related differences.

Guyatt has described significant differences between category scales and analogue scales (Guyatt et al., 1987, pp. 1129-1133). Their experience is that visual analogue scales are less easily communicated to remote respondents than category scales. This is also the experience of Laerhoven et al. (2004, pp. 830-835). To remedy this problem, Guyatt et al., (1987) provided respondents with a special training procedure to prevent imperilling the validity of their test results. Their study was carried out in 1986 however, when interactive computer interfaces where still in their infancy, and respondents were not as accustomed to using a computer mouse as they are today. An argument in favour of analogue scales is that it puts lesser constraints on future statistical analysis (Djurfeldt et al., 2003).

#### 3.2.1.3 Implications of ranking and rating for product assessment

A ranking analyses products from most to least preferred; a rating sorts them in terms of a graded relationship between the products. Ranking pictures is considered more reliable than rating as it is easier for the respondent. Normally it is difficult to administer because the ranking process is most commonly performed by sorting cards into the preference order. Hence, it normally requires a personal interview setting (Hair et al., 2010, pp. 291-292).

The visual positioning of images on a visual analogue scale may however constitute ranking and rating as a simultaneous task. Both ranking and rating have their strengths and weaknesses. The major failing with pure ranking questions is that they severely constrain the scope of future statistical analysis (Alwin & Krosnick, 1985, p. 536). The drawback with traditional ranking is that it may force respondents to make choices between products toward which they have identical feelings (Krosnick, 1999, p. 50).

On the other hand, rating questions may lead to less differentiation and a narrow distribution of ratings. Rating questions also leave the undesired tendency of personal variation in rating styles. Some respondents may, for example, have a tendency never to rate highly (Krosnick, 1999). Researchers have combined rating and ranking in studies attempting to measure consumer perceptions of products. Petiot and Yannou (2004, pp. 507-5259) have done this successfully in a study of the semantic attributes of drinking glasses and found the approach appropriate.

## 3.2.2 Methods used in papers II, III and IV

In the second study in paper II, ten industrial designers were interviewed one by one by the researcher in an environment familiar to them. General notes of the discussions were written down during the interviews. The notes were subsequently compiled and translated from Swedish. Though there are obvious limitations to this form of transcription, it is nevertheless a useful procedure and was chosen for a given purpose (Kvale, 2007). The purpose here was to extract what sentences designers tend to use when asked about different aspects of authenticity in design.

The lesson learned was, however, that it would be better to record all of what is said in future interview situations, and then take notes from the rich material of sound files that may be played repeatedly. This lesson was implemented in the third and fourth studies. In these studies, in-depth interviews and situated observations were deployed to collect the empirical material. An advantage of the personal in-depth interview is that interviewees are prone to express highly personal beliefs and experiences (Guest, 2013, pp. 113, 172). The personal interview method is a research technique that collects data through face-to-face interaction on a topic determined by the researcher.

An engineer, a designer and a marketing manager were interviewed in three companies investigated in the third and fourth studies. Each interviewee was responsible for their respective departments. The total number of interviewees was thus nine. They were between 35–64 years old, eight of them were men, and they had been working in their positions for between 5–32 years. The companies volunteered all the interviewees. The three engineers were all in-house employees, and two of the designers and two of the marketing managers were members of in-house staff. Consequently, two of the interviewees worked for independent design and marketing management agencies outside the companies. These interviewees were in charge of collaboration in the projects discussed. The collaboration with these agencies had been ongoing for over 5 years.

The interviewees were asked to cover the main question area about product value, and the questions were constructed along the lines of "Tell me something about product value ..." or "How would you describe your products...".

All interviews with Swedish subjects were carried out in their native language. Interviews with subjects from Denmark were carried out in Danish or English. The audio-recorded interviews were transcribed and translated into English. This methodological procedure is well established within similar research study contexts (Person, 2016).

Before the interviews started, each of the three companies was asked to choose one of their recent products to talk about. Conducting interviews in this fashion allows the interviewees to tell their stories in a more independent way than if they are fed continuous questions by an interviewer (Rooney, 2016; Lloyd, 2000). The companies all chose products that had not yet been launched at the time the interviews were carried out.

A specific interview method for conducting the interviews was chosen in an attempt to hinder the common tendency to use new empirical data only to confirm already formed theoretical preconceptions. The measure to negotiate this tendency was to perform the interviews in compliance with grounded theory (Charmaz, 2014). With grounded theory, interviews are often conducted with a specific type of research interviewing technique called intensive interviewing (Charmaz, 2014, pp. 55-82). The positive characteristic of intensive interviewing is its combination of flexibility and control. Its objective is to let the interview cover certain areas of interest in a gently guided, one-sided conversation that explores the interviewee's own perspective and personal experience within the research topic. Open-ended questions are meant to elicit a loose structure and consent to new, improvised follow-up questions relevant to the interviewee.

The transcribed interview material was the same for the third and fourth study. An elaborate qualitative content analysis method was deployed for analysing the transcribed interview material in the fourth study (Graneheim & Lundman, pp. 105-112). In accordance with the qualitative content analysis procedure, sentences from interviews are transformed into condensed meaning units to be sorted into different themes. This procedure for coding interviews according to themes resembles bookmarking and is according to Flick (2007, p. 144) as one of the most common ways to categorise interview content.

## 4 The appended papers

This chapter contains the abridged scope and findings of the studies in the appended full papers to be used for answering the research questions.

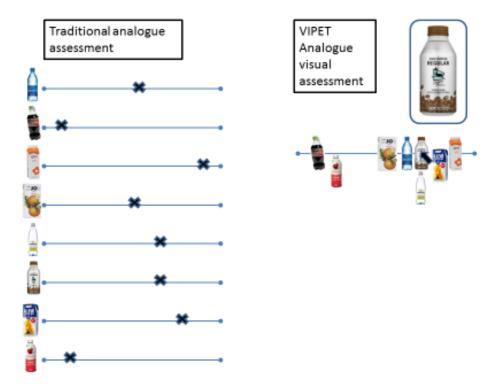
## 4.1 The scope and the findings of the papers

## 4.1.1 Paper I. Remote assessment of intangible product experiences – challenges and implications

#### 4.1.1.1 Scope

The proposition was that remote web-based assessments that are experienced as attractive and clear by respondents have an advantage over traditional remote survey forms in terms of the validity of the results and response rate. The objective was to evaluate a mock-up and a prototype version of a tool intended for the remote assessment of visual intangible product experiences.

There is a lot in favour of the idea that people would rather communicate something about themselves while experiencing play than filling in a traditional survey form (Jordan, 2010). Well-designed interactive web-based tools for product assessment potentially motivate respondents to accept and complete more time-consuming tasks than less engaging, alternative remote surveys (Couper et al., 2001). In a traditional category or analogue scale assessment, one product is assessed at a time. Hence, a handful of products would traditionally require a duplicate number of scales whilst the new tool would only require one scale. This would enable the assessment of one parameter to be performed in one and the same setting or environment containing a cluster of products (Figure 4.1).



**Figure 4.1** The assessment of one parameter performed separately for each product and an assessment constituting a cluster of products being assessed together as with VIPET.

Research confirms that a compact survey is a positive criterion for effective web-based surveys as it increases response rates (Smith et al., 2003). Other criteria for effective web-based surveys are facilitating attractive features, appealing graphics and colour (Couper, Traugott, & Lamias, 2001, pp. 250- 251).

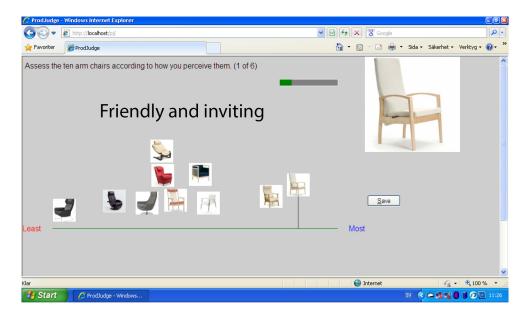
Paper I contained two studies. Together, they supported the continuous development of VIPET (*Visual Internet Product Experience Tool*). The future tool was intended to assess intangible product experiences remotely as a web-based application. The first study was a remote web-based study and its purpose was to evaluate how a mock-up version of a visual interface would be experienced by international respondents.

The mock-up tool was emailed to Masters and Bachelor level design students in five countries, asking them to assess the intangible qualities of an everyday type of product. Also a group of elderly Swedish non-students participated in the study. The participants also filled in an evaluative survey after they had mailed back their assessment of the mock-up tool. The mock-up tool was a PowerPoint with pictures of jam jars to be moved into the chart with a computer mouse (Figure 4.2).



**Figure 4.2** A screen shot of one of the three 2 X 2 charts of the test, with two bipolar parameters as assessment dimensions ('authentic' and 'reuse-worthy'). The respondents were asked to assess the products by selecting, dragging, and placing them in the chart.

The second study was a situated usability study of a prototype tool. The purpose of this study was to obtain extended knowledge about how a prototype tool would be experienced. The prototype tool had an interface that was especially designed for the remote assessment of intangible visual product experiences (Figure 4.3).



**Figure 4.3** A screen dump of the prototype tool. The figure shows the armchair with the placement furtherst to the right on the analogue scale as activated by the mouse courser. This action has connected the chair to the scale by a thin black line and activated a larger picture of this chair in a separate area outside the scale.

This prototype tool was the first prototype tool that fully supported statistical analysis from a database and had an HTML interface that guided the user through the product assessment procedure.

The products to be assessed were presented randomly, and one at the time. The program also provided the user with a bar and text informing the user about how long the test was and how many steps were left until completion of the test.

This prototype tool supported statistical analysis and was thus connected to a server (Wampserver 2.0) and the ratio scale values from the study were stored in an SQL database. Hence, an account of the statistical results could be visualized directly from the database, as presented in Figure 4.4.

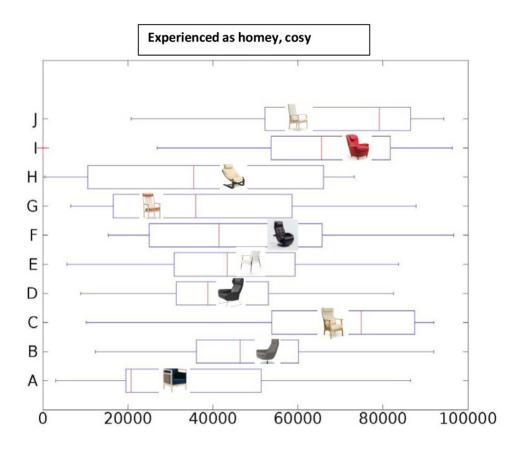


Figure 4.4 A box-and-whisker plot chart generated from the Excel table data, presented together with the pictorial representations of the evaluated products. The red line represents the median value. For chair J at the top of the graph, the results are: Minimum value 20701.00, 1st quartile 52253.00, 2nd quartile (median) 79131.00, 3rd quartile 86518.50, Maximum value 94323.00, IQR (Inter quartile range, 3rd quartile – 1st quartile) 34265.50.

### 4.1.1.2 Findings

In the first remote study, a PowerPoint-based User Compass Chart was emailed to 109 participants in five different countries. Of these, 35 responses were returned. Five of the returned tests were not correctly executed and thus were not included in the data. 30 tests were complete.

After this study, an interface evaluation form was emailed to the respondents asking them to provide feedback regarding their lasting impressions of using the tool. Numerous participants responded that they enjoyed performing the test, expressed in positive terms such as: "It was fun and different", "...it was fun to do and rather interesting", and "I liked it; stimulating". The respondents in the interviews in the second study described what they found attractive in the assessment situation and why

they found it attractive. It was considered promising that respondents described the assessment task as fun, amusing and interesting in both studies.

Regarding the test procedure, participants indicated that the procedure was experienced as being too "open-ended" and sometimes confusing to execute. Some respondents expressed a concern that the test procedure was time-consuming to learn and understand, requiring a thorough read of the textual instructions provided. Once this initial familiarisation phase was overcome however, the experience was positive. With respect to interaction, some respondents found the assessment task awkward and complicated.

The second study was a situated usability test of a prototype HTML based software VIPET tool. Nine out of ten respondents found the tool easy to use. In the survey form, they assigned this on an analogue line marked with the declaration "Difficult to use" at the left end and "Easy to use" at the right end.

The respondents were also asked to describe in open text why they had placed their mark on the analogue line where they had. The results of the interviews that followed provided qualitative input that confirmed that the tool was experienced as sufficiently usable.

No fatigue related to the placement of the 60 pictures was reported. The respondents gave positive responses in the open questions. In the forms and the interviews, the respondents expressed that the assessment task had been "fun", "amusing" and "interesting". Weaknesses in the interface to be further improved were revealed, however.

It was essential that the interface kept the lucidity, interactivity and spatial overview of the situated tool intact together with the rating and ranking procedure. When this was accomplished, the tested assessment task seemed to maintain both the inviting nature of the qualitative situated assessment tool and the statistical potential of quantitative remote web-based assessment tools.

The results of the study indicated that the remote assessment of intangible product qualities using a tool of this type could be a promising approach. The contribution of this paper is an expanded understanding of how future remote product assessment tools may be developed to become more efficient and more pleasurable in the interaction.

The findings from the second study imply that this type of tool is manageable for respondents without personal guidance. The answers from the forms and interviews where the respondents evaluated its usability and how they experienced the assessment situation support this view. There is good reason to believe that it is possible to improve on the described shortcomings that still remain.

Important new aspects about interface visibility and guidance were revealed that will guide the development of future versions of the VIPET tool. The studies have also

indicated that it is favourable to provide respondents with the opportunity to adjust their placements of visual samples during a test. This is because when they place samples one by one, they often feel the need to adjust their initial assessments as new samples are presented to them.

It was found that other web-based tools for the assessment of intangible product experiences do not comprise both ranking and rating, a clear overview, and spatial qualities, and do not support full statistical analysis as the forthcoming VIPET tool under development and described in this publication intends to do.

## 4.1.2 Paper II. Defining authenticity in product design

#### 4.1.2.1 Scope

The objective of this study was to determine what kind of authenticity is relevant to product development, and whether a standardized procedure could be developed as a means to improve product design.

In this study, ten active industrial designers were interviewed about their views on authenticity. The paper presented the combined results of a literature review and designer interviews about authenticity. Understanding the concept of authenticity from a product development and industrial design point of view was considered to be important for understanding how value that is relevant to consumers may be added to products.

A product may be regarded as highly authentic without being reliable during use, or put together with great precision. But it may nonetheless be a good fit with personal lifestyle. On the other hand, a replica may possess superior functionality and quality of craftsmanship without being experienced as authentic or as a good personal fit at all. There are unquantifiable factors behind our experience of certain products. Some of those factors affect our experience of product value. The interviewees were encouraged to discuss such issues in relation to their work practice.

## 4.1.2.2 Findings

It was not possible to draw any far-reaching or ground-breaking conclusion about authenticity in product development from either the literature or from the interviews. Depending on how we count, about 15 different forms of authenticity were discovered through the literature study and the interviews.

However, the main focus of this paper was not to put a number on the different forms of authenticity that may exist. What the interviews and the literature did was to illustrate and exemplify the diverse and complex nature of product value in the form of authenticity, and how authenticity relates to product development. It thus contributed to a greater understanding of how the "authentic" may add value to product offerings

relevant to both consumers and manufacturers. One conclusion that was drawn from the interviews was that authenticity is a valued intangible product quality, but not all valued intangible product qualities can be classified as authentic.

On further analysis of the content of the interviews, it was found that:

- 1. There is always an extra expectation of delivery in relation to products that are described as authentic.
- 2. This expectation can be transformed into either a disappointment or a confirmation of authenticity.
- 3. There appears to be a strong link between authentic products and what they promise to deliver.
- 4. The market appears to strive for authentic products that deliver additional value to consumers.
- 5. This endeavour is experienced as especially important in businesses that have long-term relationships with their consumers. Branded premium products seem strongly associated with such relationships.

Figure 4.5 shows examples of products that where named by the interviewees as explicitly authentic versus inauthentic.



**Figure 4.5** Authentic products from left to right upper row: The Bumling lamp, Kawasaki motorbike and Jaguar car. Inauthentic products from left to right lower row: The Foto lamp from Ikea, Chinese motor bike and Korean Hyundai car.

Another finding was that there appear to be two apparently opposing views on the nature and value of authentic product experiences. One camp holds the view that authenticity is what consumers really want. The opposing camp declares that authenticity is little more than a hoax. The gap dividing these two camps is profound

and essentially different in origin. This tension is interesting and it appears not to have been researched in the existing literature.

Most of the interviewees had a clear conception that what is authentic is defined by the consumer. This was backed up by the literature. According to Belasco, consumer value is determined solely by the consumer's perceptions, not by the intentions or assumptions of the suppliers (Belasco & Stayer, 1993; Doyle, 1989, p.78).

What category of products an authentic product belongs to also appears to be crucial. The interviewees expressed the idea that product genre and personal interest determine the areas in which authenticity becomes relevant for the individual consumer. It was found to be an overwhelming task to consider authenticity in all purchasing situations.

The third research question in this paper was to what degree the literature review on what authenticity is corresponds to the views of the industrial designers interviewed. Overall, the answers given by the interviewees corresponded well to what was postulated from the literature review. The most essential findings from the literature review were also expressed by the interviewees. However, the literature presented greater diversity in the phenomenon of authenticity than what came up in the interviews.

On the other hand, the interviewees provided a richer material, flanked by animated examples of how hardships and difficult conditions are part of everyday practice for industrial designers. One interesting and unique finding that emerged was that some of the interviewees thought that authentic products are all the result of a thorough industrial design process. This constituted the discovery of a new form of intangible product value. This angle on authenticity was not found in the literature. It came up when the interviewees started to describe what their everyday work was like and how they added value to products. They stated that products that are developed through this process may show greater consumer concern and thus be experienced as more authentic than other products.

It seemed to be a difficult, and delicate, matter to determine in detail what produces authenticity in a product design. For example, all exclusive and desirable products were not necessarily experienced as genuine or authentic, and a cheap and trivial product could constitute the very epitome of authenticity.

Something that was hinted at during the discussions that preceded the interviews was the relative nature of authenticity. This gave rise to the question as to whether authentic products have certain aesthetic and visual qualities. This issue divided the interviewees into two camps concerning whether these qualities should be regarded as tangible and residing within the product, or as intangible and residing in the mind of the consumer. Potter assents to the latter view when he argues that there is no such thing as authenticity out there in the world at large, only within us (Potter, A., 2010, pp.13-16). According to some of the interviewees, authenticity is a quality that may be attached to a product. Products having a "good" visual finish or being made of certain

"real" natural materials were described as having a higher probability of being experienced as authentic. According to Potter (2010), these qualities do not reside in the finish or in the materials per se, but merely in our perceptions. Our perceptions of materials also depend on the product to which they are attached. Hence, using a certain material does not guarantee an experience of authenticity.

The last research question in paper II was whether the findings suggest that a standardised procedure for assuring the presence of authenticity in products may be developed in the future.

Both the literature on authenticity and the opinions of the interviewed designers indicated that, as a standardised procedure to help designers improve their product offerings, authenticity may be of limited use. The nebulousness and complexity of the concept render it ineffective as a static formula for developing new products. Once the product is on the market, however, authenticity can be seen as a factor that may determine the success or failure of a product.

No designer or product developer can rely on a given recipe that will always deliver 'authenticity' to the market. But if the market and consumer inputs are valid and reliable in the early research phases of the development of a product, then designers may be more inclined to use authenticity as an effective design influencer. Each individual designer may effectively apply authenticity in terms of their own personal interpretations of it, but their individual applications of it may not be of much use to other designers, or even directly translatable into the *consumer's* interpretation of authenticity.

## 4.1.3 Paper III. Incorporating the intangible values of product offerings into the product development process

## 4.1.3.1 Scope

How do product development engineers, industrial designers and marketing managers view tangibles and intangibles in relation to consumer value when they develop products in their design practice? To understand this is to grasp what underlying assumptions practitioners have when developing product properties.

This third paper investigated whether companies developing premium products put a greater emphasis on intangible or tangible value within their engineering, design and marketing departments. Three manufacturing companies developing engineered and branded premium consumer products were studied.

The investigation investigated to what degree, and how, engineering, design and marketing departments within these companies focus on tangible or intangible value in their ambition to develop products with a high experienced consumer value. As such,

this study focused on the relationship and balance between tangibles and intangibles rather than on authenticity. The results were analysed in the light of product experience theory.

#### 4.1.3.2 Findings

It was confirmed that tangibles and intangibles complement each other. The different departments in the studied companies did not base their views of consumer value propositions on different rationalities or preconceptions. Awareness of the significance of tangibles and intangibles permeated the investigated departments.

The interviewees at the departments under study appeared to work closely together and they all experienced that they were well aware of their consumers' needs and the benefits to consumers of their products. The investigated departments also experienced that their consumers' needs consisted of both tangible and intangible values. All interviewees did, however, start out by describing perceived consumer value in terms of tangibles.

The interviewees stated that they worked hard on fine-tuning the tangible qualities of their products while simultaneously working hard for their brands to become more closely associated with intangible values as a means to attain a higher value proposition for their products on the market. The tendency in the studied companies was to move away from being perceived as a mere provider of technical goods towards being perceived as a facilitator and a lifestyle enhancer; to become an elicitor of consumer experiences.

Another of the findings clarified an ambiguity. Some of the interviewees expressed the idea that consumers expect nothing but full functionality and high-quality materials in all the competing products on the market. Differentiation through tangibles thus seems futile. Based on this, it makes sense to include intangible aspects in the equation and develop them. On the other hand, positive consumer experiences are themselves described as based on a long "heritage" of superior tangible qualities. This seems to function as a never-ending, tangled circle. However, this made it very apparent how intricate, iterative and mutually dependent tangibles and intangibles were in the studied companies.

Unlike the literature, the interviewees appeared to be convinced that strong tangible qualities are essential in order to deliver valuable intangible experiences. Hence, they declared that product image and branding are worth nothing if they are not supported by high-quality product tangibles. This idea is not shared by ardent postmodernist thinkers, who claim that the product and its tangibles are but secondary entities that are easily interchangeable and subordinate to a product's image. The interviewees described confidence in the brand as rooted in a belief in "strong" products to come, but more fundamentally, that this confidence has sprung from a deep trust in the brand heritage as a highly valued brand. In turn, the fundamentals of this high brand value were presented as a long tradition of consumer trust. The interviewees mostly described

this trust as dependent on tangible qualities such as high-quality build, product reliability and product shape. Hence, over time it appears to be the tangibles that build the brand identity, not exclusively brand image, intangibles and brand building strategies. A strong brand does, however, appear to enhance the positive experience of product tangibles.

The interviewees stated that their consumers value the tangible characteristics of their products. However, they also spoke about how their consumers required intangible product characteristics related to magic, desire, brand heritage, personal attributes, fashion statements, pleasure, personal aspirations, identification, status, lifestyle, and well-being. But it was the designer and marketing interviewees, rather than the engineers, who embraced the concepts from the literature (Woodruff, 1997, p. 141; Firat et al., 1995, p. 52); that it is in the product's use, and through the efforts of the consumers themselves, that "real" meaning and high consumer value is created. A final interesting finding was that not one of the interviewees mentioned authenticity as a valuable quality.

## 4.1.4 Paper IV. A Multi-Dimensional Framework for the Development of Authentic Consumer Products

### 4.1.4.1 Scope

The fourth paper started out from the same transcribed material as paper III, but it had a different focus with a more formal method for analysing the data. It focused on how the representatives from the different departments within the product development companies investigated reasoned about consumer value, how they contributed to this value, and what they thought their consumers valued. Figure 4.6 gives an account of the products that were used as a starting point for the discussions about product value at the studied companies.

The paper investigated market value in relation to product authenticity and brand authenticity as there is agreement within brand management and marketing management literature that authenticity is the strongest consumer value in the contemporary market.



Figure 4.6 The toilet series Spira from Ifö, the VeloSpace 917/918 from Thule, and the product solution under development that enables old passive loudspeakers to be controlled via a mobile phone from Bang & Olufsen.

## 4.1.4.2 Findings

It was found, in great detail, how the interviewees reasoned about product value. For practical reasons, the numerical results are only presented in a list of the most prominent "Further condensed meaning units" that emerged from the interview material. They are presented in **Figure 4.7**. The further condensed meaning units (darkest colour) are the ones that were mentioned most frequently by the interviewees.

Further condensed meaning units			
It is about the product experience 1,3,7			
Product must be aesthetic 0,8,2			
New design of parts 4,2,1			
Develop new technical features 4,0,1			
Product has unique functionality 0,3,2			
Better product performance/functionality 12,7,6			
High tangible product quality 3,6,4			
Product robustness/reliability 15,3,0			
Greater product versatility 12,1,4			
Adapting to new specifications 2,1,2			
Live up to technical standards 5,0,5			
Meet practical needs of consumers 4,2,3			
Easy to install and serve 2,1,2			
Easier to handle/use, operate, simplicity, intuitive 7,4,2			
Ease of use is important 2,3,0			
See new product in relation to brand portfolio 6,1,3			
We create quality associations to maintain the brand 1,1,5			
Steer brand associations in intended direction 0,1,4			
Our consumers experience safety 1,4,3			
Provide positive shopping experience 2,3,5			
We supply valuable advice to our consumers 2,1,4			
Adapt design to brand values 4,5,3			
We maintain high quality specifications 5,1,0			
Employees personally devoted/passionate users of product category 2,4,2			
We are creative/sensitive to trends, have visions 5,0,1			
We stand for active lifestyle 4,0,4			
We build on insight/solve real needs 1,3,1			
Listen to voice of the consumers/expectations 5,5,7			
Adapt to consumer perspective 4,1,1			
Products signal consumer identity 0,4,1			
Consumers show solidarity, trust and love to our brand and our products 3,8,5			
Consumers associate us with high quality 0,2,5			
Initiative to find emotional links, build associations to the brand 1,2,7			
Marketing through "earned media" /good reviews from others 0,1,5			
We are a strong brand with high brand value 3,2,1			
We have positive, strong/bright future 2,3,5			
Our high quality and heritage is our strongest assets 0,1,4			
Drive development according to plan, in intended direction 3,0,2			
Getting consumer activity orientation closer to emotions than solving technical task 0,5,3			
Align brand identity/values with all designed products in portfolio 2,4,0			
We develop products that are and have to be perfect when they reach the market 3,0,2			

**Figure 4.7** A list of the further condensed meaning units that occurred most frequently in the interviews. White 5-7 times, Yellow 8-10 times, orange 11-14 times, and brown 15 or more times. The first number is the frequency from the engineers, the second number from the designers, and the third number is from the marketing managers.

No one at the companies investigated mentioned authenticity as being part of their work practice. They did however talk about other things that ensure that their products and their brands get a high value in the market. They appeared to use similar strategies or building blocks as are suggested by marketing and brand management literature for building and maintaining strong authentic brands.

The paper found a parallel link with the literature on product development, brand management and marketing management when the interviews were analysed with a market value focus. It was suggested that certain tangible and intangible qualities may well reside in products that are developed to be experienced as 'authentic'. However, it is more fundamentally the structure of these qualities in relation to the brand and its promises – what the brand means to its consumers – that constitutes the foundation of consumer trust and positive meaning and thereby a high market value (see Figure 4.8).

#### Positive product meaning and value 2 1 3 CLARITY Being distinguishable Being recognisable Being consistent TRUST Differentiated in relation Product identity, Tangible, intangible Through 1,2,3 the product to competitive alternatives connection to brand product performance and experience aligns with marketing is consistent consumer expectations, through: Design through: Values, beliefs. Product language/design elements, vision and narratives reflected and aligns with 1,2 thus is experienced as true, innovative features, tangible in the product and how it is Positive genuine and authentic for performance, how the product presented what it is meaning is presented and value **Brand level** Be who you say you are Know who you are and Through 1,2,3 you will be Be unique! (1,2). Deliver according to what you stand for (Core experienced as a true, Distinctive values, heritage, organisational your promised strategy, genuine and authentic corporate image and marketing strategy) standards, practise that brand for who you are you preach from the inside

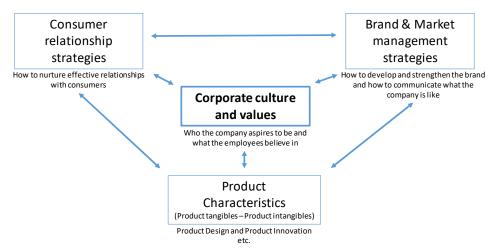
**Figure 4.8** Illustrates how products at product level are distinguishable, recognisable and consistent and aligns with the advice given to companies at brand level. The figure also illustrates how this will lead to clarity and trust that in turn generate positive meaning and value in the market.

It was found that the studied literature about authenticity and what the interviewees talked about when asked about consumer value followed a pattern. This pattern constitutes the main building blocks behind authenticity. The new framework that was created contained these building blocks. The framework is designated as the multidimensional construct of authenticity (see Figure 4.9).

This initial, proposed framework was developed for use as a guide in the consumer product development industry. It may, however, also have relevance for the business-to-business industry and, if correctly adopted, also for the services sector. The framework aligns with found literature on product authenticity and brand authenticity, and it is supported by what emerged from the interviews; it also aligns with Figure 4.8.

Product value and authenticity are complex and ambiguous concepts comprising a great variety of aspects that have to be negotiated. The building blocks have been found to be mutually dependent on each other and must be recognisable, and distinguishable in relation to other offerings and brands. The building blocks must also be consistent over time and in relation to each other. In reality, the building blocks may also, to some extent, be mixed with each other. The branding practices of a company that intends to elicit authentic consumer experiences are mixed with the corporate values of the company, for example.

# **The Construct of Authenticity** behind highly valued consumer products and brands within product development and industrial design



**Figure 4.9** The multidimensional framework of authenticity behind highly valued consumer products and brands within product development. The building blocks are mutually dependent on each other and must be recognisable, and distinguishable in relation to other offerings and brands. The building blocks must be consistent over time and in relation to each other.

# 5 Discussion of the findings

This chapter answers the main research questions and draws conclusions from the findings. It also describes the contributions of this research to the literature as well as its limitations, and outlines potential future research in the area. Finally, the construct of authenticity is contemplated further to broaden its significance.

## 5.1 Conclusions and contributions

The intention of this thesis was to investigate how we might explore the intangible experience of authenticity in product development. This has been investigated through the following research questions:

### How can we understand authenticity in relation to product development?

This question is mainly answered in papers II and IV. Paper II describes examples of what authentic and inauthentic products are like and analyses these in relation to the literature. It also presents and brings together numerous different forms of product authenticity according to the literature. Examples from the literature are that a product may be experienced as authentic because it is locally produced, environment-friendly, honest, ideological, original, or natural. The interviews in paper II also revealed a unique form of product authenticity that was not found in the literature about authenticity. This form of product authenticity sees authentic products as the result of a thorough design process, typically associated with industrial design, which focuses on user concerns. These concerns where associated in particular with industrial design development practices.

A conclusion to draw from paper II is that authentic products do not necessarily have to be exclusive (see 4.1.2.2). IKEA and their products are an example of this. Their products are profitable for the company at the same time as consumers experience trust in the brand that they will get value for their money. Their products need to be distinguishable, recognisable and consistent to be experienced as trustworthy and to have a positive meaning and a high value to their consumers (see Figure 4.8). This is the foundation behind authentic product experiences.

Papers III and IV support the idea that the total product experience comprises product tangibles, the services related to the product, and product intangibles as suggested by Steiner and Harmon's model (see Figure 2.). However, the results do not support that intangibles are superior to, or are more important than, tangibles for the generation of market value and experienced authenticity.

Paper III concluded that in the long term, the manufacture of products with high tangible quality is an important contributor to building strong brands. Conversely, strong brands do appear to enhance the positive experience of product tangibles in the products belonging to these brands.

Papers III and IV align with Desmet's model of product appraisal (see Figure 2.1). The material also included emotional factors and product concerns such as self-fulfilment, self-esteem and social status of the consumer. The empirical results in these two papers (see Figure 4.7) also reflect Creusen and Schoorman's classification into six different roles of product appearance as presented in Figure 2.2. The interview results from studies III and IV also correspond directly to 7 out of Wenben's (1995) 8 generic product benefits. Wenben describe how products may have *situational benefits*. This form of benefit may be valid for the products that have been discussed in studies III and IV; however, no quotes have been found that clearly elucidate this.

Study IV revealed a structure behind authenticity. It suggests that authenticity within product development and industrial design must be looked at from a holistic viewpoint to be correctly understood. This approach is described in the multidimensional framework of authenticity as presented in Study IV (see Figure 4.9). The significance of this holistic framework is that it is intended to assist the product development industry in developing valuable consumer products. It does this by providing a broad understanding of what the construct of authenticity is like and how it relates to product value.

It is important to stress that this multidimensional framework of authenticity has been suggested from the research rather than created. The investigated companies already develop highly valued authentic products for the consumer market. While they embrace this framework when developing products, but they have not been conscious of its existence.

The suggested framework has parallels to how Gilmore and Pine (2007) framed the landscape of authenticity, but the nature and intent of Gilmore and Pine's five major forms of authenticity are less comprehensive and not designed to be operational. One conclusion that can be drawn, mainly from the findings in Studies II, III and IV, is that Gilmore and Pine's *natural authenticity* cannot be regarded as a generic quality that may grant the elicitation of authentic experiences with a high market value. Rather, it represents a form of non-generic product characteristic that might only contribute to the elicitation of valuable experiences in specific cases. In addition, unnatural, artificial

and highly synthetic products may be experienced as authentic depending on what product categories they belong.

Gilmore and Pine's (2007) second form of authenticity, original authenticity, connects to Figure 4.8. A product that claims to be something it isn't is not honest and true in relation to its target consumers; it thus also lacks both clarity and consistency. Exceptional authenticity concerns how well offerings or services related to products are performed. This mainly falls within the building block of consumer relationship strategies in Figure 4.9; as such it is dependent on consistency with the other building blocks in the framework. Referential authenticity concerns how well an offering is associated with other external, highly valued contexts in society. As such, it mainly falls within the building block of brand & market management strategies in Figure 4.9. Influential authenticity concerns how well a company communicates its altruistic and charitable nature to the market. As such, it falls within, and ought to originate from, the building block of corporate culture and values (see Figure 4.9). However, it must filter down to embrace the other building blocks of the framework too in order to be holistic enough to be effective.

#### • How can we measure the authenticity of a product?

This is treated in Study I. The most useful characteristic of such a tool is suggested to be an interactive and web-based app that intuitively lets respondents rate and rank pictures of products that are randomly presented by placing them together along an analogue line. The procedure mimics how humans process their assessments of products in real life. The contribution of Study I is thus an expanded understanding of how tools for the remote assessment of intangible product experiences may be developed to become more efficient and pleasant to interact with. It is proposed that forms of remote web-based assessment that are experienced as attractive by respondents have an advantage over traditional survey forms in terms of efficiency in capturing subjective product experiences and for assuring the validity of the results and response rates.

The web-based tools found to date that are suitable for quantitative assessments of visual product experiences do not allow for a clear, product-context overview, nor do they include spatial qualities and the ranking and rating procedures for product assessment. They do not either support an intuitive, statistical account as the approach described does. The conclusion from these studies is that the results are promising enough to suggest that this procedure of collecting data could make a valuable contribution to the product development industry in the future. To be successful, it is suggested that the tool is used together with the multidimensional framework of authenticity. This combination of procedures will help guide companies not only to elicit and assess valuable intangibles associated with products, but also to sort out what types of intangibles to measure and what their holistic relationships to each other are.

The contribution of this research is thus that elements of authenticity can be correctly elicited, captured and assessed.

### How is authenticity treated within product development?

This is dealt with in Papers II, III and IV. A contribution from Paper II is that there appears to be an additional expectation of delivery when it comes to products that are described as authentic. Products that live up to these expectations will have their authenticity confirmed. This confirmation was considered as especially important in businesses that have long-term relationships with their consumers.

In Paper IV, authenticity was dealt with in particular also in relation to brands. The question of how consumer value is treated within product development is answered in great detail (see **Figure 4.7**). The five most prominent factors (*Further condensed meaning units*) of the 459 that were generated in Paper IV were:

- 1. Better product performance/functionality.
- 2. Product robustness/reliability.
- 3. Adding new product functionality.
- 4. Listen to consumers/their expectations.
- 5. Consumers show solidarity with, trust in and love towards our brand and our products.

The fourth study also present strategies behind valuable and authentic consumer experiences. It was found that these strategies align with advice given by design agencies and brand development consultancy experts to companies that want to be experienced as authentic brands. It was also found however that this advice would benefit from being more holistic than it appears to be in today's product development practice.

Papers III and IV showed that the interviewees did not spontaneously talk about authenticity when asked to talk about product value. However, they did describe other factors that constitute the creation of product value. These factors are the building blocks behind authenticity as described in this thesis. This citation from a designer at Thule in Study III exemplifies how authenticity may be treated consistently within the building block of product characteristics and corporate culture and values:

"We have the term "genuine"; it is about honesty, and that is connected to the next step of how we actually apply the form to our products. We would never hide an aluminium profile under carbon fibre just because that would look cooler. There are some limits here. But the day you find a carbon fibre detail on a Thule product, it will be because it must be light and have the functional properties of carbon fibre. Then we can argue for it, not just stick it on as some kind of fake."

Papers III and IV suggest that it is advantageous to work in parallel with both tangibles and intangibles as the basis for authentic consumer experiences. This conclusion is supported by research closer to the centre of product development theory such as Kapferer (2012), who claims that valuable product and brand meanings derive from the functional/tangible characteristics of branded products. As presented mainly in Paper III, the long-term development of tangibles will build consumer trust. If consistently maintained over time, this trust in superior tangible qualities will constitute the foundation for positive associations, trust in and authenticity associated with a brand. In turn, the consumer experience of the tangible qualities that reside within products will be enhanced by the intangible value that is associated with the brand to which the product belongs. A company may thus work simultaneously with enhancing these positive associations through thoroughly planned marketing and brand management strategies in order to ensure that they will generate positive and thereby highly valued authentic consumer experiences.

The company strategies included in studies III and IV represent a shift from being a "modern" product supplier solving technical problems to becoming a "postmodernist" lifestyle-oriented facilitator of self-realization and memorable consumer experiences. This conclusion, which is in line with Woodruff (1997) and Firat et al. (1995), is that it is wise to include consumers not only as targets for products, but as targets for authentic experiences. A strategy for accomplishing this shift in a credible manner is to be consistent. Alignment of the building blocks behind authenticity is, in turn, a strategy for achieving this. This is an example from study III of an alignment between the building block of product characteristics and the building block of brand & market management strategies:

"We have sold off parts of the company that did not feel right for the 'bring your life concept'. The things that mostly fulfilled a purely functional need rather than being lifestyle-related...we have streamlined what is true to our brand. So now it means something to own a Thule product, you care about what you look like, you want quality, you want well-functioning solutions and you are prepared to pay for them."

# 5.2 Contributions of the thesis to future research

Producers of consumer products normally want to offer their consumers valuable branded products. In order to do so it is important that their time and efforts are not wasted on advice and promises that are non-operational and lacking in theoretical sustenance. This thesis intends to contribute to bridging these gaps.

A contribution of this thesis to future research is that the findings from the study I may be combined with the findings from Studies II, III and IV to form a tool that might assist the product development industry in the future. This future tool might combine

the VIPET (Visual Internet Product Experience Tool) described in Study I with the multi-dimensional framework for consumer value described in Study IV. Such a tool would be able to map intangible consumer experiences of products in relation to the four building blocks of authenticity with which products ought to align and be consistent over time if they are to elicit positive consumer experiences. Thus, a future tool would be able to combine and compare the inputs from surveys conducted with VIPET with extensive mappings of how companies build consumer value holistically in relation to the new multi-dimensional framework of authenticity. This would make these inputs more beneficial than if consumers were to be asked directly about authenticity and authentic experiences.

The implementation of a generic framework in the product development industry is, admittedly, a sensitive issue that demands clear sightedness, knowledge, and a unified strategy. This thesis suggests that it is not sufficient for companies to isolate authenticity and regard it as a one-dimensional construct. All the departments concerned must be included, and all the building blocks in the framework must thus be thoroughly mapped and correctly understood.

The VIPET part of the tool could contextualise consumer assessments in the form of ranking and rating brand logotypes and branded products. This ensures that the consumer experience of a brand and its products acquires real meaning when it is assessed in the context of other competing brands and their products on the market.

In practice, this implies that a company must survey, analyse and align:

- 1. Their strategies that nurture strong consumer relationships.
- 2. Their corporate cultures and values.
- 3. Their strategies behind their brand and marketing management in relation to the characteristics of their products.
- 4. Furthermore, they ought to compare and synchronise this with input (VIPET data) obtained from consumers.

The outcome from such a procedure would form a comprehensive description that could be used in both a controlling and a guiding capacity. Consequently, the output would need to be questioned, problematized and further discussed within and across the different departments within a company. In addition to the knowledge obtained, the process of doing this, and of implementing the future tool would, ideally, deepen their understanding for the purposes of assessing and retaining market value within the company. In so doing, companies might also be able to substantiate and strengthen the foundation behind their decisions.

However, the outcome of developing valuable and desirable products is not limited to selling greater quantities of products to consumers under the motto of unsustainable mass consumption. We develop attachment to, and keep products longer that evoke

meaningful and memorable experiences. To support this valuable relationship, the products need to support us, our personality, our dreams, our beliefs and our personal lifestyles. The outcome of this thesis will hopefully support the development of products that live up to these goals.

The purely academic contribution of this thesis is the insights into how consumer value is developed and retained within the investigated companies in relation to authenticity. It lies in the review of product and brand authenticity and its contribution to the ongoing debate about authenticity. It also lies in the proposal for a new analytical framework behind consumer value. Finally it lies in the development and testing of a new way to elicit and assess consumer experiences.

The most immediate contribution for future research concerns the multidimensional framework of authenticity as described in the fourth study. A future contribution to the research might investigate how this framework can be implemented in the industry context.

A final contribution to future research lies in the potential to further develop different easy-to-use techniques for the visualisation of statistical data as described in the first study. These techniques would aim for simpler and more effective visualisation of statistical results beyond traditional static data sheets and bar graph representations. An example of a successful attempt in this direction is the Trend analyser software (Gapminder, 2011) as presented by Hans Rosling, Professor of International Health at the Karolinska Institute in Stockholm.

# 5.3 Limitations of the research and the studies

The methods and research approach used for scientific observations will always affect the research results. This condition is a concern for this thesis. It involves the fields of ontology and epistemology. Human observations about the state of things are never fully objective. This view was established over 200 years ago by the philosopher Immanuel Kant, who questioned our ability to experience an object "as such" without also colouring it with our own biased perceptions (Kant, 2004). Two observers viewing the same object or phenomenon under exactly the same physical circumstances will not have identical experiences, and most certainly not the same cognitive perception of the event (Chalmers, 1999, p. 5).

When applied to science, there is a fundamental difference between observations made and data collected. Each progression from observation to data is a process that requires underlying theory and interpretation about the relevant area of interest. To be fully objective, the researcher would have to first establish "pure facts", and then build a theory to fit them. However, this is impossible to achieve in practice (Chalmers, 1999, p. 12-14). The researcher has to decide on what to observe and how to go about it

before progressing any further. The researcher, guided by theory and hypothesis, interacts with the environment of potential observations in a quest that eventually may lead to desirable and understandable data suitable for further interpretations.

The search for structure and meaning ordinarily begins with exploration, searching for patterns or regularities in the behaviour of two or more variables. Subsequently, once these patterns have been discovered, the objective may shift to testing which explicatory model best fits the data collected (Coombs, 1964).

Persistent attention to an oddity in data that could easily have been dismissed by one scientist may be precisely what leads another scientist to new knowledge. Observation is consequently a skill; a skill to be learned (Hacking, 1983, p. 168). As mentioned, observations can be made in different ways. The nature of reports may therefore differ depending on the method used. Thus a report derived from transcripts of a personal interview differs from the report emanating from a paper survey.

### 5.3.1 The first study

There are numerous ways to carry out product assessments and to collect data that may assist product development research. The nature of the data depends on the methods deployed. Methods may complement each other when they provide data differing in nature. This explains why companies and researchers with high quality data often use more than one method to collect it. To study the same phenomenon using a combination of complementary methodologies is known as triangulation (Jick, 1979, pp. 602-611). Have relevantly posed research questions been satisfactorily answered? Construct validity (Feigl & Scriven, 1956, pp. 174-196) refers to whether a measurement mediates what it claims to measure. Several complementary method procedures such as interviews, situated user tests, paper surveys and web-based tests were deployed in the first study in an attempt to safeguard the validity of the construct in the collected data.

Logical verification ensures that the information provided from research is logically consistent (Yin, 2008, p. 43). The methods in the first study are not profoundly new. Similar types of assessment scales have been used before: the use of cards with pictures of products is well tested in situated studies, and interactive web-based tools for product assessment have been evaluated in previous research. All the procedures used have been previously independently validated by other research. What is new is the combination of these procedures. Herein lies a potential risk for some degree of inconsistency. No such issues have been found, however. The applicability and interactive nature of the assessment procedure instead vouch for consistency. Thus, numerous respondents have independently experienced the assessment procedure as reasonable and comprehensible.

The validity and verification of the data output from the first study were a concern in the sense that the study only included a limited number of participants. This concern may be negotiated by setting up remote web-based surveys on a grand scale in the future. The results from future research could be stored in a database. To establish such a database is a known procedure that would establish further reliability (Yin 2008, pp. 40-41).

#### 5.3.2 The second, third and fourth studies

The situated empirical studies II, III and IV contain interviews with product development practitioners. The verification of the results is intended to establish the correctness and accuracy of an applied method, model or procedure (Yin 2008, pp. 40-41) for collecting data. Qualitative interview methods were deployed because qualitative research is well known for its ability to address, not only the question "if", but also "how" informants experience a phenomenon being studied (Yin, Robert. K, 2002). Regarding the validity and reliability of studies III and IV, the inductive study method is a well-established approach for studying actors within product development and design management (Svengren, 1993).

It is arguable that the importance of content in an interview, as analysed in study IV, is not fully correlated with the frequency of times an interviewee mentions that particular content. Nevertheless, the fact that different interviewees mentioned a certain content independently and repeatedly indicates the strength and relevance of that particular content (Krippendorff, 2013).

It is easy to lose sight of the big picture when zooming in on authenticity. In fact, the overwhelming majority of research has done just that (See 2.7.1). In some respects, the interview part in study II did the same thing. Asking product developers directly about authenticity didn't primarily clarify what authenticity is, but rather exemplified what authenticity can be. The study interviewees did this by giving specific examples of authentic and inauthentic products. The outcome of this was not generic however; instead the result was a list of product characteristics that were considered to give specific products a high market value. This thesis maintains that it is the relationship between these product characteristics and the building blocks behind the multi-dimensional framework of authenticity that will determine what the consumer will expect, experience and ultimately value.

The interviews in these studies have only been analysed in relation to statements in the literature and adjacent research fields and only product development practitioners have been included. Consequently, no consumers have been interviewed. It would, however, be most interesting to expand future research to also include input from actual consumers. It will also be important to study some large corporations to see if and how

they may differ from the rich descriptions of product value that have been reported in this research.

The generalizability of the data generated through qualitative interviews carried out at the three companies in study II and IV is limited from a quantitative point of view. The qualitative data obtained through the studies does, however, constitute valid examples of situated reality (Flyvbjerg, 2006, p. 229). Hence, it is a sound assumption that the results are transferable to a far greater number of companies with similar context characteristics to those investigated.

The contribution of the multidimensional framework of authenticity could be further problematized. One aspect of this framework is that it is not yet very detailed. The important relationship between pricing, perceived quality and value for consumers is well known and well documented (Zeithaml, 1988) for example, but is not clearly linked to in the suggested framework. Nevertheless, it is certainly there. Mapping while implementing the building block of brand and marketing management strategies will find that pricing is embraced in this building block. Putting paramount priority on increases in sales by lowering prices rather than for example prioritising tangible product quality is considered to be a threat to brand value (Daye, 2016). It would surprise regular customers by not living up to expectations. Similar strategies are known to be short-term strategies. They thus oppose the multi-dimensional framework presented, which suggests that pricing strategies must be consistent over time and align with the rest of the building blocks of the framework.

Finally, the construct of authenticity needs to be further validated before it can be implemented in the product development industry. The first step to achieving this is to analyse in detail how well a larger number of companies that develop products with a high market value correspond to the construct. The second step would be to test how the construct can be implemented to assist product development companies in practice.

# 5.4 Epilogue - contemplating authenticity

This section has a more philosophic aim than the rest of this thesis. It will also include broader speculations about the significance of authenticity for humanity. It does so because one cannot be part of humanity and function in society without also being a consumer. We are all consumers of products and experiences thereof.

So, what is an authentic product actually? Another strategy would be to reflect on what it is not. What singles out authentic products from other products that might be equally liked or even loved, but not necessarily experienced as authentic? A reasonable answer to this question is that individual consumers may indeed value a product dearly and independently of its market value. Holbrook (1999) makes the crucial distinction between whether a product is consumed based on *self-oriented* or *other-oriented* 

concerns. Thus, a product may be consumed purely for the experience it may give *me* rather the impression it may evoke in *others*.

However, other-oriented concerns will occur as soon as someone else experiences that particular product and starts to desire it. The first question from the other consumer might be: "How can I get a similar one, where is it from?" If the product has a known origin, then it has a brand. This brand may provide consistency in the tangible and intangible qualities for everyone else who would like to acquire that particular product. The collective meaning of owning such a product would be determined by association to it and its brand. Correctly managed, we now have an authentic self- and -other oriented, product that fits targeted consumers from which a company may thrive.

To state that a product fits a consumer is not just to say that the product must be of the expected and acceptable tangible quality. It must also underpin, support and align with the consumer's lifestyle, self-image and personal beliefs. In some respects, a personal lifestyle has much in common with a brand. Products from a company must fit and be consistent with the brand and its values. The products we consume must align with how we experience ourselves and how we want to be experienced by others. To some extent we all want to be cool and revered by those around us. This is partly about consuming the right things by having an attractive and authentic lifestyle. But friends we love have something more. Apart for being nice, considerate and saying the right things, they feel balanced and genuine. They have an 'authentic personality'.

There is a great deal of literature on how to be an authentic person (Black, 2017; Guignon, 2004) and how to find the *authentic self* (Mathews, 2018; Russell, M., 2018). An educated estimate is that the most prominent authors in this field of literature in many respects preach the same gospel about being real, true and trustworthy as the literature about product and brand authenticity does. A trustworthy person who is experienced positively as having an *authentic self* to some extent can also be analysed and compared to the model of *positive product meaning and value* as presented in Figure 4.8 and the *multidimensional framework of authenticity* as presented in Figure 4.9. To be authentic is then, in short, to be clear about who you are, to have certain personal values that are aligned to and consistent over time with how you present yourself and the way you maintain relationships and relations with others, and finally is the outcome of what you actually deliver as a fellow man/woman.

The self-communicated in everyday life to others as a brand can be regarded as a stage on which we present ourselves. Here the products become props that must fit the qualities of the character to be convincing. Not only which products that are consumed matter, but also how they are used and how they are combined. It includes grand to small details. It is manifested in how the family car is treated and customised to represent the family. It is manifested in the subtle ways the casual garments appear to be negligently worn, when their appearance is in fact considered into the last detail.

These are the concisions and unconscious intricacies, the strategies that build the personal authentic brand.

One of the best-known descriptions of this in literature is the dramaturgical perspective (Goffman, 1959). However, Goffman did not explicitly make the connection to brands. The dramaturgical perspective connects to and enriches the concept of product identity as described in the frame of reference chapter by Mugge (2009) and Warell (2015). For optimal fit as a personal attribute, the identity of the product ought to connect and align to the identity of the consumer. Being convincing on stage in this respect is the same thing as being experienced as authentic. Quotes from a marketing manager at Bang & Olufsen and a designer at Ifö in Study III exemplify how product developers view this phenomenon:

"Wow! I have to show it to my friends" is also a part of what Bang & Olufsen is about. For one reason or another. If you do not want to show it to your friends, then it is not magical."

"The whole expression of the bathroom must be neat and tidy. More and more it has become a way to reveal yourself, to show who you are...to make this into a dream about how you want to live"

Shakespeare is quoted in the initial pages of this thesis. In these lines from his play, Shakespeare unintentionally embraced the fundamentals of authenticity. Interestingly, it is also applicable to the context of the development of valuable products. All you need to do is replace the word "man" with "consumer".

"This above all: to thine own self be true, and it must follow, as the night the day, thou canst not then be false to any man."

Our goals concerning objects, brands and our experiences may well be control over our lives, connection to others/society and virtue as suggested by Beverland & Farrelly (2009). But do we seek authenticity in the form of 'self-authentication' as suggested by Beverland & Farrelly (2009)? They argue that consumers actively seek authenticity to find meaning in their lives and that they do this in line with associated personal goals. We certainly seek personal meaning that fits our inner dispositions in the form of lifestyles, etc.

A way to map meaning, spread and use of authenticity is to investigate how the term is used in contextualized practice. A fast and efficient way to do this is to conduct a text search. If one does an advanced Google search (21 of November 2018) including only exact phrases and excluding hits containing the words "copy, fake, false, replica and counterfeit", you still gets 494,000 hits for "Authentic Product", 427,000 hits for "Authentic Design" and 146,000 hits for "Product Authenticity". But what does this

mean? Frankly, such numbers only tell us that the concept of authenticity is much debated and used amongst people associated with product development. However, there are authors who claim that authenticity is much more than just a commonly used word.

According to Potter (2010, p. 3), the western postmodern society has largely left religion behind as a bearer of meaning. Instead of seeking God and the Holy Grail, finding the authentic in life has become the foremost spiritual quest of our time (Potter, 2010, p. 3). Finding this meaning is, according to him, a twisted dead end (Potter, 2010, p. 13-16). He argues that most attempts to fabricate authenticity within our lives will eventually end up as just another selling point, or marketing strategy, by someone who wants to make a profit. Beverland (2005a) underpins this statement then he advises companies who want to be experienced as authentic to downplay their economic motives in favour of emphasising how charitable and altruistic they are.

The goal and desired outcome of the sales process has always been to sell, and it will always be to sell! What can be more 'ungenuine' and 'inauthentic' than that? Companies can, however, develop products that are uplifting, that have a greater purpose behind them, that help people to realise their dreams. They do not have to burden consumers with more superfluous and unsustainable stuff that they do not need. A manufacturer can be true to its 'purpose'. Being 'authentic' does not mean that companies cannot sell their products or services. It is instead the way they sell that really defines whether they appear to be desperate or legitimate (Bosco, 2018).

It has been pointed out that the relationship between the things we buy and who we are -the consumer culture, and the authentic self - is fraught with bad, opposing arguments about the false shallowness of branded identity on one side, and the deep, genuine and true self on the other (Potter, 2010, p.4). Never have so many craved the authentic, the real and the true as today (Gilmore, 2007). How then does it happen that the world seems to be growing more inauthentic, unreal and untrue every day (Potter, 2010)? Individualism has never been stronger. The desire for authenticity has been described as a response to standardisation and homogenisation in the marketplace (Thompson, et al., 2006). The individual's quest for being unique creates a competitive pressure to constantly run away from the masses, from mass consumption, and the conforming, homogenised, shallow mainstream lives of others (Bourdieu, 1994). Nevertheless, most of us are a part of this mass market. A disturbing condition is that no one specifically seems to acknowledge that they personally embrace the unreal, untrue and inauthentic life of mass consumption.

Upon closer inspection of 'authentic activities' such as ecotourism, the slow food movement or 'original' designed and branded products, we find a disguised form of status seeking (Bourdieu, 1994). The middle class culture does, however, often regard what has been described as authentic as quite the reverse; as something utopian and

remote and untouched that resides outside one's own culture, preferably in distant cultures with scarce material resources (Glenn, 2010; Fillitz, 1995, pp. 128-142).

The link between personal goals and authenticity is evident throughout the literature on subcultures of consumption and in brand communities with respect to the consumer's efforts to be included in different subcultures and to gain personal status within them through consuming the right brands and engaging in legitimate behaviour that is facilitated by associated products (Kates, 2004; Leigh et al., 2006; Quester et al., 2006).

The search for authenticity has been described as being propelled by a reaction to secularism, liberalism, and capitalism, and the sense that a meaningful life is not possible within the realm of modern society (Potter, 2010). This alienation makes us seek for meaning in a multitude of new ways. We look for a connection with something deeper and more genuine in the products, the brands and the experiences we consume. We seek the real, the untarnished, the natural, the true, the innocent, the spontaneous, the genuine and the creative that has not yet become a part of commercialism, calculation, and self-interest.

The reason people are able to dwell on "what it's all about" is, in itself, a product of western postmodernity, as only people living relatively comfortable and educated lives have the luxury of meditating on these issues. Most people in developing countries do not necessarily crave authenticity: they still live under pre-modern conditions in societies strongly influenced by religious faith.

Our lives here in the postmodern western world might be pleasantly indulgent, but not necessarily experienced as meaningful, and the ongoing search for meaning is driven by this sense that there has to be a higher meaning than this artificial world. But is there? One might argue that there is no such thing as an authentic self or an authentic life: instead, we might be caught up in a false ideology about what it means to have authentic, real and meaningful experiences; to be real, and to live a meaningful life. According to Potter (2010), these failings mainly rest on two assertions. The first is an incorrect nostalgia for a non-existent past. This nostalgia holds that things were purer, more genuine, more real, truer, and happier and ultimately, better and more authentic a long time ago, in the good old days. The second is built upon a one-sided scepticism about the postmodern world.

# 5.4.1 Personal reflections about consumer lifestyle and valuable intangibles

The experience of tangibles in a product is enhanced if we love the brand behind that product. We experience the same tangible qualities differently depending on which brand the product belongs to, much in the same way as we appreciate a gesture differently depending on which individual performs it.

We run faster in running shoes if we believe in them and their brand. I once read that the product ought to fit the mind of the consumer. I have long since forgotten where this quote came from and who measured whether an athlete's performance would increase if runners were told their running shoes where of an exclusive brand. Nevertheless, the essence of those statements has followed me throughout my research. But what does it really mean when a product fits the mind of a consumer?

One of my latest acquisitions is an exclusive jar of salt (see Figure 5.1). A lovely gift bestowed on me by my beloved girlfriend. One may wonder: Who would buy salt for about 120 Euro per kilo? In my parents' generation, the answer would be: Very few! But intangible product requirements change. They change over the years, they change over months and they may even change over weeks. Today, in the era of the emerging hipster generation, things are naturally different and perhaps more complicated than when I grew up. But not that different. The elusive value of product intangibles may be as old as humanity itself.



**Figure 5.1** My 'authentic' salt that presumably get its high value because it claims to be handcrafted and extracted from Artic seawater 'harvested' in the world's strongest maelstrom. Its tangible quality is that it, like all salts, tastes like SALT.

In 1637, single tulip bulbs where sold for more than 10 times the annual income of a skilled craftsman (Pamphlet Dutch Tulipomania, 1637).

During my first years as an academic, I had a passionate interest in vintage sport cars. All the cars I owned had one thing in common. They were all European cars, firstly with a tendency towards French models and later towards British models. I wanted functionality and speed, but not just that. The car I owned had to feel right, it had to be a part of me and it had to fit with who I was and who I wanted to be. I remember that this particularly disqualified all American cars. The prospect of having a fast and powerful American car was most alluring from a tangible performance point of view. Reluctantly, though, I found that American cars were often technically superior, cheaper and easier to repair than their European counterparts. However, in my circle of acquaintances, American cars and their big V8 engines where not considered to be anywhere near as refined and tasteful, as for example, a European Aston Martin, Porsche, MG, or a Maserati. American cars where considered lesser cars; cruder and slightly vulgar. On top of this, they were mostly driven by people that did not dress according to our 'cowboy hat-free' dress code. The American product offering stood for something that I could not reconcile myself with.

So, what does this personal example say? It exemplifies how it would have been insufficient to ask this consumer what tangible product characteristics an 'optimal' product ought to possess to get assessed as a highly valued product. It tells how intangibles and brands underpin buying criteria. The example is also linked to conceptions of different nationalities and their brands. What does America, as a brand, mean to us, and what do we associate with English, German and Italian products? The example also exemplify how affiliations to subcultures influence our experiences and how we value products.

Today, in middle age, I can still feel similar tensions in my everyday life, the only difference being that the tension concerns other products. It appears to be part of the human condition that affects, to some extent, all of us. At present, I am more committed to the Jaguar brand than to any other car brand. Yet I drive an Audi. Very few of us are completely impervious to practicality. And this time I have resigned myself to tangible product qualities in the form of reliability, supplied by the superior German car manufacturing industry. But the dream is still there ...dormant...

# References

- Alexander, N., (2009). Brand authentication: Creating and maintaining brand auras. *European Journal of Marketing*, 43(3/4), 551-562.
- Alwin, D. F., Krosnick, J. A. (1985). The Measurement of Values in Surveys: A Comparison of Ratings and Rankings. *The Public Opinion Quarterly*, 49(4), 535-552.
- Armstrong, L. (1991). It Started with an Egg. Business Week, 2(December), 142.
- Authentic 100, (2017). The Global Authentic 100. Retrieved 18 June 2018 from http://authentic100.com/
- Authentic brands group, (2018). Retrieved 18 June 2018 from https://www.authenticbrandsgroup.com/
- Baudrillard, J. (1983). *The ecstasy of Communication*, The Anti-aesthetic: Essays on Postmodern Culture. Port Townsend, WA: Bay Press.
- Beail, N. (1985). Repertory Grid Technique and Personal Constructs: Applications in Clinical & Educational Settings. Kent: Croom Helm ltd.
- Belasco, J. A., Stayer, R. C. (1993). Flight of the Buffalo, New York, NY: Warner.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139-168.
- Beverland, M.B. (2005a). Brand management and the challenge of authenticity. *Journal of Product & Brand management*, 14(7), 460-461.
- Beverland, M.B. (2005b). Crafting Brand Authenticity: The Case of Luxury Wines. *Journal of Management Studies*, 42(5), 1003-1027.
- Beverland, M.B., Farrelly, F.J. (2009). The Quest for Authenticity in Consumption: Consumers' Purposive Choice of Authentic Cues to Shape Experienced Outcomes. *Journal of Consumer Research*, 36 (February).
- Björkman, I. (2002). Aura: Aesthetic Business Creativity. *Journal of Consumption, Markets and Culture*, 5(1), 69-78.
- Black, N. (2017). A Guide for Authentic and Purposeful Living, Oklahoma, OK: Lyfe Smarts.
- Blijlevens, J., Carbon, C. C., Mugge, R., & Schoormans, P. J. (2012). Aesthetic appraisal of product designs: Independent effects of typicality and arousal. *British Journal of Psychology*, 103(1), 44-57. DOI: 10.1111/j.2044-8295.2011.02038.x.
- Bloch, P. H. (1995). Seeking the Ideal Form: Product Design and Consumer Response. *Journal of Marketing*, 59(3), 16-29.

- Bosco, A. (2018). Business authenticity. Retrieved 18 June 2018 from http://boscoanthony.com/business-authenticity/
- Bourdieu, P. (1994). *Distinction: A Social Critique of the Judgement of Taste*. London: Routledge.
- Boyle, D. (2004) Authenticity: Brands, Fakes, Spin and the Lust for Real Life, London, Harper Perennial.
- Brown, S., Kozinets, R.V., Sherry, J.F. (2003). Teaching old brands new tricks: Retro branding and the revival of brand meaning. *Journal of Marketing*, 67(3), 19-33.
- BusinessDictionary. (2019). Retrieved 2 May 2019 from http://www.businessdictionary.com/definition/market-value.html
- Chalmers, A. F. (1999). What is this thing called Science. : Indianapolis, IA: Hackett publishing.
- Charmaz, K. (2014). Constructing Grounded Theory. London: Sage.
- Chen, L. L., Kang, H. C., Hung, W. K. (2007). Effects of design features on automobile styling perceptions. *International Association of Societies of Design Research- IASDR07*, Hong Kong.
- Clark, K. B., Fujimoto, T. (1990). The power of product integrity. *Harvard Business Review*, 68(6), 107-118.
- Cohn&wolfe, (2015). Authentic Brands 2014 study: Embrace the Age of Authenticity or risk being left behind. Retrieved 22 January 2019 from https://www.prnewswire.com/news-releases/global-study-from-cohn--wolfe-defines-authenticity-in-the-eyes-of-consumers-and-reveals-the-100-most-authentic-brands-300253451.html
- Coombs, C. H. A. (1964). Theory of Data. New York, NY: John Wiley & Sons.
- Couper, M. P. (2000) 'Web Surveys a review of issues and approaches', *The public Opinion Quarterly*, 64(4), 464-494.
- Creusen, M. E. H., Schoormans, J. P. L. (2005). The different roles of product appearance in consumer choice. *Journal of Product Innovation Management*, 22(1), 63-81. DOI: 10.1111/j.0737-6782.2005.00103.x.
- Crilly, N. (2009). Shaping things: intended consumer response and the other determinants of product form. *Design Studies*, Vol. 30, 311-344.
- Crilly, N. (2010). The roles that artefacts play: technical, social and aesthetic functions. *Design Studies*, 31(4), 311-344.
- Daye, D. (2016). (Branding Strategy Insider) 2 Powerful Lessons In Brand Pricing And Value. Retrieved 1 Mars 2019 from https://www.brandingstrategyinsider.com/2016/08/2-powerful-lessons-on-brand-pricing-and-value.html#.XHzhVeRYZUY
- Delman, J. (2017). PDT, (Product Development Technologies, Strategic Design and Innovation Consultancy) Talks to Product Design and Development about Authenticity in Design. Retrieved 18 June 2018 from http://www.pdt.com/pdt-talks-to-productdesign-and-development-about-authenticity-in-design.html

- Desmet, P. M. A. (2002). Designing Emotions. PhD Thesis, Delft University: Delft.
- Desmet, P. M. A., Hekkert, P. (2007). Framework of product experience. *International Journal of Design*, 1(1), 57-66.
- Deszca, G., Munro, H., Noori, H. (1999). Developing breakthrough products: challenges and options for market assessment. *Journal of Operations Management*, 17(6), 613-630.
- Djurfeldt, G., Larsson, R., Stjärnhagen, O. (2003). Statistisk verktygslåda Samhällsvetenskaplig orsaksanalys med kvantitativa metoder. Lund: Studentlitteratur.
- Doyle, P. (1989). Building successful brands: the strategic objectives, *Journal of Marketing Management*, 5(1), 77-95.
- Driskill, D., Bermodez, M., McMahon, S., Ullah F. (2015). The Intangible Factors of Design of Design & New Product Development. *Paper presented at the Student research symposium*, Portland University. Retrieved February 27, 2017, from PDXScholar website: http://pdxscholar.library.pdx.edu/studentsymposium/2015/Presentations/2/
- Engelbrektsson, P., Söderman, M. (2004). The use and perception of methods and product representations in product development: A survey of Swedish industry. *Journal of Engineering Design*, 15(2), 141-154.
- Feigl, H., Scriven, M. (1956). *The Foundation of Science and the Concepts of Psychology and Psychoanalysis (I)*. London: Oxford University Press.
- Feyerabend, P., (1988). Against method. (Rev. ed.) London: Verso.
- Fenko, A., Schifferstein, H. N. J., Hekkert, P. (2008). Which senses dominate at different stages of product experience? *Proceedings of DRS2008 Design Research Society Biennial Conference*, Sheffield, UK.
- Fillitz, T., Saris, A.J. & Streissler, A. (red.) (2013). Debating authenticity: concepts of modernity in anthropological perspective. New York: Berghahn Books.
- Firat, F. A., Nikhilesh D., Venkatesh A. (1995). Marketing in a Postmodern World. *European Journal of Marketing*, 29(1), 40-56.
- Flick, U. (2007). *Designing qualitative research*. 1. ed. Thousand Oaks, Calif.: Sage Publications.
- Flynn, D., Schaik, P., Wersch, A. (2004). A comparison of multi-item likert and visual analogue scales for the assessment of transectionally define coping function. *European Journal of Psychological Assessment*, 20(1), 49-58.
- Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2), 219-245. DOI: 10.1177/1077800405284363.
- Gapminder. (2011). Trend-alyser [software]. Retrieved April 29, 2016 from www.gapminder.org.
- Gilmore, J. H., Pine, B. J. (2007). *Authenticity: what consumers really want*. Boston: Harvard Business School Press.
- Glasersfeld, E.V. (1995). *Radical constructivism: a way of knowing and learning*. London: Falmer Press.

- Glenn, J. (2010) Fake authenticity. Retrieved 18 June 2018 from http://hilobrow.com/2010/06/01/fake-authenticity/
- GMI. (2010). Everything you need to conduct global market research with confidence. Retrieved April 15, 2016 from www.gmi-mr.com
- Gomes-Mejia, L. R., Palich, L. E. (1997). Cultural diversity and the performance of multinational firms. *Journal of International Business Studies*, 28(2), 309-335.
- Graneheim, H., Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112.
- Grayson, K., (2002). Telling the difference: Consumer Evaluations of Authentic and Inauthentic Marketing offerings. *Advances in Consumer Research*, Volume 29, 44-45.
- Guest, G., Namey E. E., Mitchell, M. L. (2013). Collecting Qualitative Data. London: Sage.
- Guignon, C.B. (2004). On being authentic. (1. ed.) London: Routledge.
- Guyatt, G. H., Townsend, M., Bergman, L.B., Keller, J.L. (1987). A comparison of likert and visual analogue scales of measuring change in function. *Journal of Chronic Diseases*, 40(12), 1129-1133.
- Hacking, I. (1983). Representing and intervening: Introductory topics in the philosophy of natural science. Cambridge, MA: University Press.
- Hackos, J. T., Redish, J. C. (1998). *User and Task Analysis for Interface Design*. New York, NY: John Wiley & Sons.
- Haines-Gadd, M., Hasegawa, A., Hooper, R., Huck, Q., Pabian, M., Portillo, C., Zheng, L., Williams, L. (2015). Shaping things: intended consumer response and the other determinants of product form. *Design Studies*, 40, 246-268.
- Hair, J. F., Black, W. C., Anderson, R. E. (2010). *Multivariate Data Analysis a global perspective*. New Jersey, NJ: Pearson.
- Hasdogan, G. (1996). The role of user models in product design for assessment of user needs. *Design Studies*, 17(19), 19-33.
- Hekkert, P., Leder, H. (2009). Product Aesthetics. In Schifferstein, H. N. J., Hekkert, P. (eds.) *Product Experience*. Amsterdam: Elsevier.
- Holbrook, M.B. (red.) (1999). Consumer value: a framework for analysis and research. London: Routledge.
- Hollingworth, H. L. (1910). The central tendency of judgement. *Journal of Philosophy, Psychology and Scientific Methods*, 7(17), 461-469.
- Homer, P., Miles, P. (2006). Relationships among Ad-Induced Affect, Beliefs, and Attitudes: Another Look, *Journal of Advertising*, 35(1), 35-51.
- Horrocks, C. (1999). Baudrillard and the millennium. Trumpington: Icon.
- Hughes, G. D. (1969). Some confounding effects of forced-choice scales. *Journal of Marketing Research*, 6(2), 223-226.

- Irvine, M. (2013). Postmodernity vs. the Postmodern vs. Postmodernism. [Version 9.9.13] Communication, Culture & Technology Program, Georgetown University, Washington, DC. Retrieved 18 June 2018 from http://faculty.georgetown.edu/irvinem/theory/pomo.html
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611.
- Jones, T. (1997). New Product Development. Oxford: Butterworth-Heinemann.
- Jordan, P. W. (2009) Personal communication with design, marketing and brand strategist Patrick Jordan. He consults for many of the world's most successful companies and is considered one of the most influential practitioners in his field.
- Jordan, P. W. (2000). Designing Pleasurable products. London: Taylor & Francis.
- Jordan, P.W. and Green, W.S. (2002) *Pleasure with Products Beyond Usability*, Taylor and Francis, London.
- Jönsson, S. (2004). Product Development Work for Premium Values, Liber, Malmö.
- Kant, I. (2004). *Observations on the feeling of the Beautiful and Sublime*. Los Angeles, CA: University of California Press.
- Kapferer, J.N. (2012). The new strategic brand management: advanced insights and strategic thinking. (5. ed.) Kogan Page London.
- Karjalainen, T. M., Snelders, D. (2010). Designing Visual Recognition for the Brand. *Journal of Product Innovation Management*, Vol, 27, 6-22.
- Karlsson, B. S. A., Aronsson, N., Svensson, K. A. (2003). Using semantic environment descriptions as a tool to evaluate car interiors. *Ergonomics*, 46 (13-14), 1408-1422.
- Karlsson, M. (2009). *Personal interview*, Division of Design and Human Factors, Chalmers University Gothenburg, Sweden.
- Kates, S. M. (2004). The Dynamics of Brand Legitimacy: An Interpretive Study in the Gay Men's Community. *Journal of Consumer Research*, Vol. (September), 455-464.
- Kaulio, M. A., Karlsson, M., Rydebrink, P., Klemets, M. (1996). *PRE Att skapa ett företagsspecifikt arbetssätt för att hantera kundkrav*. Linköping: Sverea IVF, Linköping University.
- Keitsch, M., Hjort af Ornäs, V. (2008). Meaning and interpretation: An analysis of two theoretical perspectives in product design. *Proceedings of the 7th international Conference on Design & Emotion.* Hung Hom, Hong Kong.
- Kellner, D, Baudrillard, J. (1989) From Marxism to Postmodernism and Beyond. Cambridge, Polity Press in association with Basil Blackwell.
- Kempf-Leonard, K. (2005). (red.), Encyclopedia of social measurement, 1. ed., San Diego, Calif., *Academic*, Vol. 2., 299-305.
- Khalifa, A. S. (2004). Customer value: a review of recent literature and an integrative configuration. *Management Decision*, 42(5), 645-666. DOI: 10.1108/00251740410538497.

- Khun, T. S. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Kotler, P., Rath, A. (1984). Design: A powerful but neglected strategic tool. *Journal of Business Strategy*, 5(2), 16-21.
- Kotro, T. (2005). *Hobbyist Knowing in Product Development*. Helsinki: University of Art and Design Helsinki.
- Krippendorf, K. (1989). On the essential contexts of artefacts or on the proposition that design is making sense of things. *Design Issues*, 5(2), 9-39.
- Krippendorff, K. (2013). *Content analysis: an introduction to its methodology*. 3rd ed. Thousand Oaks, Calif: SAGE.
- Kristav, P. (2011). Remote Assessment of Intangible Product Experiences: A means to assist product development (Licentiate Thesis). Division of Machine Design, Department of Design Sciences LTH, Lund University, Lund, Sweden.
- Kristav. P., Hiort af Ornäs, V. (2012). Exploring negotiated determinants of product form. *The 11th Nordcode Conference*. Helsinki, Finland.
- Kroes, P., Light, A., Moore, S., Vermaas, P. (2009) Design in Engineering and Architecture; towards an Integrated Philosophical Understanding. In Vermaas, P., Kroes, P., Light, A., Moore, S. (eds.) *Philosophy and Design: from engineering to architecture*. London: Springer.
- Krosnick, J. A. (1999). Maximizing measurement quality: Principles of good questionnaire design. In Robinson, J. P., Shaver, P. R., Wrightsman, L. S., (ed,). Measures of Political Attitudes. New York, NY: Academic Press.
- Küller, R., Mikellides, B., Janssens, J. (2009). Color, arousal, and performance A comparison of Three Experiments. *Color research and Application*, 34(2), 141-152.
- Kvale, S. (2007). Doing interviews. (1. ed.) Thousand Oaks, Calif.: Sage Publications.
- Laerhoven, H., Zaag Loonen, H. J., Derkx, B.H.F. (2004). A comparison of likert scale and visual analogue scales as response options in children's questionnaires. *Acta Paediatrica*, 93(6), 830-835.
- Langnau L. (2010). Engineering exchange, Design in 2010: Four emerging trends for technical product design. Retrieved 18 June 2018 from http://www.engineeringexchange.com/profiles/blogs/design-in-2010-four-emerging
- Lash, S. (1999). Another modernity: A Different Rationality. Oxford: Blackwell Publishers.
- Laval, S. (2004). Metoder för arkitekturdialog. Retrieved 18 June 2018 from http://www.arkitekturanalys.se/ULdownload/metoderforarkitekturdialog.pdf
- Laval, S., Wikforss, Ö. (2010). Arkitekturanalys ur ett användarperspektiv. Retrieved 18 June 2018 from www.arkitekturanalys.se
- Lederman, S. J., Klatzky, R. L. (2004). *Multisensory texture perception*. In Calvert, G. A., Spence, C., Stein, B. E. *The Handbook of Multisensory Processes*. Cambridge, MA: MIT Press.

- Leigh, T. H., Peters, C., Shelton, J. (2006). The Consumer Quest for Authenticity: The Multiplicity of Meanings within the MG Subculture of Consumption. *Journal of the Academy of Marketing Science*, 3(4), 481-493.
- Lewis, D., Bridger, D. (2000). *The Soul of the New Consumer: Authenticity-What We By and Why in the New Economy*. London: Nicholas Brealey Publishing.
- Lewis, D., Bridger, D. (2001). The soul of the new consumer: authenticity what we buy and why in the new economy, Updated ed., London, Nicholas Brealey.
- Linn, C. E. (2002). Värdeskapandets Dynamik: hur metaprodukter, varumärken och design ger resultat på sista raden. Stockholm: Meta Management AB.
- Lombard, M., Snyder-Duch, J., Campanella Bracken, C. (2002). Content Analysis in Mass Communication: Assessment and Reporting of Intercoder Reliability. *Journal of Human Communication Research*, 28(4), 587-604.
- Marketing charts. (2017). These Are Perceived to be the Most "Authentic" in 2017. Retrieved 18 June 2018 from https://www.marketingcharts.com/brand-related/top-brands-80824
- Marsh-Richard, D. M., Hatzis, E. S., Mathias, C. W., Venditti, N., Dougherty, D. M. (2009). Adaptive Visual Analog Scales (AVAS): A Modifiable Software Program for the Creation, Administration, and Scoring of Visual Analog Scales. *Behavioural Research Methods*, 41(1), 99-106.
- Martinec, R. (2004). Consumer Perceptions of Iconicity and Indexicality and Their Influence on Assessments of Authentic Market Offerings. *Journal of Consumer Research*, 31(September), 296-312.
- Mather, G. (2009). Foundations of Sensation and Perception. Hove: Psychology Press.
- Mathews, A. (2018). The Authentic Self, With a capital "S". Retrieved 24 January 2019 from https://www.psychologytoday.com/intl/blog/traversing-the-inner-terrain/201802/the-authentic-self
- McCracken, G. (1986). Culture and consumption: A theoretical account of the structure and movement of cultural meaning of consumer goods. *Journal of Consumer Research*, 13(1), 71-84.
- McDonagh, D., Bruseberg, A., Haslam, C. (2002). Visual product evaluation: exploring users'emotional relationships with products. *Applied Ergonomics*, 33(3), 231-240.
- Milovanovic, D. (2009). Dueling paradigms: Modernist v. Postmodernist thought.

  Department of Criminal Justice. Northeastern Illinois University, Chicago, IL.

  Retrieved 18 June 2018 from http://critcrim.org/critpapers/milovanovic\_postmod.htm
- Mitchell, M., Tseng, X. D. (1998). Design by customers for mass customization products. *CIRP Annals- Manufacturing Technology*, 47(1), 103-106.
- Motte, D. (2009). Using brain imaging to measure emotional response to product appearance. The International Conference on Designing Pleasurable Products and Interfaces – DPPI 09, 187-198). Compiegne.

- Mugge, R. (2009). The development and testing of a product personality scale. *Design Studies*, Vol. 30, 287-302.
- Mugge, R., Schoormans, J. P. L., Schifferstein, H. N. J. (2009). *Product attachment: Design strategies to stimulate the emotional bonding to products.* In Schifferstein, H. N. J., Hekkert, P. (ed.). *Product Experience*. Amsterdam: Elsevier.
- Ng, A. W. Y., Chan, A. H. S. (2018). Color associations among designers and non-designers for common warning and operation concepts. *Applied Ergonomics*, Vol. 70, 18-25.
- Norman, D. A. (2004). Emotional Design. New York, NY: Basic Books.
- Osgood, C. E. (1952). The Nature and Measurement of Meaning. *Psychological Bulletin*, 49, 197-237.
- Osgood, C. E., Suci, G.J., Tannenbaum, P.H. (1957). The Measurement of Meaning. Illinois press, Urbana Phal, G., Beitz, W. (1996). *Engineering Design: A Systematic Approach*. London: Springer.
- Pamphlet Dutch Tulipomania (1637). Wageningen Digital Library. Retrieved October 24, 2018 from https://www.abbl.lu/260px-pamphlet-dutch-tulipomania-1637
- Person, O. (2016). Assessing the performance of styling activities: An interview study with industry professionals in style-sensitive companies. *Design Studies*, 42, 33–55.
- Petiot, J. F., Yannou, B. (2004). Measuring consumer perceptions for a better comprehension, specification and assessment of product semantics. *International Journal of Industrial Ergonomics*, 33(6), 507-525.
- Pine, II, B. J., Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97-105.
- Pine, B.J. (2014). The experience economy. Johanneshov: MTM.
- Porter, C. S., Desmet, P., Signes, M. J., Sperling, L., Özcan, E., Wouters, C., & Tito, M. (2006). ENGAGE: Designing for emotion. *Proceedings of 16th World Congress on Ergonomics IEA*. Maastricht.
- Potter, A. (2010). The Authenticity Hoax, New York, NY: Harper Collins Publishers.
- Prasidh R. S. (2011). Consumer Culture and Postmodernism. *Postmodern Openings*, 2(5), 55-88. Retrieved 18 June 2018 from http://postmodernopenings.com
- Proust, M. (1981). *Remembrance of Things Past.* Vol. I. New York, NY: Random House and Chatto & Windus.
- Quester, P., Beverland, M. B., Farrelly, F. (2006). Brand-Personal Values Fit and Brand Meanings: Exploring the Role Individual Values play in Ongoing Brand Loyalty in Extreme Sports Subcultures. Advances in Consumer Research, Vol. 33, 21-27.
- Raaij, F. W. (1993). Postmodern Consumption. *Journal of Economic Psychology*, Vol. 14, 541-563.
- Reingen, P. H., Foster, B. L. (1984). Brand congruence in interpersonal relations. *Journal of Consumer Research*, 11(3), 771-783.

- Riesenhuber, M., Poggio, T. (2000). Models of object recognition. *Journal of Nature Neuroscience*, 3(11), 1199-1204.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39(6), 1161-1178.
- Russell, M. (2018). How To Unlock Your Authentic Self and Become Remarkable In Every Way. Retrieved January 24 2019 from https://betterhumans.coach.me/how-to-unlock-your-authentic-self-and-become-remarkable-in-every-way-154bfd50a998
- Schegloff. E. E. (1992). Repair after Next Turn: The last structurally provided defense of intersubjectivity in conversation. *The American Journal of Sociology*, 97(5), 1295-1345.
- Schifferstein, H. N. J. (2006). The perceived importance of sensory modalities in product usage: A study of self-reports. *Acta Psychologica*, 212(1), 41-64.
- Scholz, S. W., Meissner, M., Decker, R. (2010). Measuring Consumer Preferences for Complex Products: A Compositional Approach Based on Paired Comparisons. *Journal of Marketing Research*, 47(August), 685-698.
- Shang, H., Hsua, M. C., Chuang, C. C. (2000). A semantic differential study of designers' and users' product perception. *International Journal of Industrial Ergonomics*, 25(1), 375-391.
- Smets, G. J. F., Overbeeke, C. J. (1995). Expressing tastes in packages. *Design Studies*, 16(3), 349-365.
- Spacey, J. (2017) 30 Types of Product Experience, Simplicable, Business Guide. Retrieved 18 June 2018 from https://simplicable.com/new/product-experience
- Sperling, L., Christoforidou, D., Olander, E. (2005). Communication with users in industrial design activities. *Educational report*. Division of Industrial Design, Department of Design Sciences, Lund University. Lund.
- Steiner. F., Harmon, R.R. (2009). The impact of Intangible Value on the Design and Marketing of New Products and Services: An Exploratory Approach. In PICMET 2009 Proceedings. Presented at the PICMET. Retrieved 18 June 2018 from http://ieeexplore.ieee.org/document/5261890/?reload=true
- Sullivan, L. P. (1986). Quality Function Deployment. Quality Progress, June, 39-50.
- Sutherland R. (2011, December). The circumstances of our lives may matter less than how we see them, says Rory Sutherland [Video file]. Retrieved March 7, 2017 from https://www.ted.com/talks/rory\_sutherland\_perspective\_is\_everything
- Svengren, L. (1993). Case study methods in design management research. *Design Studies*, 14(4), 444-456.
- Thompson, C. J., Rindfleisch, A. Z. (2006). Emotional Branding and the Strategic Value of the Doppelganger brand Image. *Journal of Marketing*, 70(1), 50-64.
- Tiger, L. (1992). The Pursuit of Pleasure. Boston, MA: Little, Brown & Company.
- Toffer, A. (1970). Future Shock. Toronto: Bantam Books.

- Ulrich, K., Eppinger. S. (2012). *Product Design and Development*. New York, NY: McGraw-Hill.
- Veblen, T. (1975). Theory of the Leisure Class.. New York, NY: A.M. Kelley, Bookseller.
- Vihma, S. (1995). Products as Representations: A Semiotic and Aesthetic Study of Design Products. PhD Thesis. University of Art and Design, Helsinki.
- Vink, P. (2005). Comfort and Design. Boca Raton, FL: CRC Press.
- Wallendorf, M., Arnould, E. J. (1988). My favorite things: A cross-cultural inquiry into object attachment, possessiveness, and social linkage. *Journal of Consumer Research*, 14(4), 531-547.
- Warell, A. (2008). Modelling perceptual product experience- Towards a cohesive framework of presentation and representation. *Proceedings from the 6th Conference on Design & Emotion*. Hong Kong.
- Warell, A. (2015). Identify references in product design: An approach for inter-relating visual product experience and brand value representation. *The 6<sup>th</sup> International Conference on Applied Human Factors and Ergonomics, 26-30 July,* 2118-2125) Las Vegas, NS.
- Watson, D., Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98(2), 219-235.
- Wei, Y., Chun-Hsien, C., Li, P. K. (2002). An integrated approach to the elicitation of customer requirements for engineering design using picture sorts and fuzzy evaluation. Journal of Artificial Intelligence for Engineering Design, Analysis and Manufacturing, 16(2), 59-71.
- Wenben L. A. (1995). Consumer Values, Product Benefits and Customer Value: a Consumption Behavior Approach Advances. *Consumer Research*, Vol. 22.
- Wikström, S., Jönsson, H., 'Espoir Decosta, P. L. (2014). A clash of modernities: Developing a new value-based framework to understanding the mismatch between production and consumption. *Journal of Consumer Culture* 16(3). DOI: 10.1177/1469540514528197.
- Woodruf, R., B., Gardial, S., F. (1996). Know your Customer: New Approaches to Understanding Customer Value and Satisfaction. Cambridge, MA: Blackwell.
- Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139-153.
- Workdesign. (2014). Let's get real. Authenticity in design. Retrieved 18 June 2018 from https://workdesign.com/2014/10/lets-get-real-authenticity-design/
- Wyver, J. (1986). Television and postmodernism, Postmodernism. In L. Appignaseni (Ed.), Postmodernism: ICA Documents 5, 52-54. London, United Kingdom: Institute of Contemporary Arts (ICA).
- Yamamoto, M., Lambert, D. R. (1994). The impact of product aesthetics on the evaluation of industrial products. *Journal of Product Innovation Management*, 11(4), 309-324.
- Yannou, B., Ahmed, W. B. (2009). A Bayesian learning of probabilistic relations between perceptual attributes and technical characteristics of car dishoards to construct a

- perceptual evaluation model. *International Journal of Product Development*, 7(1-2), 47-72.
- Yin, R. K. (2008). *Case Study Research: Design and methods 3rd Edition.* Thousand Oaks, CA: Sage Publications.
- Zellner, D. A., Krautz, M. A. (1990). Color affects perceived odor intensity. *Journal of Experimental Psychology: Human Perception and Performance*, 16(2), 391-397.

## **Bibliography**

Sources relevant for this thesis, but not referred to in the text.

- Artacho-Ramírez, M. A., Diego-Mas, J. A., Alcaide-Marzal, J. (2008). Influence of the mode of graphical representation on the perception of product aesthetic and emotional features: An exploratory study. International Journal of Industrial Ergonomics, 38(11-12), 942-952.
- Asakura, Y., Hato, E. (2007). Tracking individual travel behavior using mobile phones: Recent technological development. *Transportation Research*, 41(7), 684-690.
- Begelman, G., Keller, P., Smadja, F. (2006). Automated Tag Clustering: Improving search and exploration in the tag space. Retrieved 18 June 2018 from www.pui.ch/phred/automated\_tag\_clustering/automated\_tag\_clustering.pdf
- Bont de, C. J. P. M., 1992, Consumer Evaluations of Early Product Concepts, PhD Thesis, Delft University Press: Delft.
- Brazil, J., Jue, A., Mullins, C., Punkett, J. (2006). Variables that influence drop-out rates and data quality in web-based surveys. *The Innovate conference 10-12 May*, Miami, FL.
- Chen, L. L., Hsiao, K. A., Liang, J. (2003). Affective Product Shapes through Image Morphing. *The DPPI '03 conference 23-26 June*, 11-16. Pittsburgh, MA,
- Christoforidou, D., Motte, D. (2009). Emotions, feelings, pleasure... Insights from affective neuroscience. *The International Conference on Research into Design ICoRD'09*, 379-386. Bangalore.
- Chuang, Y., Chen, L. L. (2008). How to rate 100 visual stimuli efficiently. *International Journal of Design*, 2(1), 31-43.
- Couper, M. P. (2000). Web Surveys a review of issues and approaches. *The public Opinion Quarterly*, 64(4), 464-494.
- Crilly, N., Moultrie, J., Clarson, P., J. (2004). Seeing things: consumer response to the visual domain in product design. *Design Studies*, 25, 547-577.
- Delicious social bookmarking, 2010. The tastiest bookmarks on the web. Save your own or see what's fresh now! Retrieved 18 June 2018 from http://delicious.com/.
- Frohlich, D. M. (2004). *Audiophotography: Bringing Photos to Life with Sounds*. London: Kluver Academic Publishers.

- Gaver, B., Dunn, T., Pacenti, E. (1999). Cultural Probes. Interactions, 1(2).
- GlobalTestMarket. (2010). Retrieved 18 June 2018 from www.globaltestmarket.com
- Goffman, E. (1959). The Presentation of Self in Everyday life. New York, NY: Overlook Press.
- Govers, P. C. M., Schoormans, J.P.L. (2005). Product personality and its influence on consumer preference. *Journal of Consumer Marketing*, 22(4), 189-197.
- Goyder, J. (1986). Surveys on surveys: limitations and potentialities. *The Public Opinion Quarterly*, 50(1), 27-41.
- Hamilton, R. W., Thompson, D. V. (2007). Is there a substitute for direct experience? Comparing consumers' preferences after direct and indirect product experiences. *Journal of consumer research*, 34(4), 546-555.
- Hekkert, P., Scifferstein, H. N. J. (2009). *Product Aesthetics in Product Experience*. Amsterdam: Elsevier.
- Hoch, S. J. (2002). Product Experience Is Seductive. *Journal of Consumer Research*, 29(December), 448-454.
- Ijsselstieijn, W., Nap, H. H., DeKort, Y. (2007). Digital game design for elderly users. *Proceedings of the 2007 Conference on Future Play,* 17-22. New York, NY.
- Jamieson, L. F., Bass, F. M. (1989). Adjusting stated intention measures to predict trial purchase of new products: A comparison of models and methods. *Journal of Marketing Research*, 26(3), 336-345.
- Johnson, K. W., Lenau, T., Ashby, M. F. (2003). The aesthetic and perceived attributes of products. *The International Conference on Engineering Design IDEC 03*. Stockholm.
- Kaplowitz, M. D., Hadlock, T. D., Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly*, 68(1), 94-101.
- Kotler, P., Keller, K., L. (2012). *Marketing management*. (14. ed., Global ed.). Harlow: Pearson Education.
- Krippendorff, K. (2006). *The Semantic turn, a New Foundation for Design.* Boca Raton, CA: CRC Press Taylor & Francis Group.
- Küller, R. (1975). Semantisk miljöbeskrivning (SMB). Stockholm: Psykologiförlaget AB.
- Lattin, J. M. (2003). Analyzing Multivariate Data. Pacific Grove, CA: Thomson brooks/cole.
- McDonald, A. S. (2006). Ensuring the Validity of Online Assessment. Retrieved 18 June 2018 from www.profilingforsuccess.com/assessment/documents/Ensuring\_the\_Validity\_of\_Online \_Assessment.pdf
- MacElroy, B. (2000). Variables influencing dropout rates In Web-based surveys. *Quirk's Marketing Research Review*, July.
- Mazur, G. H., QFD Institute: The official source for QFD. Retrieved 18 June 2018 from http://www.qfdi.org
- MindCanvas [Internet software]. Retrieved April 21, 2016 from www.themindcanvas.com

- Monö, R. (1997). Design for Product Understanding. Stockholm: Liber AB.
- Nagamachi, M. (1995). Kansei Engineering: A new ergonomic consumer-oriented technology for product development. *International Journal of Industrial Ergonomics*, 15(1), 3-11.
- Perceptual Mapping. (2009). In Wikipedia. Retrieved April 19, 2016 from www.wikipedia.com/wiki/Perceptual\_mapping.
- PFS: Profiling For Success. (2010). Retrieved 18 June 2018 from http://www.profilingforsuccess.com
- Rugg, G., McGeorge, P. (1997). The sorting techniques: a tutorial paper on card sorts, picture sorts and item sorts. *Expert Systems*, 14(2), 80-93.
- Schütte, S. T. W., Eklund, J., Axelsson, J. R. C., Nagamachi, M. (2004). Concepts, methods and tools in Kansei engineering. *Theoretical Issues in Ergonomics Science*, 5(3), 214-231.
- Sharples, S. C., Saikayasit, R. (2006). Effectiveness of virtual prototypes: Perception of material properties in CAD and VR. 16th Congress of the International Ergonomics Association. Maastricht.
- Schifferstein, H. N. J., Zwartkruis-Pelgrim, E. P. H. (2008). Consumer-product attachment: Measurement and design implications. *International Journal of Design*, 2(3), 1-13.
- Scott, L. M., Vargas, P. (2007). Writing with Pictures: Toward a Unifying Theory of Consumer Response to Images. *Journal of consumer research*, 34(3), 341-356.
- Skogen, M. G. R. (2006). Visual white space and emotional exclusivity: A student exercise. *Proceedings from the 5th conference on Design & Emotion.* Gothenburg.
- Smith, M. L. (2011). Portable Home [web log post], Retrieved 18 June 2018 from http://megansmith.ca/blog/?tag=cultural-probe
- Sperling, L., Eriksson, P. (2006). Drivers' experiences of interior materials in present & future interiors of cars and trucks. In Bust, P. D., (ed,). Contemporary Ergonomics. London: Taylor & Francis.
- Sperling, L. (2006). Focus group interviews about experiences of wood surfaces by means of the User Compass Chart. *Power Point presentation* to the Scanian Red Beech Project. Hässleholm.
- Sperling, L., Rosenblad, T. (2006). Personal presentation at the Engage project. Stockholm.
- Steeh, C. G. (1981). Trends in nonresponse rates, 1952-1979. *Public Opinion Quarterly*, 45(1), 40-57.
- Strategic Planning with the Perceptual Mapping Brand Marketing Framework. (2019) Retrieved 30 Jan 2019 from www.anythingresearch.com/business-frameworks/Perceptual-Mapping.php
- Susagroup. (2010). Creating meaningful experiences. Retrieved 18 June 2018 from www.susagroup.com
- Team Focus. (2010). Retrieved April 21, 2016 from www.teamfocus.co.uk

- Thompson, D. V., Hamilton, R. W., Rust, R. T. (2005). Feature Fatigue: When Product Capabilities Become Too Much of a Good thing. *Journal of Marketing Research*, 42(4), 431-442.
- Veblen, T. (2005). The Theory of the Leisure Class; An Economic Study of Institutions. Delhi: Aakar Books.
- Warell, A. (2008). Modelling perceptual product experience- Towards a cohesive framework of presentation and representation. *Proceedings from the 6th Conference on Design & Emotion*. Hong Kong.
- Whitcomb, G., H. (1990). Computer games for the elderly. *Proceedings from the Conference on Computers and the Quality of Life.* Washington, D. C.





