STRIVING FOR MEANING - A STUDY OF INNOVATION PROCESSES

Åsa Öberg

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School of Innovation, Design and Engineering
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Akademisk avhandling

som för avläggande av filosofie doktorsexamen i innovation och design vid Akademin för innovation, design och teknik kommer att offentligen försvaras fredagen den 16 oktober 2015, 10.00 i Raspen, Mälardalens högskola, Eskilstuna.

Fakultetsopponent: Professor Koenraad Debackere, KU Leuven
Abstract

Traditionally, innovation processes have often focused on creatively solving problems with the help of new technology or business models. However, when describing products in terms of function or visual appearance, the reflection on a less visible dimension, the product meaning, is left out. The perspective of meaning is an alternative path to innovation that pays attention to the reason for using a product, its “why” rather than its “how”. Nevertheless, within the field of innovation management, research on meaning is still in its infancy and lacks well developed frameworks.

The objective of this study is to increase the understanding of the dimension of meaning within the innovation processes in companies and - in particular - the practices that support such a process, looking particularly at nine cases where managers sought to develop directions of new product meaning - spanning businesses within manufacturing, consumer goods and fashion.

The study shows that companies used practices often opposite to what is described in innovation literature. Rather than taking out and leaving their opinions behind to reach a “beginner's mind”, the managers showed a silent evolving of interest and a conscious exposing of their own personal beliefs. They moved beyond standard procedures of information sharing to a practice of a multifaceted criticizing. Rather than outsourcing the product solutions, a practice of embodying the proposed product meaning was observed. In-depth studies showed that when the participants do not expose their thoughts with conviction, the process of searching to innovate product meaning seems to struggle. The act of exposing does not happen in a moment but when individuals open up and let old interpretations fade away, leaving room for new perspectives. Moreover, these studies showed that external sources, so called interpreters, fuel discussions on product meaning by leveraging a critical ability that includes practices described as asking, giving, daring and playing.

The study contributes with an increased understanding of the meaning dimension within innovation management by leveraging theories of hermeneutics, design and leadership. It shows that this type of innovation process is relevant but differs from processes of creatively solving problems. Rather than being driven to find solutions, a meaning perspective includes a process of striving towards new potential product meaning.
Till Pappa
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SAMMANFATTNING


Studien bidrar med en ökad förståelse för meningsperspektivet inom innovationsområdet genom att hämta teorier från fälten hermeneutik, design och ledarskap. Den visar att den här typen av innovationsprocess är relevant men att den skiljer sig från processer som fokuserar på kreativ problemlösning. Istället för ett driv mot avslut (en ny lösning) innebär meningsperspektiv istället en ständig strävan mot en produkts nya och föränderliga mening.
Innovationsprocesser handlar ofta om kreativ problemlösning där produkter beskrivs genom ny teknik eller en ny affärsmodell. Detta fokus på funktion och ibland utseende utelämnar en parameter - nämligen den som rör produktens mening. Meningsperspektivet utgör ett alternativ för innovation. Det lyfter frågor kring anledningen till att använda en produkt med fokus på ”varför” vi ska använda den snarare är ”hur”. Inom innovationsområdet befinner sig forskningen kring mening i ett tidigt skede utan väl utvecklade ramverk.


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THANKS 

Eskilstuna August 2015

The work in your hand is not made by me. It is the final output of a long process of thinking, reflection and aha-moments. It consist of the ideas, efforts, proposals, theories, actions, quotes and struggles of many people, some of whom I know very well, and others that happened to cross my path as I walked through this adventure of learning.

Here I'd like to take a moment to thank a few of those people. Thanks to the crew at Mälardalen University who hired me a long time ago, especially to Sten Ekman, who believed in me, and Magnus Wiktors-son, who made it possible for me to enter the system of academia again. Thanks to Mats Jackson, whose link to industry made me feel at home, to my main supervisor Yvonne Eriksson, who opened my eyes to academic research in an engaged and awakening way, to Janne Brandt, who always encouraged me through the collaboration on the DEVIP project with his fast talk, energetic walk and warm smiles. A special thanks to my PhD colleagues in this same project, Anders Wikström, my room mate and friend for your energy and care in small and big things and Jennie Andersson Schaeffer for your deep reflection, listening and clever questions. Thanks to the PhDs at Forskarskolan at MDH, Petra Edoff, Anna Granlund and Daniel Gåsvaer for being supportive, caring, clever, organized and helpful in all the ups and downs of this journey, as well as the PhDs of "Innofacture" for showing interest despite being in other fields. A warm smile also to my colleagues at the Information Design Department, especially Marianne Palmgren for pulling me back into reality when participating in her courses on design with our spacial design students, to Carina Söderlund for your care and engaged listening and to Anna-Lena Carlsson for challenging me to be more precise in my sometimes fluffy ideas. Overall my home base, the School of Innovation, Design and Engineering at MDH has been a place that has offered a wide range of competences with which I could reflect. Thanks also to the Knowledge-Foundation and the Marie Curie funded EU project DESMA for making the funding of my work possible.

My deepest thanks goes to my friend and supervisor Roberto Verganti, who has put up with all my struggles, questions and sometimes crazy ideas. Thanks for always listening and giving me a chance to grow. Thanks for inspiring me with all your rich knowledge within and outside academic research, for inviting me to meet interesting people of all kinds. Thanks for the debates, the hard work, the many journeys, even the intense working hours in airplanes and cafes. Thanks for the music, the fun and the empathy. Your support for me and my family is beyond words.

My warmest thanks also to those researchers who have been working next to me, despite being in Milan. Hugs and thanks to Naiara Altuna for keeping things in order when I got lost, to Tommaso Buganza for putting a smile on my face and Emilio Bellini for your careful listening. A special thanks to Claudio Dell'Era and Roberto Verganti who enabled me to be a visiting PhD at Politecnico di Milano, a part of the Light. Touch. Matters.-project and for thinking of me as a research fellow within the DESMA network. Thanks for always listening patiently and keeping me updated in an entertaining and professional way. Apart from a lot of cheerful memories from projects, reflections on empirical work and theories of old men, you all helped me understand Italy, the coffee, the gelato and the passion for fashion. Grazie mille.

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one late afternoon in Gothenburg (forgive me if it was not a Circoën…!). Thanks to Livbeth Svengren Holm for putting me together with MDH through a phone call one day in 2009, to Ulla Johansson for both encouraging and challenging me in a fruitful way. A warm thanks also to Katarina Wetter Edman, my former colleague who helped me understand what research is all about and to my former manager Tomas Edman for being a role model on how to steer projects forward and even more how to make people grow. Even if you are far away, you have both inspired me. Thanks also to Christian Yubito at Material Connexion in Milan for giving me energy during the long meetings in the LTM project and to our project manager Erik Tempelman for your interest in my work.

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During these six years not every morning has been light and cheerful. And I am definitely not a morning person. I owe a warm thank you to my friends and colleagues in the BNI-Network of Eskilstuna for giving me a reason to get up early every Friday morning. Also thanks to my colleagues within illustration and text design in the group of Urban Sketchers for making me put down pens, colors and sketchpad next to my computer every Tuesday morning. Namaste, Deb Young Philips, at Younga Yoga Studio in Wollongong, Australia, for the many early mornings of Yoga. Your classes made a huge difference in the last year of this work. I am still working on the kshana-tat-kramayoh sanyamad vivekaam jnanam (The Royal King Pigeon pose). Thanks for helping me find a necessary distance to my work. I am also very thankful to Hans Zetterström for your dedication and hard work on a parallel project in life, the carpentry business of my father. Thanks for always understanding me; helping my family and making the idea of a new house come through. Your care has been so important to me. There is also a bunch of caring people that by their questions and care gave me the energy to continue when my life collapsed in the middle of this PhD. These are friends of the family, especially my aunt Mona Anderson who knows the ups and downs of a PhD, parents of my children's friends, my kind neighbors Karin and Gunnar, who helped me with all kinds of things, the girls at the cafeteria at MDH and the dedicated librarians, not the least. Without you I would have felt too lonely.

A long and warm thanks also to the shiny group of three girls of “La Dolce Vita”, who have supported me every month at dinners and training sessions. Without you I would never have managed to finish. Thanks to Camilla, Anna and Jenny, my old friends where I can be just as I am. Many thanks also to my family, my mom Ann-Mari for raising me to be creative and spontaneous and for your care despite hard times. Thanks to my sister Karin for silently being there and encouraging me to carry on. Thanks to Lotta and Lasse, the best parents-in-law, for all kind of practical support of dinners, coffee, pool swimming and other adventures. My last thanks goes to my amazingly warm and caring children Vendela and Judith for putting up with mom’s work and sometimes stressful life. Without your imagination and ideas I would be lost in this world. My deepest thanks to Niklas, who also knows the struggles of a PhD project. Despite being far away, you always supported me in your own, mysterious but comforting way.
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Supportive theory
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A guide to the reader

To ease the reading of this work these clarifications may be helpful.

1) This work is aimed at:
   - Researchers and students within innovation management
   - Executives within the same area

2) It describes the process of innovation in the search for meaning through the four practices of evolving, exposing, criticizing and embodying (See Part 2 - The Process).

3) It also provides a background to the dimension of meaning in an innovation management setting by describing four characteristics and the relevance of this type of innovation (See Part 1 - Meaning and its relevance and Appendix 2).

4) This research finds support in the field of hermeneutics, the Theory U and in the design discourse. It does not build on one single theory, but several, hence the distribution of theory in connection to the empirical investigations.

5) It springs mainly from a collaborative approach between industry and research and took place in two major phases, the first ending in a Licentiate thesis (Öberg, 2012), the second with this PhD thesis.

6) Theory, methods and empirical material can be found at several places in this work. To browse the material, please see the tables in the Introduction and Method sections below. For impatient readers, see the summaries at the end of Parts 1 and throughout Part 2 as well as the Findings in the concluding section.

7) For a less academic and more personal reading, see the three introductions, the corresponding photos/illustrations and the Preface.

8) The proposals in this thesis derive from an interpretation of empirical material made by the author. Its content will benefit from a reinterpretation by the reader.
PUBLICATIONS

* Appended

EXPOSING – INNOVATION FROM WITHIN THE BOX
Åsa Öberg
Book chapter in DESMA Avenues - reflecting on design + management.
DESMA – The Design and Management Training Network for young researchers
(Artmonitor, University of Gothenburg, 2015)

CARVING OUT THE PRODUCT MEANING – FROM PRE-EMPTYING TO EMBODYING*
Åsa Öberg and Roberto Verganti
Presented at the 21th ELASM International Product Development Management Conference, June 15-17 Limerick, Ireland 2014 (a)

PRE-EMPTYING AND THE MYTH OF THE NAIVE MIND*
Åsa Öberg and Roberto Verganti
Presented at the 19th DMI International Design Management Research Conference, 2-4 sep, London, UK 2014 (b)

MEANING - AN UNEXPLORED PATH OF INNOVATION*
Åsa Öberg and Roberto Verganti
2014 (c)
Awarded The Best Paper Award, International Conference on Innovation and Management, July 15-18; Honolulu, US 2014

INTERPRETERS - A SOURCE OF INNOVATIONS DRIVEN BY MEANING*
Naiara Altuna, Åsa Öberg and Roberto Verganti
Presented at the 21th ELASM International Product Development Management Conference, June 15-17 Limerick, Ireland 2014

TAKING A MEANING PERSPECTIVE – A THIRD DIMENSION OF INNOVATION
Åsa Öberg and Roberto Verganti
Chapter 1 in The Highways and Byways to Radical Innovation edited by Poul Rind Christensen and Sabine Junginger, Design School Kolding and University of Southern Denmark, Narayana Press, 2014 (d)
PREFACE
- What does “revenge” mean, mom, says Little J. We are reading “The Wind on the Moon” by Eric Linklater, an old book from 1944. I interrupt my reading and reflect for a second before giving her as good an answer as I can. A few days later, out running, a new question hits me: Où t'es, papa? sings a voice in my earphones and it makes me slow down the pace a moment. Maybe it’s the rhythm in the song by Belgian Stromae1 or maybe the fact that my own father passed away during my studies – but the song affects me and sparks some reflections on the theme of asking questions. Nowadays, questions around me most often come from children. They seem to have an ability to wonder about the things around them, about humans, books, the mountains of the moon….

It’s much rarer for the same direct questions to appear at work. I hardly ever see grownups ask about something with deep curiosity because they honestly want to know more. I try to think about people around me who ask a lot, listen a lot, reflect and maybe even change their minds. A few friendly faces appear but it is not a crowd of people. Maybe I have been too isolated lately, trying to finish this thesis… Probably people do ask a lot of questions – it’s just that I can’t see them. But, I still have a feeling that certain questions are becoming rare. I think about the questions “Why” and “Why”. And Why - a third time. This little question that often demands a pause, a reflection, a turning back inside ourselves, to the reason for something. When someone asks why, we often need some extra time to answer. By asking “why”, we might get closer to a person, her ideas and motivation. Instead of discussing the latest App on your phone, how it works and where you learn about it, you could also discuss why (at all) you downloaded it. What was the reason for taking time to do that? It takes a bit more time to answer the “why-question” though, - and maybe some people would even feel uneasy to ask what maybe should be “obvious”. Why-questions are not always the easiest ones and therefore I guess we sometimes avoid them.

The little question of why holds such potential though. It teases out something deeper in people. It moves beyond discussions on the surface of things. Instead of discussing the looks of the App, (its “what”) or the functions it offers (its “how”), a little share of that discussion could be contributed to the reason for using it - its “why”. If we were to give a little portion of our discussions to the reflection on “why”, at work or with friends, many exciting things would be revealed about people. We would learn about their own personal reasons for doing or using something and what they find meaningful.
- *What does "revenge" mean, mom,* says Little J. We are reading “The Wind on the Moon” by Eric Linklater, an old book from 1944. I interrupt my reading and reflect for a second before giving her as good an answer as I can. A few days later, out running, a new question hits me: *Où t’es, papa?* sings a voice in my earphones and it makes me slow down the pace a moment. Maybe it’s the rhythm in the song by Belgian Stromae\(^1\) or maybe the fact that my own father passed away during my studies – but the song affects me and sparks some reflections on the theme of asking questions. Nowadays, questions around me most often come from children. They seem to have an ability to wonder about the things around them, about humans, books, the mountains of the moon….

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\(^1\) [https://youtu.be/oiKji0Z_Xnjc](https://youtu.be/oiKji0Z_Xnjc)
The reflection on why, on the purpose of things, has been at the core of this work. It is not a study of individuals and their opinions though, and neither is it solely a study of products. It does not focus on psychology, nor on semantics (even though these would have been nice research paths too!). It's a study of both people and products. Even more, of how people (in this case they happened to be managers in companies) reflect on and propose new meaning of products. More specifically, how the “taken for granted” meaning of a product can change. In more research-like terms, the study has focused on how products can develop into something new, offering a new reason to use them. A classic example would be the Nintendo Wii that changed the meaning of computer games. This type of product used to be about being the fastest and most advanced game with high-resolution graphics. An escape from the real world into a virtual world, a sometimes lonely (but still very exciting) activity. Nintendo changed this perception. They offered a product with simplified graphics, not for expert gamers but for the man (or woman) in the street. A game of interaction, movement and socializing - by staying real - in the real world. The meaning change appears when asking “why use the two products?” In the case of the conventional game console one could answer, “to be an expert in a virtual world”, in the Nintendo case, “to hang out in the real world”. The products propose two different reasons, or meanings, to be used. Neither of them is better than the other. But they both attract people. Changes of product meaning such as the Nintendo Wii filled my head with ideas and wonder several years ago when at the very start of my PhD studies. I wanted to know more about how companies handle product meanings in their innovation processes.

What was the reason for this curiosity then? The main reason was that I felt, this reflection and these deeper layers were missing from discussion about products and communication. Before deciding to undertake the long-term project of a PhD, I had been working with graphic design, something I loved doing. But, after years in front of the screen I started to miss the strategies behind the ideas presented by marketing or product managers. I had also spent a few years at SVID (The Swedish Industrial Design Foundation) at a local office focused on packaging design. While working in the business of paper pulp, paper, packages and printing on the one hand, and with graphical designers and industrial designers on the other, I became very intrigued by their work on developing new products. But I also noticed the tensions between them when discussing new solutions. I longed to learn more about how designers think (and to be honest, I probably also wished to be one myself!). I also wanted to bridge the artistic, often more reflective practice of designers to the world I came from, the marketers and the managers. For a while I lost myself in this desire to learn more about the practice of design and contributing to industries that I had been working with (such as Volvo, TetraPak and Stora Enso). Studies on design, its value and practice were a good starting point but I felt something was missing. The business perspective was not so apparent, and I needed that to link the studies back to my own origins.
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Changes of product meaning such as the Nintendo Wii filled my head with ideas for use. Neither of them is better than the other. But they both attract people. They offered a product with simplified graphics, not for expert gamers but for the man (or woman) in the street. A game of interaction, movement and socializing -

**In more research-like terms, the study has focused on how products can develop**

More specifically, how the “taken for granted” meaning of a product can change. The reflection on why, on the purpose of things, has been at the core of this work. It is not a study of individuals and their opinions though, and neither is it solely a study of products. It does not focus on psychology, nor on semantics and communication. Before deciding to undertake the long-term project of a reflection and these deeper layers were missing from discussion about products. What was the reason for this curiosity then? The main reason was that I felt, this dissertation was always puzzled when being asked to define “meaning”. For reasons that are interest in innovation. I often used the question “why” to start discussions. But I this time, I was still struggling to explain the “meaning” perspective that raised my interest in innovation. I often used the question “why” to start discussions. But I was always puzzled when being asked to define “meaning”. For reasons that are still unclear, it did not make sense to me to create a precise definition. In a later phase, I gave my definition in order to help these discussions forward. You will find it if you turn a few pages forward.

Despite being somewhat confused, I was lucky to have many chances to try to explain myself at conferences and other events. Early on I took part in the European Summer School on Technology Management at Scuola Superiore Sant’Anna di Pisa, in Volterra, Italy where, despite learning to drink coffee not made of coffee but “orzo”, Alberto Di Minin challenged my ideas for a full week. The same summer I also interacted with the community of Creativity and innovation management at their Community Workshop in Paris. Later on, my early findings were discussed with Armand Hatchuel from Mines ParisTech, on problem solving at the 18th EIASM IPDMC (International Product Development Management Conference). I still remember the intense discussions between the sessions on the open and
airy indoor balconies on the second floor of Delft University. I planned to use my French but discarded that naïve idea when being bombarded by Armand’s bright and sharp arguments.

I also had a chance to discuss with Don Norman my research on theories of *user-centered design* at Copenhagen Business School, which I visited several times during my studies, and with Mats Magnusson and the participants in the course *Innovation Management* at the Royal Institute of Technology in Stockholm, especially on the topic of interpretative management. Mats’ listing of names of researches, years and articles, quickly noted down on the board behind him, still stays in my mind and he gave a broad and deep overview of the field of innovation management. He also gave a valuable discussion at my half-way seminar of the Licentiate thesis.

Another valuable moment was the workshop on *hermeneutics*, arranged by the University of Gothenburg. On an island outside Gothenburg a number of researchers from design, philosophy and innovation gathered to share their insights - a few of them taking place in the car on the ferry back and forth. Several scholars also engaged deeply in the presentations of the later papers at the 21th EIASM IPDMC in Limerick as well as the DMI-conference (Design Management) in London.

Next to these domains of design and innovation I have tried to move into “unknown” fields to get inspired and challenged. The hermeneutics workshop was one such event, another one was the Qualitative Research in Management and Organization Conference in Albuquerque and a discussion on ”affordances” with Mark Johnson from the University of Oregon. Even though I started the seminar with a joke about my co-author’s stamp collection, Mark listened and suggested interesting paths to explore, some of them still to be investigated. A wider reflection on hermeneutics has also kindly been given to me through mails, meetings and seminars with Finn Torbjörn Hansen at Aalborg University in Denmark. During a long, windy walk I realized how much there is still to explore at the intersection between philosophy and innovation. In addition to all these interesting physical meetings, the reflections with several editors have helped to clarify my findings. I’m thinking of the editors of Industrial Marketing Management and International Journal of Innovation in Management, and also the editors of the book *The Highways and Byways to Radical Innovation*.

In all these discussions and meetings the question of the “why” of a product has been an implicit one. Discussions have concerned academic issues of framing, defining and positioning. They were much needed but sometimes I missed any reflection on the “things” per se. What would we really see as the meaning of a certain product? Here, my colleagues from the Information Design department at Mälardalen University, especially Yvonne Eriksson and Anna-Lena Karlsson, have challenged me a lot and helped me realize the complexity of product meaning.
But also students I have met have given me opportunities to talk about why “the why question” is so important. I’m thinking particularly of the PhD students in a course of Innovation and Design at Politecnico di Milano who dived into my empirical findings with curiosity and skepticism. In addition the twelve researchers of the DESMA network (Design + Management, a Marie Curie funded, EU related project) where I am currently a member. The European project Light. Touch. Matters. is another platform where I have had the opportunity to share and elaborate my research insights to design practitioners and material scientists from all over Europe. It has been a much-needed outlook into other domains where innovation is practiced and a welcome break from the everyday chores. With all these inspiring meetings and fields of knowledge the navigation of the PhD project has not always remained on a steady course. In the later phase of the project the fun, warm and deep reflections of the Reading Club of Politecnico di Milano on the very subject of meaning and innovation meant a lot for the development of my own thinking and insights. Being a visiting PhD there really fueled my own thinking.

Along the journey of the PhD work, some books have been carried around more frequently than others. The French Philosopher Ricoeur has a red one that I have been reading in parts, time and time again, both fascinated and terrified by his long, rich language. Two black books, one by German philosopher Gadamer and the other by Swedish authors Alvesson and Sköldberg have also taken up space in my bag. Early on, the light blue book with the airplane by Verganti kept me company, later the large Theory U by Scharmer together with a very tiny little book of Frankl found space on my desks at home and in the office. Thornquist’s stylish book made me laugh to tears in a period when I really needed to cheer myself up.

All these people and events have helped to develop my thoughts into texts, presentations and proposals. They have been fundamental for my research on how to understand the meaning dimension within an innovation process. From the early thoughts on meaning as a driver of innovation I came to understand it as an activity including a search for meaning, a struggle, or as a striving for meaning. Maybe an even deeper way to put it would be as in the beautiful speech by Andrew Salomon, who encourages us to forge meaning.

But, how could this work be useful then? My studies have tried to sort out what others (mostly managers) do when they reflect on products, how they try to understand what could be the meaning of it and how this meaning might be different. I hope that this work might inspire other researchers to dive into the intriguing

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3 https://youtu.be/RiM5a-vaNkg
subject of meaning, what it is, what it can be, how it surrounds us every day, how it changes and how, where and why we discuss it. The framework here presented might act as a stepping-stone towards more elaborated understandings. As complex as it is, I hope I will have a chance to see this subject being incorporated into our education in innovation management and design, hopefully with help from domains far from these ones. My wish is that this work might be an excuse to steal a few minutes of the board meetings in organizations, to reflect for a second on the “why” of their business and coming product proposals. That maybe the cases described might provide the inspiration to take on a meaning perspective more actively in the next innovation project. If these reflections do not find time in the busy agendas of people at work, they might give the reader a minute of deeper personal reflection: on her own “why” of things; on the meaning of her activities, relationships, wishes or fears. I think we would benefit from that kind of “time-out” or an “act of wonder”, to quote Hansen.

At a late night party, a friend and secondary school teacher tells me “we (engaged women closer to 40, my note!) believe we are strong and are questioning the system”, while in reality many of us are slowly adapting and accepting what is taken for granted. We discuss my research and agree that the question of why is something to be encouraged throughout the school system. Her passion is to make the teenagers in her classroom glow and question things around them. I think of the students at university that sometimes already left all their “why”-questions aside in the hunt to pass their assignments. Once again it hits me that my stubborn focus on meaning and “why” would be an interesting subject on so many levels outside my own focus on innovation. It has opened up reflections with craftsmen (Why do you really paint houses at your business?), business people (Why do you sell Volvo excavators?) and my own networks of business owners and entrepreneurs (Why do we network, really, when there is social media around?).

The Swedish Scholar Mats Alvesson says in one of his papers that people take dominant frameworks for granted, that they “do not ask questions of the broader purpose” and therefore we are experiencing a loss of social purpose of research.4 I hope this thesis works in the opposite direction – to stretch beyond its contribution within its field of innovation management. The reflection on meaning might open up to a reflection beyond “industry’s concern with production and consumption”, to quote Dutch Design scholar Krippendorff.

He challenges us by pointing to alchemy, mythology and theology to find meaning and make sense of things. I have not adopted the thoughts of Krippendorff fully - yet this work will encourage me to continue my own reflections of meaning and the “why” of things. I keep the big, dark eyes of Little J with me and her

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questions and wonder of the world. I hope you find, or soon will find, your own mental picture of how to keep a reflection on meaning alive inside you.
INTRODUCTION
The reasons for undertaking a study on innovation and meaning and its research setting
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The reasons for undertaking a study on innovation and meaning and its research setting
Piotr, the CEO of Vox, a Polish furniture manufacturer, feels the need to offer something new to his long-standing and loyal customers. Several indications in society have made him aware that the context of life is changing for these people. As they grow older, they often move to smaller homes and therefore need to rethink their living space. Simultaneously, they might face challenges of declining health and this affects the type and arrangement of furniture they use. In Poland, as in many other countries, the elderly are a growing proportion of the population. According to Piotr (and he is probably not alone in his opinion!), these “seniors” are more active than seniors used to be. He is curious to understand how his company’s products might play a role in improving the life quality of the elderly and decides to set up a project to find out.

Piotr contacts a group of researchers working at the crossroads of design and innovation to explore whether their “design-driven innovation” perspective might be valuable in this search to innovate his Vox products. They see design as making sense of something - giving meaning to it - and have studied the “meaning” perspective of innovation processes in companies within design, consumer products and manufacturing. This common interest in how to find and propose new meaning within products becomes the start of a project to innovate furniture for the elderly. Piotr and his team wish to find a direction towards a new meaning or experience of their products, while the researchers wish to test some early assumptions on the practices of meaning as an enabler of innovation. The academic field of innovation management does not yet contain robust research on meaning and how it changes, so this project provides the opportunity to learn more.

The project starts with a three-day workshop where the employees share what they believe an elderly, but still active, person would find meaningful when interacting with furniture at home. All the employees give their own interpretations of what the experience of a potential new product could be. Together they then develop different directions of meanings. They challenge their thinking by polarizing the concepts and finding metaphors to enrich them. After many iterations of proposing new meanings for their products, two directions start to appear. One is the “living bedroom scenario” and the other “the enriched table scenario”. The first relates to the new experience of a bed for an elderly person who might have to spend a lot of time in it. The second relates to a multi-functional table ranging from gardening to hobby projects or space-consuming dinners with many guests.

These two scenarios are then discussed with eight external experts, or so-called “interpreters”, in phase two of the project. For a full day the invited guests and the employees reflect on meaningful scenarios as perceived by an elderly person. The interpreters, professionals within areas such as food, ergonomics, rehabilitation, nature medicine and...
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1 In which my PhD studies have developed, see also the Method section.
spas, enrich the reflections on the two potential meaning directions and give Piotr and his team a deepened insight. Sparked by their reflections on beds and their meaning for elderly people, they decide they want to offer a new meaning of what a bed can be. They develop a “Living-Bed”, intended to be placed in a living room instead of a bedroom. The bed, with more width than a single bed, includes a bookshelf at the back, drawers for private objects, curtains to create privacy, a TV-screen and even some exercise equipment. The idea is that, even if tired or sick, an elderly person can enjoy social life in a living room, inviting friends to the bed as if it were a sofa, grandchildren to play or read, just watch TV or take a nap. The bed reached the market in 2012 as the result of an innovation process inspired by a search for new product meaning. It changes a common view of the meaning of a bed for the elderly: from being a private, almost forgotten place with just one or two functions, to being a place to be active, to socialize or stay in privacy, extending freedom of choice through a wide range of functions.

The Living Bed by Vox was created through an innovation process that looked very different from Vox’s normal practice in innovation projects. The aim of this research is to describe this type of practice, through a study of nine cases and their innovation projects in search of new product meaning.

Meaning - an alternative approach to innovation processes

The perspective of meaning is an alternative approach to innovation.² It gives a chance to reflect on why an individual uses a product, why she likes it and how she experiences it. It gives an answer to the reasons for using it and to its purpose. However, the meaning of a product or artifact can differ. What I perceive as the meaning of a product might not be what you perceive. A fork, for example, to most people in the Western world serves the purpose of picking up and transporting food to your mouth. But, it might also serve another purpose, for example to be used to comb your hair. Depending on who you are and what context you live in, you will give different meaning to products. In addition, what is meaningful today might be of less importance tomorrow.

Reflecting on product meaning is one way of driving an innovation process. It can give a company the impetus towards a deeper reflection on the purpose of their product, on its existence rather than its performance. It might pave the way

² The word “meaning” is not a new “invented” word, though. It consists of an existing discourse within design (see Krippendorff, 1989, Heskett, 1985, Jahnke, 2013).
for the proposal of new products, proposing new meaningful experiences. This is what Apple did when they changed the meaning of a mobile phone, from being a purely functional item to include experience and life style. And this is what Nintendo Wii did with the meaning of computer games, proposing a meaning of socializing “in the real world” instead of being oriented towards experts in a virtual reality (Verganti, 2009). It is also what Nespresso did, when changing coffee from commodity and bulk to indulgence and luxury (Johansson, 2012). In this research, ABB Robotics wished to move beyond their ordinary innovation processes and actively consider the meaning dimension of their products - which their competitor KUKA had already done almost 15 years ago (Öberg, 2012). The proposals of these companies could be described through the use of new technology and market strategies, but they also include a meaning perspective. Their product offers a different meaning, proposing an alternative direction to people (Verganti, 2009, Öberg, 2012).

The dimension of meaning within companies is not a new phenomenon. Understanding what is meaningful, what make sense, is an activity that takes place continuously and on different levels. Engineers engage in meaning-making when trying to sort out problems (Godoe, 2011), marketing and communication professionals spell it out through brand value (Tripsas, 2009), designers strive to give meaning to, or de-signate products (Krippendorff, 1989, Jahnke 2013), whole organizations make sense of their offers (Weick, 1995). But, while these activities concentrate on the meaning at stake, the current meaning, this research focuses on how new product meaning can be proposed. It gives attention to the change of product meaning. In the academic context of innovation management, where this work makes it contribution, the process of proposing new product meaning has received less discussion.

Nevertheless, meaning always springs from humans. Individual people are the ones that in the end give meaning to things. The final interpretation will always be made by them. This does not mean, however, that reflections on meanings are not for companies to handle. Instead, companies can, when reflecting on current product meanings, even question them and consider new meanings. By understanding different humans, their perspectives and what makes sense to them, companies can choose to make proposals for people to consider. In this way, new products with new meanings can evolve.

This might have an impact in a world that is turning more and more complex, and
where people even struggle to find a feeling of belonging, of what is meaningful in life (Frankl, 1970/1988, Antonovsky, 1987, Antonovsky, 1996). When people are living in a “constant flux”, surrounded by mass media and new information technologies (Bauman, 2000, Bauman, 2007), proposing a direction or a new product meaning might **have a value**. It might be one alternative way forward for companies whose normal paths to innovation look unclear. For example, the technological advances that used to drive many industries are not as frequent and revolutionary as they used to be. In addition, they are often easily accessible and therefore copied by competitors.

In short, society and business **contexts look different today** than they used to, driving people to work out for themselves their roles and “what meaning to pursue” (Giddens, 1991). Where man used to rely on tradition, today man searches to find a direction (Frankl, 1970/1988). Reflecting on product meaning might generate products that go beyond the most “obvious” and outspoken needs. It might also enrich existing business perspectives on innovation. But, knowledge regarding innovation and meaning is limited. This study will therefore be concentrated around meaning in relation to innovation. It aims at **deepening the understanding** of the process of such an innovation process.

**Definitions**

When consulting dictionaries, explanations of “meaning” seem to be of two main types. Firstly, related to semantics, the study of the relationship between signs and the things to which they refer (or, the meaning of words and phrases). Secondly, explanations that include a philosophic, less tangible and visible concept by including the words “implied, explicit, important, worthwhile, quality and purpose”. The Online Oxford dictionaries summarize it as follows:

> Meaning - “what is meant by a word, text, a concept or an action… implied or explicit significance… important or worthwhile quality, purpose…”.

This study considers meaning as connected to the **purpose of a product**, as perceived

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4 See Appendix 1 for an extended version of the definition of meaning.

5 The Oxford dictionary (http://english.oxforddictionaries.com, 2015-05-31)
sby a user. It this sense, it accords with the second definition, the philosophic perspective rather than the semantic. With words such as “implied” and “explicit” this definition suggests a personal involvement and judgment. It brings more than signs – it also brings reasoning.

Meaning is used in three ways. First to describe a product meaning, second to describe a change in meaning of a product, and third to describe innovations springing from a meaning perspective.

The product meaning concentrates on the purpose of an artifact as perceived by a user. For example:

A common understanding of the basic purpose of a car can be to transport someone from point A to point B. This can be done by a rusty old Volvo, or by a brand-new Ferrari. The function is still the same but the user-experience is different. Let’s take a look at two cars:

The feelings associated with an old, well-used car, its somewhat shaky steering wheel and matte, sun-bleached finish, its sounds, strange movements and special “effects” might be those of familiarity, affection, reliability, robustness and pride. (I still remember my mother’s old, green Citroën when lifting before “take off” – how it fought and struggled to lift us children in the back seat up in the air!) In this case, navigating through dusk and dawn, snow or mud works fine. It might even be full of life and joy! But, the feelings for the car could, in contrast, also include indifference, annoyance, worries, embarrassment and risk (will this car really take me to point B, or will we stop before?). The reasoning, from this perspective, might be that, “indeed, old cars might have a strong personality, but how long can we really trust them, and they are really so boring, aren’t they”? 

6 Meaning is a widely used concept. In the field of concept analysis this would be considered not a one-dimensional concept but a multi-dimensional one, difficult to define. Still, this research gives a definition of meaning. The purpose of defining it is to enable other scholars to engage and provide their definitions and reflections of this multifaceted concept.

7 The study has focused on managers in companies, in their reflections on new product meaning, intended for an individual in interaction with an artifact. Therefore, when this research uses “product meaning”, it is through the interpretations of what managers in the studied companies believe a new product meaning could be, for the user. It is not their own personal opinion about what product meaning should be. This perspective needs to be considered when the word “product meaning” appears in the text, see graphic in the Method section.
In contrast, when leaning down to enter a new, glittering car, sensing the characteristic new car smell and maybe caressing its smooth leather seats, some people would be amazed, impressed, curious, attracted and eager to drive. (Unfortunately, I have no interesting racing memories to relate here!) Feeling the breath-taking power of the engine and barely touching the ground while riding exhilarates many humans. It might even be an awesome ride! Other people might react differently. They might be bored, suspicious, reluctant, anxious or scared (will this car, with its sound, strange movements and special “effects”, really take me to point B, or will we crash before?). This thought might arrive from the idea that, “yes clearly, here comes a strong car with bold attributes, but it is larger than life, unnecessarily fast and boringly predictable”.

The perceived meaning of the old and the new cars can be different, depending on who you are, your connection to the cars, your values and beliefs. Therefore, people will also give different purposes, meanings, to the product.

This example indicates that perceived meaning can derive not only from tangible values such as age, cost of operation and nationality, but also from emotional and symbolic values.

**The change of product meaning** instead focuses on when an artifact is interpreted in such a way that its meaning changes from one purpose to another.

**The innovation arising from a product meaning** perspective focuses on the positive outcome of a process, where a new product meaning is proposed. For example, the case of Apple’s I-phone or the Nintendo Wii game console, mentioned above.

Note, that the focus of the study is the *process* of innovating from a meaning perspective. Therefore, this work will not elaborate extensively on the *content* of new proposed product meanings. When describing product meanings though, the study refers to the intended meaning that users will (hopefully) perceive, for example through advertising. The descriptions of meanings also arise from what can be considered as a common perception or conventions in an industry.\(^8\) Certainly, individuals will give their own personal meanings to the discussed products.

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\(^8\) For example, when the “existing” and dominant meaning of a manufacturing robot is to be explained, this derives from the common perspective in the industry, not only from what the managers in the cases studied believe. When the new meaning of a bed was introduced in the beginning of this work, it is a perception of what is communicated in marketing material and perceived by media and researchers, it is not only what the managers themselves perceive.
Objective and research question

This research aims at increasing the understanding of the dimension of meaning within innovation processes in companies. In particular, how companies can practice innovation when in search of new product meaning. In accordance with this overall research objective, one main question has guided the work:

**What are the practices that support innovation processes when in search of a new product meaning?**

This research question is answered in the second part of the thesis, “The process”. In approaching this question, a background study of the dimension of meaning in innovation processes was performed (Part 1, “Meaning and its relevance”). It sheds light on the characteristics and relevance of this type of innovation and serves as a foundation to the main study.9

Related research

Several theories assisted in the explanation of the empirical material. Some of them belong to the discourse in which this work aims to make a contribution, namely the innovation management field (for example the studies by Verganti and Jahnke). Others belong to fields outside this domain (as in the philosophical field of hermeneutics and the Theory U by Scharmer). These perspectives are briefly discussed below and further developed in the following chapters.

Perspectives within the innovation management discourse

Fall 2013. Innovation Lab, an ongoing decade-old research project, has just launched their learnings and findings in the book “Discontinuous Innovation – Learning to Manage the Unexpected” (Augsdörfer, Bessant et al. 2013). The illustration on the front, a pink box drawn with chalk on a black background, tells the reader to “think outside the box”. One might assume that this means to leave your own “box” of thoughts, values and ideas - and look elsewhere for innovation. On closer inspection, this book describes innovation as a bundle of processes and dynamics that companies need to handle to survive. The first line makes it clear by explaining that it is “…pretty clear that any organization which fails to change what they offer… will find it difficult to survive”. The message is straightforward

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9 See also graphic at the end of this Introduction section.
– this book is about surviving, as a company.

This publication is not alone in its approach. Studies of innovation management have often focused on one of two domains of research, technology or market (for an extensive review see Marinova and Phillimore 2003, Garcia and Calantine, 2002 and Calantine et al., 2010). In previous decades studies have explored the antecedents of technological breakthrough (Abernathy and Clark, 1985, Henderson and Clark, 1990, Utterback, 1994), the applications of existing or new technologies (Christensen, 1997), technology foresight (Rohrbeck and Gemünden, 2011) and/or products to penetrate new market domains (Kim and Mauborgne, 2005, McGrath and MacMillan, 2009).

One widely present perspective in the academic discourse of innovation, at least when it concerns business and design, seems to be the focus on solving problems - and therefore on finding solutions. A well-structured and rich argumentation of this perspective, that innovation has often been about solving problems, is illustrated by Marcus Jahnke (Jahnke 2013) tracking the roots of “innovation as problem solving” back to the studies of Pólya (Pólya, 1945), which suggest four phases in addressing problems. Jahnke also recognizes this perspective in the 1946 studies of Gerich Altshuller, the inventor of TRIZ and the “theory of inventive problem solving” (Altshuller 1984). This strong focus on the problem relaxed in the 60s, and a somewhat less strict approach to problem solving developed. Focus turned to the creative capabilities of humans and came to be embedded in “creative problem solving” methods (Gordon 1961, Osborn 1963), and to the creation of a “science of design” (see for example Herbert Simon and his analysis of decision making processes, Simon, 1969/1982).

The perspective that innovation is about “(creatively) solving problems”, seems to be an unspoken starting point in much of the design and innovation management literature. See for example the model of design hierarchy of Clark, 1985, or the problem solving cycles in Clark and Fujimoto, 1991, in system engineering design by Pahl and Beitz, 1988 and in innovation strategy (with reference for example to the resource-based view of corporations by Wernerfelt, 1984 and their dynamic capabilities, Teece et al. 1997). In these approaches, innovating focuses on “finding” a solution, implying that an optimal solution does exist. Similarly, the body of literature on concurrent engineering concentrates on effectively finding optimal solutions to given technical problems (Krishnan et al. 1997). These theories relate to studies within product development management. Here, creative problem solving also concerns the importance of communication and team working.

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10 For example as in the notion of “swimming into a blue ocean” (market) instead of staying on the battlefield of a red ocean (the existing market where competitors compete, see Kim and Mauborgne, 2005.)
(Khrisman and Ulrich 2001), as well as the cross-functional integration between R&D and marketing (Moenaert and Souder, 1990), between product engineering and manufacturing (Gerwin, 1993) or with external partners (Clark 1989, Littler et al. 1995). In a well-known study of product innovation in the car industry, the analysis is centered on a model of innovation as information processing (Clark and Fujimoto, 1991).

Research in design gives a nuance to this focus on defined problems. More than 30 years ago Schön described how problems are not fixed but need to be re-framed and that rather than talking about problems, we should talk about uncertain problematic situations (Schön, 1983). About ten years later, Buchanan showed how problems can be considered as “wicked problems”\(^\text{11}\) and how the field of design approaches them as being “without a single solution” (Johansson, Woodilla et al., 2013). About a decade later the design practice of problem solving came to be described in different kinds of processes by among others Lawson (Lawson, 2006) and Cross (Cross, 2011). But, still, these studies assume that innovation is a solution to a more or less defined problem that needs to be understood (Dorst 2011). Another recent discourse is the one related to “design thinking” (Kelley 2001, Brown 2009, Martin 2009, Lockwood 2009, Kelley and Kelley 2013, Liedtka 2014, Brown and Martin, 2015). From this perspective, innovation involves getting close to users, understanding what they find meaningful, and then creatively generating ideas within the existing context. In this sense, design thinking focuses on finding solutions to address existing meanings in the lives of people. It gives insights into problem solving but less into innovating meanings.\(^\text{12}\) Close to design thinking and the users as a source of innovation are the fields of open innovation and crowdsourcing. Instead of generating ideas internally (through methods such as brainstorming), innovation is driven with the help of communities of external users (Chesbrough, 2003, Surowiecki, 2005, Von Hippel, 2005, Brabham, 2008). These are involved in innovation processes, set by a company, with a defined problem at hand.

The research in this thesis does not focus on solving problems. Rather, it is related to opportunities, hidden or implicit, driven by the needs and (unspoken) wishes of humans. The focus is transferred from the purely cognitive or creative to the social. This social dimension has been stressed before, as in the social-technical systems and the Actor-Network theory of Latour (Latour, 1987), Bijker and Law, (Bijker and Law, 1994) and Rogers (Rogers, 2003). Here, clusters of

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\(^{11}\) Even though the concept of ”wicked problems” was described already by Rittel, who borrowed the expression from Popper, see Buchanan, 2001 or Churchman, 1967.

\(^{12}\) See Fulton Suri, J. and Gibbs Howard S., 2006 for a reflection on meaning in the context of design thinking.
actors engage in meaning creation, making these theories close to the perspective in this research. A difference, even if subtle, might be that while the above-mentioned theories focus on material and semiotic levels of meaning making, this research is directed to the process of innovation.

As described earlier this research focuses on innovation from the perspective of meaning, as perceived by the user. It concentrates on the process of proposing changes in the purpose of a product, in the “why” rather than in the “how”. It would seem that this dimension of meaning is a field that has only marginally been explored within innovation management. Most existing theories do not focus on the combination of meaning and innovation. It has been studied by Verganti (Verganti, 2009), who also served as the main inspiration for this work. Similar perspectives are also described by Moon in her book “Different” (Moon, 2010).

**Perspectives outside the innovation management discourse**

The word *meaning* has connotations to a plethora of fields. It can be discussed as a part of life, as within philosophy and psychology. Further, it can be connected to artifacts with cultural or symbolic connotations or to product design. A third perspective includes meaning in relation to business, connected to organizational perspectives, marketing, entrepreneurship and service innovation.

One perspective that can be linked to this research is the design discourse. Design, which derives from the Latin de-signare, to designate, to make sense of things (Krippendorff, 1989) is per se about making meaning, to “create meaning” (Heskett 1985). Aligning with this reasoning is the study on “meaning making” in relation to the practice of designers (Jahnke 2013). Another perspective where meaning is a central concept is the philosophic field of hermeneutics. It gives insight into the interpretative process of understanding meaning, for example, as when different perspectives blend in a “fusion of horizons” (Gadamer, 1960/2004). The empirical material can also be linked to a more critical stance of interpretation - a “clash of interpretations” - where opinions of different kinds encounter or even collide with each other (Ricoeur, 1977/2010, Kristensson Uggla 2002). This critical ability is also described in critical literacy within the field of education (Scherrff, 2012, Lewison et al., 2008). Closer to management practices of innovation are the studies of Theory U by learning and leadership scholar Otto C. Scharmer (Scharmer, 2008) and the notion of “presencing”. Meaning is described as moving beyond rational information processing to a deeper and intimate part of our self – but as part of, and in relation to, the context around

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13 See Appendix 2 for a wider reflection.
us. Another discourse with links to this research is the sense-making discourse, related to how organizations make sense of themselves and their environment (Weick, 1995, Tripsas, 2009). In addition, there is the framework of “interpretive management” and its “interlocutors” (Lester et Al., 1998) or the “intermediates”, people within companies that cross borders (Hargadon and Sutton, 1997). These perspectives stress dynamics within the organizational boundaries.

To summarize this section on related theory, the field of innovation management looks closely related to problem solving. It focuses on processes, information sharing and involving users. Design studies give some insights into the complexity of setting problems and hermeneutics gives insights into the act of interpreting meaning. Where processes are concerned, the Theory U offers explanations of the individual and her meaning making. Still, for those interested in the combination of meaning and innovation, there is no rich stream of research visible today.

**Limitations**

Faced with a concept that can be related to such a wide spread of theories, several limitations had to be established. First, the study focuses on the process of innovation, not on innovation as such. An important part of this process is its outcome, a product including a proposed new meaning. Therefore “product meanings” will be described even if the main focus in not the new meaning as such.

Second, the method to understand this process has been to study and interact with managers in companies—not the end-users. The interpretations of the managers on new product meaning are described as part of the innovations process—but these interpretations are not the central construct studied.14

Third, the contribution is directed mainly to the innovation management field. It might give a partial contribution also to the design-discourse and its processes. It does not aim to address other academic discourses such as, for example, organizational studies.

Theoretically, the study is limited to the use of certain perspectives to explain its findings. It finds support in theories of innovation management and design (Verganti Jahnke, Hekkert, Krippendorff), within hermeneutics (Gadamer and Ricoeur) and learning and leadership (Scharmer). Empirically, this research includes the study of “best cases” on the one hand, and collaborative projects with

14 The managers make interpretations of what they believe the end-user will experience. It is their work, their reflections and practices that constitute the main study.
companies on the other. Some empirical investigations have been related to consumer-oriented products, while others relate to the robotic and other manufacturing industries.

Lastly, the study will not elaborate on designer-related theories such as ergonomics, semiotics or semantics, aesthetics or linguistics.

**Outline**

This work consists of two main parts, framed by an introduction and a conclusion. It also includes a section on the methodological approach, presented directly after this section. Theories will be presented in relation to the two main parts of the study: firstly to the concept of meaning as such - and to its relevance (Part 1). Here, research leverages the philosophy of hermeneutics to explain the characteristics of innovation from a meaning perspective. And secondly, in relation to its practices (Part 2). Research here leverages the “Theory U”, theories from design and from critical literacy and education to explain the practices. The reason for this division is that no single theory was applicable to address the objective of this research: to increase the understanding of the dimension of meaning within innovation processes.

![Picture 1 The structure of the thesis and the connected publications. Appendix papers in dark yellow.](image-url)
The two main parts start by relating to theory where this work makes a contribution, i.e. the innovation management field. This is in order to give a picture of what has currently been studied and where research looks less robust. Thereafter the specific method connected to the research focus of the part will be described. After this, empiric material, analyses and proposal follow, supported by a second theoretical section where supportive theories are presented. Both parts end with a critical reflection. The thesis ends with an overall reflection and some thoughts on future research. It is supported by nine different academic contributions and nine case studies, see table below.

Table 1 The two studies and its connected publications, cases and additional notes

<table>
<thead>
<tr>
<th>PUBLICATION</th>
<th>CASE</th>
<th>NOTES</th>
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<tr>
<td>Journal Paper 2 (4) - IMM 2013*</td>
<td>RoboCoaster, ABB Robotics, POC, BayerMaterialScience, Electrolux, Philips</td>
<td></td>
</tr>
<tr>
<td>Paper 5, IPDMC 2014 (a)*</td>
<td>Shinebridge (Jaune), Marron, Blanc, Needles&amp;Pins (Vert), Vox, Trewig</td>
<td></td>
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<tr>
<td>Paper 6, IPDMC 2014*</td>
<td>Shinebridge</td>
<td></td>
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<tr>
<td>Paper 7, DMI 2014 (b)*</td>
<td>Marron, Blanc, Shinebridge (Jaune), Needles&amp;Pins (Vert)</td>
<td></td>
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<tr>
<td>Book Chapter, DESMA 2015</td>
<td>Marron, Blanc, Shinebridge (Jaune), Needles&amp;Pins (Vert)</td>
<td></td>
</tr>
<tr>
<td>Paper 3, IPDMC 11</td>
<td>RoboCoaster, ABB Robotics, POC, BayerMaterialScience, Electrolux, Philips</td>
<td></td>
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<tr>
<td>Journal Paper 1 – IJM 2014 (c)*</td>
<td>RoboCoaster, ABB Robotics, POC, Procter &amp; Gamble</td>
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<tr>
<td>Paper 2, IPDMC 2012*</td>
<td>RoboCoaster, ABB Robotics,</td>
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<tr>
<td>Paper 3, IPDMC 2011</td>
<td>RoboCoaster, ABB Robotics, POC, BayerMaterialScience, Electrolux, Philips</td>
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<tr>
<td>Paper 8, IAM 2014 (d)</td>
<td>ABB Robotics, Bombardier</td>
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<tr>
<td>Book Chapter</td>
<td>RoboCoaster, ABB Robotics, POC, Procter &amp; Gamble</td>
<td></td>
</tr>
<tr>
<td>Design School Kolding 2014 (e)</td>
<td>RoboCoaster, ABB Robotics, POC, Procter &amp; Gamble</td>
<td></td>
</tr>
<tr>
<td>Paper 0, ICED 11</td>
<td>ABB Robotics, Bombardier</td>
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* appended paper


Best Paper Award for the article “Meaning – An Unexplored Path of Innovation” at The International Conference on Innovation and Management, Honolulu, August 2014.

The chapter contributes by being the first, introductory chapter of the book.
THE METHODOLOGICAL APPROACH
THE METHODOLOGICAL APPROACH
This thesis is intended to deepen the understanding of innovation processes and meaning by proposing new theory—but also by describing the method developed. In this section, the research methodology is described in three levels, from the starting point via the research design to the everyday work. More detailed descriptions of the methods can be found in the following two parts respectively (see the graphic on structure in the Introduction section).

Note that the focus of the study has been to understand the practices that support an innovation process towards finding a new potential meaning of a product. In this process, the aim is to propose a product with an intended new meaning (see left-hand side of the graphic below). This proposed and perceived meaning will be discussed in several cases, such as the RoboCoaster by the German company KUKA. Still, the dynamics between the user and the artifact is not the main focus of the study.

Instead it gives priority to the process, one practice being the interpretation process where managers make interpretations, or appropriations, of this potential new product meaning.

The focus of the study— the innovation process when in search of new product meaning.

**The starting point**

As discussed, in innovation management discourse "meaning" does not yet comprise a wide range of studies and hence no well-developed methods were found that could inspire this research. This shortage could have been met by applying other, already well-established, methods from the field. But meaning, being a constantly changing and subjective parameter, looked less aligned with practices of innovation management research where "hypotheses" and "data" are normal for posing and answering research questions.16 These approaches looked less suitable

15 For sake of clarity the word "user" has been used here despite the fact that "THE" user does not exist. Humans cannot be considered as stereotypes, rather as different individuals engaging in the creation of meaning. To quote Krippendorff, "THE user is a myth", Krippendorff 2006, page 63.

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![The focus of the study – the innovation process when in search of new product meaning.](image)

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As discussed, in innovation management discourse “meaning” does not yet comprise a wide range of studies and hence no well-developed methods were found that could inspire this research. This shortage could have been met by applying other, already well-established, methods from the field. But meaning, being a constantly changing and subjective parameter, looked less aligned with practices of innovation management research where “hypotheses” and “data” are normal for posing and answering research questions. These approaches looked less suitable

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for a study of an exploratory rather than confirmatory nature. Therefore, faced with this new research stream, alternative research approaches were considered. Meanings that stem from human interpretation would benefit from being discussed in a context where the individual, and therefore subjective thought, could be iteratively leveraged. The platform for this type of research approach was found in the philosophical field of hermeneutics where empirical material is considered not as facts (“data”), but as insights, not value-free as long as it relates to human beings (Alvesson and Sköldberg, 2008). In this way hermeneutics resonates with meaning, as being an interpretation made by an individual.

Hermeneutics also proposes a constant improvement of proposals. It allows an interpreter (the researcher) to be clear and explicit about her own background and how this might affect the research made. This transparency indicates a readiness to change opinion along the way, to spend time on alternative perspectives and possible explanations. Nevertheless, in the later stage of research observations were incorporated through an active participation in some of the companies studied. This provided a reflection of the role of the researcher, making perspectives of action research come into consideration. In the next two sections, hermeneutics and action research will be further discussed.

**Hermeneutics**

The study of hermeneutics crystallized three concepts that came to serve as a perspective through which the empirical material has been interpreted. In this sense, the role of hermeneutics could be described as an analytic methodological “tool” to read the observations made. The first concept in this “lens” is the reflective hermeneutic circle, where the parts of an action or situation can be understood only if placed in a context, a wholeness (Alvesson and Sköldberg, 2008). Vice versa, the context can only be understood if the parts are understood. The iterative move between the whole and its parts is a process that could be observed among the managers in the empirical material. It will be further explained in the first part of this study. The second concept focuses on the individual, or a so-called interpreter, and her subjective understanding or interpretation of something. The use of individual interpretation in the process of understanding potential new product meanings is another pattern visible in the empirical material (see especially the section on Criticizing in Part 2). The third concept includes a critical perspective, where a diversity of interpretations confront each other

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17 Hermeneutics originates in the interpretation of written texts in literature, religion and law, but has come to be used also for the spoken word and actions in general, see Alvesson and Sköldberg, 2008.

18 These attempts are visible in the concluding reflections of the coming two parts.
(Ricoeur, 1977/2010) in the process of developing new understanding. This approach is a practice that was also observed in the empirical observations.

In addition to the function as a “lens” to read the empirical parts, hermeneutics also served as a guide to take observations further. By iteratively moving between details of observations (such as notes and quotes) to larger processes (such as a series of workshops), the proposals were re-considered, adjusted or changed. Similarly, this study has been exposed to several contexts, subjecting early research findings to other researchers (or interpreters) outside the field of innovation management to enrich the understanding of the material. It enabled a critical perspective and contributed to further refinements of the work.

(Iinnovation) Action Research

If the field of hermeneutics was a major inspiration in the first phase of research, the phase that followed would be characterized also by collaborative efforts between researchers and companies. The role of the research group changed, from subjectively observing the innovation process to actively participating in it, bringing an inter-subjective approach. By sharing reflections and bringing theoretical constructs, (even experiments!) research looked close to an “innovation action research” (Kaplan, 1998), where activities of a process turn into something more than practice (and learning) – namely, to generate knowledge (Coughlan and Coghlan, 2011). This mutual work shows similarities to a “trilateral science” where a combination of “data, theory and values” stimulates new knowledge (Galtung, 1977).

Planning the research journey

The design of the study has taken inspiration from the DRM-methodology (Blessing and Chakrabarti, 2009). It begins with a research clarification and con-

19 These consist of a group of several researchers within innovation management, mostly belonging to Politecnico di Milano, Italy but also from Mälardalen University, represented by me.

20 Inter-subjectivity relates to a common experienced and understood world of shared meanings, interpretations and culture, a commonsense knowledge enacted in social practice studied through “interpretive procedures” such as turn-taking. See Cunliffe, 2010 for a thorough description.

21 A phase including several activities, such as including a mapping of current understanding, performing literature studies, interacting with the research field as well as industry and lastly, setting up a research plan.
continues with a descriptive study, in which empirical data is collected\(^{22}\), resulting in increased understanding of the problem at hand (see the section “The first phase” below and the Licentiate thesis Öberg, 2012). In the second phase, the study included a “testing” of early assumptions to develop support (or not) for these.

**The everyday work**

**The first phase**
The study started by investigating the dimension of meaning in the innovation processes within the robotics industry. Instead of choosing cases “heard of”, or cases of special interest to a company, a method was developed to allow for a selection of the most valuable cases.\(^{23}\) The method was prepared as a workshop\(^{24}\) in which one of the companies in the industry, ABB Robotics in Västerås, Sweden, participated. It enabled the creation of a comprehensive map of innovations in the robotics industry and helped to sort out the different meanings connected. The map was discussed and validated with the company and with researchers\(^{25}\) before deciding which cases to study. The first case (Case 1), a software case, The

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\(^{22}\) This part included meetings, interviews, discussions and workshops with the companies participating as well as an analysis of the material through the lens of hermeneutics.


\(^{24}\) This workshop was conducted in October 2010, recorded, transcribed and listened through by three of the five participating researchers in the project.

\(^{25}\) At Mälardalen University and Copenhagen Business School.
RobotStudio, came from ABB Robotics, the second (Case 2), designated the RoboCoaster, combined hardware and software from a competitor, KUKA Roboter GmbH, based in Germany (and also included the Da Vinci system).

The second phase
The study here focused on developing and empirically testing the insights drawn up to this point. The studies came to involve companies that shared an interest in innovation processes from a meaning perspective and the early proposals of developing methods. This mutual interest led to a collaborative project with a multinational corporation within consumer goods (Case 3). The project focused on trying out and refining methods on how to practice innovation when in search of new product meanings. This was not a “consulting project” with guarantees of “success”, but there was a willingness from both employees and researchers to learn more and put early insights into practice.

When several companies showed interest in the ongoing research by the research group, four additional projects took place during a period of two years (Cases 4, 5, 6 and 9 below). These included two projects with another global brand within consumer care (Cases 4 and 5), a worldwide fashion retailer (Case 6) and a major player in manufacturing hardware, linking research back to the interest in hi-tech companies (Case 9). In parallel with these major cases, follow-up studies were performed on two cases (Case 7 and 8) that had been partly studied in the first case. Also, some smaller cases were studied.

Investigation of cases

The empirical material can be divided into two major parts. First, three cases connected to the robotics industry, ABB Robotics, KUKA/RoboCoaster and the DaVinci system. In the first case, workshops, interviews and collection through secondary sources have been carried out. In the second case the empirical material was collected through interviews and secondary sources. The third case has been studied exclusively through secondary sources (see the left-hand side of the illustration and the table below).

Second, the seven cases of Shinebridge, Blanc, Rouge, Needles&Pins, Deloitte, Vox and Prysmian, the majority of which belong to consumer products. In all these cases, the focus has been on testing and developing methods connected to practices focusing on innovation from a meaning perspective. The empirical material derives from between 2-5 workshops for each case. In parallel, several complementary cases have been studied. These are the cases of Electrolux and POC, in Sweden, as well as the cases of Procter & Gamble in Venezuela and Trewig in Italy. These all include workshops and discussions. In addition, the study has been
supported by the study of some cases exclusively through secondary sources. These are the cases of BayerMaterialScience, Philips, Nintendo Wii and Huggies (right-hand side of illustration).

Table 2 The cases and their type of study

<table>
<thead>
<tr>
<th>CASE</th>
<th>MAIN STUDY</th>
<th>COMPLEMENTARY STUDY</th>
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<tbody>
<tr>
<td>1 ABB Robotics RobotStudio</td>
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<tr>
<td>2 KUKA/RoboCoaster</td>
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<tr>
<td>3 Shinebridge/Jaune</td>
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<td>4 Blanc</td>
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<td>5 Rouge</td>
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<tr>
<td>6 Needles&amp;Pins/Vert</td>
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<td>7 Deloitte</td>
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<td>8 Vox</td>
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<tr>
<td>9 Prysmian</td>
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Additional cases
Da Vinci
POC
Electrolux
Trewig
Marron
Huggies
Philips
Bayer Material Science
The first phase

Case 1, The RobotStudio at ABB Robotics

The workshop in the first phase yielded valuable information material about the RobotStudio, provided by employees who had worked closely on the case. It was enriched with five semi-structured interviews with managers within pre-development, software development and product management, with the help of two different questionnaires. To be able to compare the case with the normal structure of their innovation process, empirical material was also collected on the general innovative strategies.

After analyzing the material together with the material from KUKA and other non-robotic but consumer-oriented cases, and comparing with the literature most closely related to the research, some first proposals were developed. These preliminary findings provided an opportunity to describe the characteristics of innovation processes driven by a meaning perspective (see also the first part of this study below). The findings led to a second workshop with ABB Robotics, concentrating on the practices of the innovation process connected to meaning. After the workshop, the company decided to increase their activity in the field of innovation inspired by meaning. A formal decision to begin a project on innovation strategies and meaning was taken. Plans included involving top management, but this plan did not come to fruition, and the project stopped.

Case 2, The RoboCoaster at KUKA Roboter Gmbh / RoboCoaster Ltd (and the Da Vinci system by Intuitive Surgical)

The information provided by managers at ABB Robotics in the first initial workshop created interest in this case. The first step was to meet executives of the company concerned. Two interviews took place during spring 2011, with the CEO at the Swedish subsidiary and with the Future Lab manager in Germany. KUKA showed interest in the ongoing research and wished both to share

26 These were presented academically in the form of one conference paper (the IPDMC conference in Delft, Netherlands in June 2011), two journal papers (the Industrial Marketing Management in 2013 and the International Journal of Innovation in Management, 2014) and one book chapter, see Publications.

27 The characteristics have been gathered under the name ”nature” in earlier versions of this research.

28 Also studied through documentations on the Internet and commercial material.
and also to gain new knowledge by participating in the research more actively. Through a visit to the headquarters in Augsburg\textsuperscript{29}, this study came to incorporate an additional retrospective case within robotics, the Da Vinci system (designed by Intuitive Surgical in partnership with KUKA). It also directed interest towards the relevance and economic value of an innovation including a changed product meaning.

**The second phase**

The focus on industrial robotics and their product meanings changed in the second phase of this research\textsuperscript{30}. Instead of understanding the concept of meaning, per se, it turned to the *practices* of such a process, where insights were less developed. The interaction between researchers and the companies was structured in two or three stage-projects (see illustrations below and in Öberg and Verganti, 2014b).

**The first stage** included activities of “opening” a group of employees to talk about and share personal insights into their products and their meaning. Individual reflections in the form of homework were carefully presented and discussed in depth by researchers and employees, forming patterns of different proposals of product meanings\textsuperscript{31}.

**The second stage** enabled a wider discussion of new meanings by embracing perspectives of external voices, beyond the thoughts of individuals of the company. This stage came to be developed with inspiration from what Verganti described as “interpreters” (Verganti 2009).\textsuperscript{32} By confronting and blending different perspectives and mindsets, assumptions of new meanings came to be further developed here. These emerged not only through oral and written language but also through communication of objects, music and movies.

**The third stage** could be described as a moment of giving shape to well thought-through potential new meanings. Here, proposed product meanings got a chance

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\textsuperscript{29} In addition to the interview with the manager of the Future Lab, other employees within product development and R&D also took part, making use of the questionnaires used previously at ABB Robotics. In addition, the experimental workshop for developing new sensitive robots was also visited.

\textsuperscript{30} Consisting a two-year-long phase packed with six case studies.

\textsuperscript{31} This required a workshop of 2.5 – 3 days (see Part 2, the practice of Exposing for a closer description of this “opening” phase).

\textsuperscript{32} The research group developed a 2-2.5 day workshop including experts from “far flung” fields but with a connection to the product in focus (the so called “Interpreter lab”). See Part 2, and the section on “Criticizing” for a thorough description of this discussion phase.)
to become less abstract and more tangible, giving shape to conceptual ideas growing from a meaning perspective. The three stages encompassed a period of 6-8 months with every company, excluding preliminary discussions/seminars as well as follow-up discussions and progress into new projects.

Since these projects connect to the future innovation strategy of the companies, it has not been possible to disclose their names or their meaning directions. All companies, except three, the Polish furniture company Vox, the accountant consultant Deloitte and the manufacturing company Prysmian, have therefore been re-named. This research relates to Shinebridge (also named Jaune in one of the publications), a company within consumer goods, facing challenges with their younger customers; Marron, a sister company within consumer electronics, where the challenge was to re-think the meaning of their core product; Rouge and Blanc, two projects from another large corporation within consumer goods, giving valuable input through two different projects, one connected to finding a new market and the other to reflecting on the meaning of a product. In addition, this study also reports the short story of Trewig, a furniture manufacturer, along with the official story of Vox, challenging what the meaning of a bed for the elderly could be. The last case is Needles&Pins (also labeled Vert in one of the articles), a worldwide player within the fashion industry, again faced with decreasing sales among their youngest customers. To protect the informants these have also been re-named, as for example in the case of Mr. Q and Mme O.

**Case 3, Shinebridge (Jaune)**

This company showed interest in the concept of “design driven innovation” (Verganti 2009) leading to a seminar and training on the insights and methods still under development by the research group. An 18-month-long project took place on innovation driven from a meaning perspective of products within personal care

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33 See Öberg Verganti, 2014b and Part 2 for a more detailed description of this shape-giving, or “embodying” phase.
to a market targeting young customers. The case consisted of 5 workshops of 2.5-3 days, in UK and Boston, US. It included top executives from R&D, product and innovation management, in total encompassing around 30 individuals and two external consultants on communication. The specific subject cannot be disclosed here. The research team consisted of four researchers (two professors in innovation management and two doctoral students). In addition, the case contained three follow-up interviews with project and product managers, recorded and partly transcribed. Discussions between the employees and researchers are still ongoing.

Case 4, Rouge

In this case, the project focused on the investigation of potential new product meaning in an established but growing market of consumer products. For the same reason as above, its content cannot be fully described. Empirically, the case consisted of 2 workshops, in total 5 days, all conducted in Liverpool, UK. About 15 managers within R&D and product development participated. The research team consisted of one professor, one doctoral student and one external researcher/consultant previously involved in similar projects.

Case 5, Blanc

This case included explorations of innovations, meaning and technology within an existing market, again within consumer products. For the same reasons as its “sister” project above details cannot be provided. It consisted of 3 workshops (in total 8 days) all in Liverpool, UK including about 15 managers (not everyone participated in all phases). The research team consisted of the two researchers above and a third doctoral student.

Both these cases are internally handled by the company behind Rouge and Blanc. The company is in the process of incorporating the projects into their innovation strategy.

Case 6, Needles & Pins (Vert)

This project focused on meaning and new retail experiences in the fashion industry. It spanned both the European and American market and therefore included workshops on both sides of the Atlantic. In total 5 workshops took place, all of
them 2.5-3 days long, in the Milan region in Italy and in New York, US. Around 25 people participated in this project, which also included several follow-up meetings. The constellation of researchers included three of the ones participating above in Case 5 and a fourth researcher, specializing in retailing and meaning. The collaboration has led to two new projects and the recruitment of a new position connected to a strategy of meaning and innovation within the company.

Case 7, Deloitte

This project started as a two day workshop/training in London 2011 with four top executives from the Australian part of the company. The focus was on meaning and innovation in the accounting business. Deloitte then moved on with communicating and implementing the early insights - to the point that new services were launched and successfully taken to market in 2014. A three-day visit with combined workshops, interviews and training seminars took place in Sydney and Melbourne. Two additional interviews followed. Two researchers conducted this research. Deloitte and their clients have shown interest in further collaboration in innovation strategies from a meaning perspective.

Case 8, Vox

This project started in Poznan, Poland. It consisted of one 2-day and one 3-day workshop, and focused on innovation driven by meaning within furniture. About 15 people participated. The results led to a new product on the market. The same researchers as in the Deloitte case investigated this case. No further cooperation has taken place since the launch of the new product.

Case 9, Prysmian

This project belonged to a hi-tech manufacturing market. It started in Milan and stretched over 8 months. Three workshops were conducted with 12 managers within R&D and product management. The research team was the same as in Case 3.

In addition to the main study of robotics firms and consumer goods firms, the research has also identified other cases which have involved innovating meanings.

34 Case 7 and 8 were studied already in the first phase, but the outcome of their innovation processes came to be studied further in the second phase.
Some cases were partly studied before this research began. These included the Nintendo Wii game console, the company BayerMaterialScience and the Philips ambient experience (Verganti 2009, Verganti, 2011).

Additional cases were the “mini-cases” of the downhill skiing helmet company POC and the home appliance company Electrolux, both in Sweden. Minor studies have also been performed on the Italian Lamp producer Trewig and the American corporation Procter and Gamble, and its emerging markets in Venezuela. In these cases, the methods for collecting empirical material have differed from case to case. Most of them have consisted of interviews, recorded and sometimes transcribed. The two later ones also included one-day workshops. In addition, secondary data has enriched the understanding of the companies. For reasons of confidentiality, some of the extensive collection of material could not be used in this thesis. These studies have been performed by the same team as in cases 7 and 8.

Analysis of cases

The material collected has been tracked, coded, and then interpreted with the help of the perspective of hermeneutics, described above, firstly by the group of researchers, and then with other researchers from the perspectives of management, innovation and design. It has been read in the light of several theoretical approaches (see Appendix 2) and earlier findings. Reflections have also been shared with the companies’ teams to further check the interpretations with their perspective. The insights have also been presented in different arenas of discussion, for example in connection with philosophy35 but also more business-like settings36. The overall approach has been to compare the “revolutionary” or new ongoing case in a company with the “normal” routines in the same company. It was hoped that differences would be observed. In addition, the first part of the material has been exposed to a pair analysis. The behaviors of two different firms within the same industry (ABB Robotics and KUKA), confronted with the same opportunities/challenges, were compared to detect differences and similarities.

35 For example at the workshop of Hermeneutics in Gothenburg 2012 and meetings and conversations with Hansen, Aalborg, Denmark 2014.

36 Such as the Innovation Outreach Program Conference in Boston, 2013, at Rotary, BNI Network and other seminars with local companies in the proximity of research. See also the sections on Validity and Reliability.
Some cases were partly studied before this research began. These included the Nintendo Wii game console, the company BayerMaterialScience and the Philips ambient experience (Verganti 2009, Verganti, 2011). Additional cases were the “mini-cases” of the downhill skiing helmet company POC and the home appliance company Electrolux, both in Sweden. Minor studies have also been performed on the Italian lamp producer Trewig and the American corporation Procter and Gamble, and its emerging markets in Venezuela. In these cases, the methods for collecting empirical material have differed from case to case. Most of them have consisted of interviews, recorded and sometimes transcribed. The two later ones also included one-day workshops. In addition, secondary data has enriched the understanding of the companies. For reasons of confidentiality, some of the extensive collection of material could not be used in this thesis. These studies have been performed by the same team as in cases 7 and 8.

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**Table 3 The empirical material collection**

<table>
<thead>
<tr>
<th>CASE</th>
<th>SPAN</th>
<th>NUMBER of workshops</th>
<th>DAYS of workshop</th>
<th>PARTICIPANTS</th>
<th>PROFILE</th>
<th>PLACE</th>
<th>INTERVIEW type</th>
<th>NUMBER of interviewees</th>
<th>Additional activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Abb Robotics</td>
<td>24 months</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>PR, R&amp;D, SW, S</td>
<td>Sweden</td>
<td>Structured</td>
<td>3</td>
<td>Storyboards</td>
</tr>
<tr>
<td>2. KUKA / RoboCoaster</td>
<td>12 months</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>PR, R&amp;D</td>
<td>Sweden, Germany</td>
<td>Semi-structured</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3. Shirebridge</td>
<td>18 months</td>
<td>5</td>
<td>12</td>
<td>30</td>
<td>PR, R&amp;D, MKT, D</td>
<td>UK/US</td>
<td>Structured</td>
<td>3</td>
<td>Storyboards</td>
</tr>
<tr>
<td>4. Rouge</td>
<td>6 months</td>
<td>3</td>
<td>8</td>
<td>15</td>
<td>PR, R&amp;D, MKT, INV</td>
<td>UK</td>
<td>Reflections</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. Blanc</td>
<td>6 months</td>
<td>3</td>
<td>8</td>
<td>15</td>
<td>PR, R&amp;D, MKT, S</td>
<td>UK</td>
<td>Reflections</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6. Needles &amp; Pins</td>
<td>18 months</td>
<td>5</td>
<td>12</td>
<td>30</td>
<td>INV, R, MKT</td>
<td>Italy/US</td>
<td>Reflections</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7. Deloitte</td>
<td>24 months</td>
<td>2</td>
<td>2</td>
<td>14</td>
<td>CEO, S, PR</td>
<td>UK and Australia</td>
<td>Reflections</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8. Vox</td>
<td>6 months</td>
<td>2</td>
<td>5</td>
<td>20</td>
<td>CEO, PR, MKT, D</td>
<td>Poland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Aysmian</td>
<td>8 months</td>
<td>3</td>
<td>8</td>
<td>12</td>
<td>CEO, R&amp;D, PR, MKT</td>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Da Vinci</td>
<td>12 months</td>
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<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>Semi-structured</td>
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<td>Secondary source</td>
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<td>0</td>
<td>0</td>
<td>CEO</td>
<td>Sweden</td>
<td>Semi-structured</td>
<td>1</td>
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<td>Electrolux</td>
<td>1 month</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>R&amp;D</td>
<td>Sweden</td>
<td>Semi-structured</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trewig</td>
<td>1 month</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td>CEO, PR, R&amp;D, MKT</td>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marron</td>
<td>6 months</td>
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<td>0</td>
<td>0</td>
<td>R&amp;D, PR</td>
<td>Venezuela</td>
<td>Semi-structured</td>
<td>1</td>
<td>Secondary source</td>
</tr>
<tr>
<td>Procter &amp; Gamble</td>
<td>1 month</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
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<td>0</td>
<td>R&amp;D, PR</td>
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<td></td>
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<tr>
<td>Bayer Material Science</td>
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<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*PR = Product management, SW = Software development, S = Strategy, MKT = Marketing, D = Design, INV = Innovation management, R = Retail*
Quality

Validity

To be valid, it is important to show that the empirical material gathered is actually focused on the research question and that the conclusions are “unambiguously drawn from its premises” (Christensen, 2006). Validity also comes from ruling out other explanations. When the phenomena and the findings are examined by as many competences and parts of a company as possible, the internal validity is strengthened. In this case, executives from many different disciplines and companies took part and examined the ongoing research in iterations intended to increase its internal validity. In this way, research builds “correctness”, by achieving an acceptance of the interpretations studied by the actors/executives (Johansson, 2003, p 114). To further validate the material, this research has aimed to find alternative explanations by ensuring multiple perspectives.37 Empirical material has been collected from different sources such as reports and other written material but also discussed with independent experts and other researchers in the field.

Validity also concerns the generalizability of the findings. Can these be applied to different contexts? In this sense, research connects to external validity (Yin, 1984). This condition can be difficult to fulfill 100%, firstly because, regardless of the number of contexts where the findings are applied, there will always be “yet another” context; and secondly, because findings always build on what took place, they build on history. Rather than “prescribing” what will happen, a scenario, more or less likely, can be proposed. Nevertheless, the research findings emerge from iterative interpretations of several cases in the robotics and other industries (see table in the Introduction).

Reliability

A traditional scientific understanding of the term “reliability” would focus on objectivity and require data measured in “the right way” to ensure material more “trustworthy” than subjective data (Christensen, 2006). But, when a research field is new, without a vast amount of studies, the focus turns naturally to finding and understanding the basic conditions rather than measuring them. The aim of this research has been to present an exploratory study rather than a confirmatory one.

37 See also the Preface.
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To be reliable, in the first phase research was designed as an in-depth study of companies within the same industry, industrial robotics. This allowed comparison of companies faced with similar challenges in similar contexts. The study consisted of empirics from different sources, such as managers from both ABB Robotics and KUKA departments in Germany, Sweden and the United Kingdom. They could be double-checked by the use of multiple informants. Independently written material was collected and experts independent of the companies were engaged. In addition, companies several times gave their interpretations of the material. By providing the names of the companies it is possible for other scholars to examine the data.

Reliability in the second phase included an additional comparison of companies within the same industry. Four of the cases belong to the same context of industry within consumer products, enabling a study in a similar setting. In addition, the study has been focused on increasing the understanding of practices. As in Kaplan’s and Coughlan and Coughlan’s thoughts of action learning and “innovation action research” (Kaplan, 1998, Coughlan and Coghlan, 2011), a deep understanding grows when the researcher immerses herself in the ongoing work. By being an active participant in more than 20 workshops the study developed insights that could be compared to earlier research, to the notes of the other participating researchers, to different theoretical perspectives and in discussions with other academics. This iterative circle of understanding, proposing, testing and refining helped to increase the reliability when related to practice and meaning. In addition, throughout the six cases the same methodology has been tested and then refined.

Critical reflection
The starting position of reading the empirical material has been within hermeneutics and the findings depend partly on this scientific approach. It also aligns with an (innovation) action research perspective (Kaplan, 1998) where new knowledge is the result of a collaboration between researchers and the managers in the companies studied. The closest related fields to this chosen research approach are empirically close ones, such as grounded theory, ethnography or phenomenography.

Grounded theory, based on raw “data” and leaving “old theories” behind, represents a perspective very distant from the way this research evolved. Ethnography, would have been useful if focusing on a smaller group of people, and how they understand their own behavior (Giddens, 2009). But as this research stems from a willingness to understand more of the dynamics in large companies, with a link to one’s own experience and search for theories, these perspectives have not been
applied. In selecting the hands-on methods, both quantitative questionnaires and observations on site were considered. But both were left out as they either risked failing to achieve the necessary depth – or required too much time actually being present within the everyday work of the companies. Still, this research would benefit from being approached from other fields of study. Quantitative surveys, ethnographic studies or broader ranging perspectives such as critical theory are avenues left to be explored.
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MEANING AND ITS RELEVANCE

The presence of meaning in different fields and four characteristics observed within this type of innovation processes
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Shinebridge, a multinational company within the consumer goods sector, has a long tradition of innovating products. Since their founding more than 100 years ago they have combined advanced technology with market know-how to create new high-value products. A combination of consumer data and ethnographic methods of design thinking have helped them to find new solutions to client problems. But their product environment is changing. They are experiencing a loss of market share. Their users and the way they use the products are changing. An ever shifting flow of signals and offers is steadily increasing the complexity of life of these users. What is starting to appear is a situation more complex than is usually the case when solving product problems. The user-driven methods that they normally use do not seem to be capable of handling these movements. Instead, this challenge needs to be addressed in greater depth, beyond the product and its current users, to embrace a wider context. Shinebridge decides to investigate alternative approaches and expand what they call “their toolbox”. They contact a group of researchers that navigate in the intersection where design and innovation meet. Shinebridge says that they have identified something different in their “design-driven innovation” perspective, something that reaches beyond solving product problems. The researchers have introduced a perspective that considers design as connected to meaningful experiences, beyond solving users’ problems, and that then looks at how these experiences can drive innovation processes forward. Shinebridge explains that they are open and eager to try new methods. This is the point at which minds meet. Research on innovation from a meaning perspective is still scarce and the researchers are looking for cases to explore. This mutual interest in meaning and innovation leads to the creation of a project. In this part of the thesis the story of Shinebridge and several other cases will shed light on the dimension of meaning within a process of innovation.

Outline
As previously mentioned, this thesis focuses on the process of innovation in the search for meaning. But, before discussing this process, a background to meaning will be introduced. It describes some concepts, or characteristics, of this type of innovation and how it might be relevant for companies. The text follows the structure presented above, starting from an example and then relating it to existing theories within innovation management and the method used. Thereafter, an integrated section will follow, where the empirical material, its analysis and proposal will be combined with supportive theory. This section consists of two lines of arguments, a preliminary proposal and a re-analysis (see the circles in the green field in the illustration below). Lastly, a section on the relevance of this type of innovation, followed by a summary and a critical reflection on the study.
Shinebridge, a multinational company within the consumer goods sector, has a long tradition of innovating products. Since their founding more than 100 years ago they have combined advanced technology with market know-how to create new high-value products. A combination of consumer data and ethnographic methods of design thinking have helped them to find new solutions to client problems. But their product environment is changing. They are experiencing a loss of market share. Their users and the way they use the products are changing. An ever shifting flow of signals and offers is steadily increasing the complexity of life of these users. What is starting to appear is a situation more complex than is usually the case when solving product problems. The user-driven methods that they normally use do not seem to be capable of handling these movements. Instead, this challenge needs to be addressed in greater depth, beyond the product and its current users, to embrace a wider context. Shinebridge decides to investigate alternative approaches and expand what they call "their toolbox". They contact a group of researchers that navigate in the intersection where design and innovation meet. Shinebridge says that they have identified something different in their "design-driven innovation" perspective, something that reaches beyond solving product problems. The researchers have introduced a perspective that considers design as connected to meaningful experiences, beyond solving users' problems, and that then looks at how these experiences can drive innovation processes forward. Shinebridge explains that they are open and eager to try new methods. This is the point at which minds meet. Research on innovation from a meaning perspective is still scarce and the researchers are looking for cases to explore. This mutual interest in meaning and innovation leads to the creation of a project. In this part of the thesis the story of Shinebridge and several other cases will shed light on the dimension of meaning within a process of innovation.

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RoboCoaster - an example of a meaning change

An industrial robot can execute very precise but also heavy-duty tasks. It can assemble integrated circuits into cellphones, pick chocolate pralines into boxes at great speed, or weld, paint or lift car bodies, to mention just a few things. When asking a user of such a robot about “why” she uses it, she would probably mention the fast, accurate movement supporting the production process – or the lifting power that replaces what people would otherwise have to do.¹ The answer to “why” she uses the product – its purpose - points to the efficiency and control that can replace human labor.²

¹ The question of “why” to use such a robot has been posed several times to employees in ABB Robotics and KUKA, it has been discussed with independent robotics experts, at for example Robotdalen in Sweden (http://www.robotdalen.se) and to individuals operating robots.

² This interpretation - that the purpose of a manufacturing robot, as perceived by its user, is about efficiency and control – comes out of the above mentioned discussions. The general opinion among both robotics companies and other companies in the study as well as among “common people” and in the media seems to support this assumption. Most likely, other interpretations of this purpose, or product meaning, exist.
But the purpose, or meaning, of a robot can change. The RoboCoaster, by the German Company KUKA, is one example of such a change. This standard robot (the KR 500) with its seven axes offers the same movement as the ones KUKA normally produce for the automotive industry. But, this robot is equipped with a seat at the end of its arm. Here, two people can experience a ride with the robot that swirls the seat and moves its arm, creating feelings of, for example, joy or fear to its user. Attached to the robot is a software application, where the user can choose between different motion profiles and levels of speed, from an easy and gentle ride, to a more breathtaking one. The robot, normally used for lifting and moving objects in a precise and efficient way has come to serve another purpose for the user. From being fast and “in control” (leaving humans way behind), to entertaining people in an unpredictable way (by including them in its movements).

This product shows a change of product meaning. It represents a clear move from one purpose (efficiency) to another (entertainment) and has been used many times in the study to initiate a reflection on what “meaning” is and how it can change. But - the example is also valuable because of other changes. Depending on the perspective, it includes a change of context (from industry to the amusement business) and a change of user. These parameters make the reflection on product meaning and how it changes complex. To simplify the understanding of

3 Also the interpretation of the new purpose of the RoboCoaster robot has been verified in the same way as above. It has also been studied through marketing material connected to the product that expresses a similar interpretation.

4 For example that different users give different meanings to products (as within the concept of multi-modality, see for example Kress and Van Leeuwen, 2006.)
a meaning change, the example needs to be understood from the perspective of the robotics industry and its users. An operator of an industrial robot in a factory would most likely see and perceive a change when encountering the RoboCoaster in an amusement park. The value of the example is to create an introduction to reflections on meaning and its many dimensions. It serves as a background to the main focus of this research, the study of the process behind the meaning change.

When studying the RoboCoaster, professionals in the industry outside KUKA did not seem to consider it very innovative. One reason given was the absence of new technology. But, to KUKA and in a wider context (such as the context of amusement parks) it did represent “something new and something valuable” (as in the definition of being an innovation by Schumpeter, 1934. It had a significant impact on the business of KUKA and also enabled the development of new products and their entry into several new markets (see the section on relevance in this Part 1).

Existing perspectives on innovation

Technology and market

The RoboCoaster can be interpreted as a change of product meaning. It seems to be driven from another vantage point than classic innovation perspectives of technology or market. Technology (or “technological opportunities” as stated already by Schumpeter (ibid) can be considered as one driver of innovation. It “pushes” new offers out into the market. One example of a technology-driven innovation within the industry of manufacturing robotics could be a robot with a new faster way to move a robotic arm (enabled by a new generation of technology). An alternative driver of innovation is market, or “user need” (McGrath and MacMillan, 2009). In this case, innovation is “pulled” forward by demands from the market. An example within the field of manufacturing robots could be when a producer of chocolate boxes asks for a new robot tool to pick pralines fast and in the right order on a belt (to avoid the mistakes made by man). In this case the innovation meets a client need, a demand from the market. It is market-driven. Within these two dimensions, innovation can take place both in existing and new markets as well as with the help of an existing or new technology (see picture below).

5 Which provides the basis of this research.
An additional approach to considering technology and market is the notion of the “innovator’s dilemma”, consisting of the paradox that companies that have been successful with current innovation hold back investment in new disruptive technologies (Christensen 1997). Managers have a “hard time doing what does not fit the model for how to make money”. The proposal is that disruptive innovations do not come from customers, not from “mainstream value networks”, but from within the organization and its ability to forecast and discover new markets and technologies. Focus turns inwards toward the organizational capabilities within the organization rather than outside the company walls. The discussion of the parameters of technology and market has resulted in many different frameworks. One of these is Ansoff’s matrix on products and markets, another Burgelman et al.’s on technology and market applications (Ansoff 1965, Burgelman et al., 2004) a third, more recent one - of technology and business model by Pisano (Pisano, 2015).

However, these theories do not seem to capture the dynamics of the RoboCoaster case entirely. Technology is not the foremost driver in this case. This innovation is not driven by new technology focused on the means or functions. Market, though, does form part of the explanation. The product moves into a new market instead of staying in the existing one (or, leaving the battlefield of a red ocean to “swim into a blue ocean”, to quote the Blue Ocean Strategy, Kim and Mauborgne, 2005). The product is doing something “different” (Moon, 2010). Still, it includes something more than being explained only as a market-driven innovation. The dynamics of the RoboCoaster is also connected to the experience, the purpose, or meaning of a product. It exemplifies the fact that innovation does not have to emerge from a change of technology only, or a change of market need, only. It can be driven by a change of meaning, or the purpose of using a product (Verganti, 2009).
Meaning

This meaning driven approach is the focus of the study. It expands the scope of innovation, from the traditional view of technology or market-driven innovation to also include a meaning-driven approach. The space of innovation therefore becomes a three-dimensional construct. This partially mirrors Abell’s model for business definition (Abell 1980). However, while Abell’s third dimension points to the “what” of a product by discussing different “functions” to fulfill customer needs, this proposal stresses the “why” by discussing the “meaning” searched for by users. This meaning, when translated into solutions (“what”), may include both utilitarian and functional needs, as well as emotional and symbolic needs. In other words, the question “why” brings products into a wider perspective, beyond visible and tangible functions. Another difference with Abell’s model is that the perspective of this research is dynamic (on innovation) rather than static (on business definition).

Within innovation research, this meaning dimension has been discussed by Verganti (Verganti, 2009). He explains that meanings develop from an “interaction between a user and a product”. A company may think about the possible meaning of a product, but a meaning cannot be designed. Rather, the company can provide a platform, on which the user can provide her own interpretation. Verganti

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6 By adding a third dimension to the technology and market-related discussion of innovation, this research does not add another scale to measure what is worse and what is better. Simply, the third dimension is a scale of difference. The technology axis, indeed, shows a movement from good to improved technology (moving upwards), but both the market and the meaning axes show a move from one position to a different one. This is because neither market nor meaning can be judged as “better” or “worse”. It is simply a different position, see Moon, 2010.

7 See also Öberg Verganti 2014c.
Meaning driven approach is the focus of the study. It expands the scope of innovation, from the traditional view of technology or market-driven innovation to also include a meaning-driven approach. The space of innovation therefore becomes a three-dimensional construct. This partially mirrors Abell's model for business definition (Abell 1980). However, while Abell's third dimension points to the "what" of a product by discussing different "functions" to fulfill customer needs, this proposal stresses the "why" by discussing the "meaning" searched for by users. This meaning, when translated into solutions ("what"), may include both utilitarian and functional needs, as well as emotional and symbolic needs. In other words, the question "why" brings products into a wider perspective, beyond visible and tangible functions. Another difference with Abell's model is that the perspective of this research is dynamic (on innovation) rather than static (on business definition).

Verganti suggests that the creation of meaning takes place on different levels. It does not originate solely within a human being but in relation to the world around her. Creating meaning, consequently, can be described as a context-dependent process, building on the dynamics within a society and culture and associated with technology. It comes from a vast array of actors, signals and signs. In the relationship between the product and the user, the creation of meaning connects to emotional and symbolic values, as in the product language and messages sent from the product, as well as from utilitarian values connected to the functions of the product (see the example in the Introduction). As a result, when a human sees, feels or in other ways experiences a product, she uses many different elements to build her own understanding of it and create a purpose (Verganti 2009).

RobotStudio - an additional example

The process of creating meaning does not reduce the complexity of innovation. It introduces more parameters and questions. Meaning is not only focused on the color of a product, a faster movement, a lighter material or a new business segment. It embraces deeper, less obvious and more subjective values but does not exclude the technology or market dimensions. Both new and existing functions (enhanced through new or existing technology) can include a new (sometimes hidden) meaning. Meaning could also be innovated with the help of a new market approach. It therefore applies both to existing and new technology and concerns both existing and new markets. In the case of the RoboCoaster, this is a product that moves with the help of an existing technology to a new market, bringing new meaning. But meaning can also appear in existing markets with a new technology.

One example is the RobotStudio, a software product developed by ABB Robotics in the early 1980s, to better predict the movements and efficiency of the robot. Instead of designing, building and trying a robot out in real life, on the factory floor, this application enabled car manufacturers to optimize the performance of the manufacturing process in a "virtual world". This simulating capacity made it possible to visualize and predict the operations of manufacturing before constructing the robot. The meaning, therefore, moved from selling an efficient
robotic arm (hardware) to selling knowledge on how to use it (software). This meant, for example, that the current (at that time) views of robots as “fast movers” diminished to a certain extent. Instead, the new meaning indicated that even a slow robot could be more valuable than a faster one - if it was used in an effective way.\(^8\)

\[Picture 10\] Technology – Market – Meaning and different kinds of innovations connected to meaning (RoboCoaster and RobotStudio)

So far, it can be concluded that innovation driven from a meaning perspective can take place in relation to both existing and new markets and technologies. The RobotStudio is targeted at traditional robotics clients, such as industrial manufacturers, but it implies a change in the reasons for buying robots, from buying speed and efficiency, to buying knowledge of how to use them. The RoboCoaster instead brings robotics into a new arena, transforming the experience of a robot from one of control and efficiency to one of entertainment. In both of these cases, whether an existing or a new technology is applied or an existing or new market is targeted, the dimension of meaning is present.

**The method connected to meaning and its relevance**

To deepen the understanding of the process of innovating product meaning, the study first focused on understanding its background concepts. Current theories within innovation management were studied, one inspirational source being the theory of design driven innovation (Verganti, 2003, Verganti, 2008, Verganti, 2009). In parallel a study on “meaning” resulted in a division of the concept in

\(^8\) See Verganti and Öberg, 2013 for a more thorough discussion of these two cases.
relation to three fields (see below and Appendix 2 for theories and references).³ To understand whether these theories could be applicable to the study, they were related to three constructs central to the study; meaning, innovation (and business) and product (and users).

Table 4 The central constructs of innovation in the search for meaning (meaning – innovation (and business) and product (and users)) in relation to different fields studied. The underlying question was whether the central constructs were discussed in the different fields.

<table>
<thead>
<tr>
<th>(ACADEMIC) FIELD OF STUDY</th>
<th>MEANING</th>
<th>INNOVATION (and business)</th>
<th>PRODUCT (and users)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning and life</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Meaning and artifacts</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Meaning and business</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Innovation and meaning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The first field was labeled “meaning and life”. It discussed meaning in relation to fields of philosophy and theories of psychology. While philosophers of all kinds discuss the process of how humans can find meaning, the field of psychology seems more static, focused on the existing human situation. The second part of the study, “meaning and artifacts”, mapped cultural and symbolic perspectives, product meaning and design approaches. It gave insights into the relationship between artifacts and humans. The third part, “meaning and business”, related to organizational perspectives on sensemaking/sensegiving and human/social perspectives, entrepreneurship, brand management and marketing. It also included perspectives of service innovation and the discussion about product value. It could be concluded that:

- All three fields related to meaning
- The second field related to product and users but less to innovation and business
- The third field related to innovation and business but less to products and users.

None of these theories discussed the combination of the three central concepts. Instead, the empirical material came to be analyzed through the philosophic field of hermeneutics, where three concepts came to serve as a “lens” (see the section on Supportive theory below). In this first part of the study, the work on hermeneutics and design practice by Marcus Jahnke also contributed to the reflection

³ In addition, a literature search through ordinary databases proved unfruitful since the concept “innovation of meaning” was not widely represented. Instead, material relating to organizational change, to learning and to cultural meanings was found, but it did not address the innovation part of the interest in innovation from a meaning perspective.
on meaning and interpretation (Jahnke, 2010, Jahnke, 2012). The insights were presented as a model of what characterizes this type of innovation (Öberg and Verganti, 2011). It was refined in iterations (Öberg, 2012, Verganti and Öberg, 2013, Öberg and Verganti, 2014c, Öberg and Verganti, 2014d) before the final proposal via this thesis.

The Empirical material – Analysis and proposal

The model from the first phase of this study (presented in detail in the Licentiate thesis, see Öberg 2012) proposed four characteristics of an innovation of meaning; being context dependent, being not optimized, being outlandish and being co-generated. These will now be presented, in two steps, the first connected to the early proposal, and the second to its verification in the second phase of this study.10

Characteristic one - Being context dependent

Studies on innovation have often focused on solving problems that can be technically described (Pólya, 1945, Altshuller 1984). But in the case of the RoboCoaster, the focus was not on a technical problem and its details. Instead it was related to a new, cultural and social context. The robot was planned to deliver entertainment and human emotions rather than technology and physical performance. In this sense, it seemed to work on another level and with a broader scope, moving from a narrow focus on the problem to considering the overall user experience. By re-considering how to use the robot, its utility, and also its reason or purpose, changed.

The novel interpretation emerged when the company managed to embrace not only the parts (as the product, its services and other things that constitute the product and what it offers) but also the whole (the user experience).11 It stretched from designing a product and its parts, to the identification of many different signals, blended and interpreted into one coherent message. The process links to the hermeneutic concept of considering both the parts and the whole when develop-

10 In the beginning of the second part of this research, the four characteristics were criticized for being too generic, for example by discussant Mats Magnusson at The Royal Institute of Technology in Stockholm, at the Licentiate seminar, Nov 2012. Critics argued that the themes could also be valid for technology- or market-driven innovations. The four themes were then compared to the activities in the new empirical material and re-analyzed with the help of six new case studies.

11 This observation also included for example the case of Huggies, see Öberg 2012.
ing new understanding. It indicates that this type of innovation reaches beyond a focus on details, to a characteristic of being context-dependent.\footnote{For a methodological and theoretical discussion about the complexity of context, see Duranti and Goodwin, 1992}

**Re-analyzing the proposal of characteristic one**

As described before, the context-dependency was criticized for being of too general a character. Technical innovation, it was argued, also belongs to a context. Still, technology includes an option of being studied in a restricted, controlled condition. This would most likely be difficult when there’s an interest in meaning that stems from humans in a changing context. The strongest indication of the importance of context came through the study of the *briefs* of the projects. Instead of writing a brief including product specifications, the managers in all the cases described a wider context, the experience of the product - not the product per se.

An example of this approach is Vox, the furniture company. Instead of a brief including a hoped for future product with connected features, it contained a description of the life experience of elderly people in the situation of a restricted living space. It included scenarios of moving from a larger to a smaller home, from a countryside house to a city flat, facing health challenges and possibly restricted freedom of movement. The Vox brief did not focus on product, market or technology. It went beyond, to describe an experience.

The approach used by Vox seemed to open up the discussions in the project group. Experiencing this, the research group, in interaction with Vox, developed a propeller-shaped model to illustrate the difference between product focus and experience focus (see below). In later projects, this model helped in two ways. Firstly, it created awareness of something beyond a product focus - to a wider context (the move from the center of the propeller to its blades). Secondly, it led to a discussion of different contexts and experiences of products. In all the six cases reflections on experience have expanded the scope to wider contexts. None of the cases chose an alternative way forward at the outset of the projects.
However, this move to a wider experience was not always easily grasped by the companies. When Frank, one of the managers in the Shinebridge project, was interviewed, he pointed out how the “normal way” of thinking (closely related to products and “consumer needs”) influenced and almost hindered a reflection on meaning:

“I understood the process but... I was still, I was still not... convinced... that... understanding what the meaning would tell me... I really struggled! It was like: Oh... for me... I had a trouble with the “Anna voice” (a colleague, my note), in my head, saying: “but the consumer says” (laughter). Because Anna is a product researcher. She is always like “but the consumer”... It’s like this. And I remember she was telling me this as well, “Oh I have trouble switching off the consumer voice”!

Later in the project Frank also expressed a deeper understanding of the dependency of context rather than product. This was in interaction with the external experts, or interpreters, (here called E1 and E2) and the questions that were given to them to discuss assumptions made by the Shinebridge team regarding potential new meanings.

“First time in my time, personally, I had it like a coin dropping (sound with the fingers) on the process. The first one when E1 or E2 or whoever, was talking and we asked the questions to them, and then they give the answers, first then in my mind, kind of, they looked close to the processes (of innovation in search of meanings, my comment) and I realized, yeah, now I get it, why we were thinking... why we were asking the questions... Now, I can even translate the answer to my own background of the question, that’s kind of the first time it looked close... in my head”.

Picture 11  The propeller-model of moving from product focus (in this case furniture) to considering different experiences
Frank was not alone in his reactions to the context dependency of an innovation driven by meaning project. The pattern of first struggling with the move from product to experience focus and then having to take in the opinions of “experts” (not even close to the product knowledge of the company) has been seen in several of the cases. In both of the projects of the other multinational company, Rouge and Blanc, and in the Prysmian case, managers expressed similar doubts and confusion, but later came to embrace the approach. To the managers of Needles & Pins, used to the constant fluctuations in the fashion industry, the approach of context dependency looked more familiar and drove the project forward. The openness to wider contexts was also expressed by the top executives team of Deloitte. To conclude, not only KUKA embraced a broader perspective when innovating the meaning of their products. The same approach also proved valuable in all the seven cases of Shinebridge, Rouge, Blanc, Needles & Pins, Deloitte, Vox and Prysmian.

**Characteristic two - Being not optimized**

One stream of innovation management sees problem solving as a process of progressively reducing uncertainty with the aim of arriving at the most optimal solution (Clark and Fujimoto, 1991, Terwiesch and Ulrich, 2009). But, in this process of information gathering and processing, external actors that constitute a source of new arguments might be left out if appearing too late in the process. This study shows a deliberate openness to these actors. Their different ideas and voices seemed to have been a positive stimulus to opening up other perspectives. Their thinking was blended with the ongoing interpretation process, leading to new unforeseen interpretations.

KUKA began their work with the RoboCoaster after a proposal from an internal entrepreneur, named Gino De-Gol, with insights from the amusement park business. The first product presented on the market was a standard product, adapted for the use of private people with the help of suitable software. Over the years, the company then carefully listened to what the external actors looked for and progressively refined their product, which emerged as an advanced entertainment and educational device. Beginning as an adapted assembly robot, the RoboCoaster now offers several experiences. This was possible through an iterative development process in which different actors added new knowledge and proposals along the way, and in this way helped to reinterpret the meaning of the product.

This process show similarities to the **iterative hermeneutic circle**, in which understanding is a continuous process of introducing new perspectives and then re-interpreting and re-reflecting on these. In the same manner, the KUKA strategy has been to listen and adapt the product - continuously. It suggests that instead of focusing on convergence towards an optimal solution, innovation when in search
of meaning is based on a continuous and iterative discussion in which firms take an active part. This implies that innovations stemming from a search for meaning are not to be optimized. They belong to an ever-shifting sphere of knowledge, opinions, news and proposals and can therefore never be constant.

Re-analyzing the proposal of characteristic two
To further validate or contradict this proposal, also the theme of “being not optimized” has been compared to the activities in the six new case studies. In order to capture the enormous web of internal and external conversations between managers, researchers and external experts, the use of metaphors was tracked to describe the evolving descriptions of a new potential product meaning. One could assume that after a six months project in three iterations of workshops (and meetings in between) the convergence of the many proposed meanings would end up in one final, clearly described and agreed metaphor of potential product meaning. And this is what happened in most cases. But a metaphor is not a perfect description of reality, and consequently the metaphor soon changed to another one that according to the managers better expressed the new product meaning. The description of the meaning never stopped fully in any of the projects but continuously evolved.

One example is the case of Needles&Pins. The research group kept track of all its iterations of metaphors: from the first round of workshops where all individuals expressed their own imagined meanings of products (108 in total) to the convergence of meaning themes (ten in total); then to the many discussions and viewpoints when encountering interpreters, first enriching and expanding the understanding of meanings and then narrowing it down (to five potential meanings). Once again, in the third round of workshops where ideas and meanings slowly converged first into three meaning metaphors and then again, to one. This final meaning was then described through one metaphor, again exchanged, updated and refined in three iterations, first leading to a totally new round of metaphors (18 in total) and then converging again into one. This one was then refined and modified in three additional rounds.

The team of Needles&Pins experienced frustration in the many confrontations with several top managers when presenting the metaphors of the new meaning. After five iterations the team arrived with the metaphor of Danish brand Bang & Olufsen, to describe the new meaning direction. They also used two sub-themes to contrast the change of meaning. These were named: “Made in Italy” representing certain values (of the old scenario) and “Live by Italian seduction” (to de-
scribed a potential new scenario). Nevertheless, this new metaphor, was again rejected by one of the top managers. One of the project members reported back to the research group (in Italian).

“Sulla metafora Luca (top manager) dice che il From “Own the made in Italy” to “Live by Italian seduction” stride un po con Bang&Olufsen, che non è per nulla italiano. Gli suona male”. (Sep 2014)

Translated:
“On the metaphor, Luca says that the “From“: …the “Made in Italy” (the idea of, as a client, owning the feeling of an object that is “Made in Italy”, my comment) to “Live by Italian seduction” (the idea of not owning “a value as stated by a certain brand” but to live life in a more seductive way, my comment), clashes a little with (the values of) Bang&Olufsen, that is not Italian at all. It sounds bad to him.

This quote is an example of how the perceived meaning of something (in this case the Bang&Olufsen brand) represents one thing to some employees, while to someone else (in this case the manager Luca) it represents something different. It shows that finding a good metaphor is iterative and time-consuming work.

The characteristic of being not optimized was observed in the Needles&Pins case but had been seen earlier in the Shinebridge, Vox and Rouge cases. Shinebridge used metaphors of music and food before arriving at the final metaphor with a strong connection to sports (see sketch at the end of this section). In cooperation with the research team they produced a physical artifact and a video to further underline the new meaning experience (again in many iterations before the final production). These were then used to stimulate discussions with other employees. Also in the Vox case, metaphors changed continuously; from movie titles to artists to iteratively refined sketches to explain the experience wished for. In the Rouge and Blanc cases, metaphors, or especially sketches of metaphors, were discussed between managers and the research team at a very detailed level (see detailed sketch at the beginning of this Part 1). The iterations stretched beyond the last official round of the workshops, again indicating the opposite of an optimized view on innovating products. To conclude, the theme of an innovation as being not optimized was initially supported by the KUKA case, but further confirmed by the cases of Needles&Pins, Shinebridge, Vox, Rouge and Blanc.

13 This means, three elements were used. First the metaphor, in this case Bang & Olufsen. Then a sub-description, including a “From”-parameter (the old way) and one “To”-parameter (the new way). See also Ricoeur on the definition of a metaphor in terms of movement as “from” and “to”, Ricoeur 1977/2010, page 17.
Characteristic three - Being outlandish

Making a radical change to a product might create significant value to a company. Naturally, therefore, the literature on radical innovation includes a great amount of research (see for example Garcia and Calatone, 2002). In the studies of radical change, though, the research is rarely connected to radical changes of meaning, but rather to changes in capabilities. For example, the use of external networks is considered crucial in providing access to new competences (Chesbrough, 2003). The empirical material stretches the idea of a network a bit further. It points to the use of not only a helpful network, but in addition, one that questions, even criticizes existing norms, as for example in the case of ABB Robotics and the development of the RobotStudio. When some employees suggested working on software development (instead of hardware), the proposal was met with opposition within the organization because it meant that some of the competence engaged in designing robots and their movements, the hardware, would be handed over to the clients through this new service. A group of believers in the idea persisted however and continued working with the new software application. They were supported by competence from external partners in the software industry, not normally involved with robotics. When the product was launched it was ahead of explicit client demand. Clients were threatened instead of being thrilled: for example, car manufacturers, whose internal expertise is understanding how to use robots. These experts interpreted the RobotStudio as a threat to their role within the organization. The whole idea of this new product looked bizarre, strange and different. It could have been described as almost outlandish.

From this case, it seems that a company interested in innovating through meaning can benefit from possessing or developing the ability to leave current assumptions behind and instead build critical capabilities. This is a theme discussed also within hermeneutics, where a "critical stance" is described as driving understanding forward. By questioning what is taken for granted and reinterpreting the surrounding context, reflections on new product meaning can evolve. Not infrequently these reflections look strange, even outlandish to people.

Re-analyzing the proposal of characteristic three

The method for “looking for” signs of outlandishness in the six additional cases was through observing the level of critical abilities in the teams. It was assumed that repeated questions and skepticism could be connected to a feeling of something unclear, maybe strange, even outlandish. As a consequence, moments of questioning and critical discussions were observed. The “outlandishness” shone through especially in two different types of situations: firstly, when questions in workshops were many and provoked long discussions within the team or when encountering external experts; and secondly, when external managers entered the project with a lot of questioning immediately the day they started to engage.
One example is the strong reaction of Mr Q at Shinebridge, when he entered the Shinebridge project in its very last phase, at the third round of workshops. A few, carefully selected words, or dimensions, were exposed on a wall of the room to describe both the “old”, existing meaning as well as the “new” proposed one. Everyone in the room seemed to feel familiar with these widely discussed dimensions and the reasoning behind – except one. This was the marketing manager, Mr Q. He was puzzled by some of the selected words. With a mother tongue other than English, and with a Latin background rather than Anglo-Saxon, one of the words in particular looked very odd and difficult to him. At his request, the whole group re-examined the meaning of this single word, why it was selected as the right word to use for the new proposed product meaning, and if there were not other words that were better suited. By this questioning, not only did the new participant have to sort out the “existing” meaning - but the whole group had to go through this process of questioning and reflecting again. By expressing his doubts towards the proposed product meaning he actually helped the project forward. It seemed, once the current meaning became clear to him, he could leave it and start to reflect, even take in, the new proposed meaning and join the project fully. In the end, Mr Q explained:

“No that I said what I feel and what is my perspective, now I can discuss the other perspectives and we can move on” (Mr Q of Shinebridge).

Later, when presenting the new potential meaning to the top manager of the business, it was again met with skepticism, and an air of outlandishness was reported from the meeting by the managers who were present. In this meeting, Mr Q had fully grasped the new meaning and acted as its protagonist, moving the discussion forward.

Mr Q’s experience confirmed a pattern that had started to appear even in earlier cases, namely that a critical ability towards something unfamiliar, even outlandish, helped the teams to further clarify the content of the new proposed meaning, both to themselves and to external people. It could also be seen in the Prysmian case where one of the managers even stated out loud that it was his role to be “the bad guy” by asking difficult or “annoying” questions. The outlandish nature of some proposals forced deeper reflections, a more specific language to transfer the experience of this new meaning, the need for strong metaphors and iterations of these.

The research team brought this learning about facing feelings of outlandishness to other projects. In cooperation with Needles&Pins, a method was developed to train the ability to meet an outlandish attitude towards a new product meaning proposal. It consisted of a role play in pairs, where one manager played the person who felt the new proposal was outlandish and another pretended to be
its defender, trying out a variety of means, such as metaphors, to convince and explain the new thinking. This role play was performed in pairs with the rest of the team as audience and then discussed to deepen the understanding of new meaning (see the photo at the start of this section). To conclude, the theme of being outlandish has been exemplified by the reactions towards the KUKA Robo-Coaster, but also in the RobotStudio case. In addition, both the Shinebridge and Needles&Pins cases as well as the Prysmian case point to feelings of outlandishness towards some proposed new product meanings.

**Characteristic four - Being co-generated**

The three characteristics described above indicate that a change in the meaning of a product is not necessarily a response to a clear market need. On the contrary, it implies a step back from current needs and proposes a new vision, not apparent to the market (Verganti 2009). This makes the insights contradictory to most theories of innovation, which advocate a closer look at users in order to realize innovation (such as studies on user-centered innovation, design thinking and crowdsourcing). The common act of interpretation is not based on the discovery of what is already there, but on a deliberate creation of new interpretations that do not yet exist. It is not about generating ideas and solutions, but about conceiving a new possibility and creating a new vision.

Consider the sports equipment company POC, that produces downhill ski helmets. Instead of just offering supportive gear to avoid injuries the company has given a new interpretation of what personal protection is about - from being “a boring must” to a fashionable and attractive feature worn by top skiing athletes. The founder of POC, Stefan Ytterborn, worked on different contextual signals to propose this new scenario of personal protection. One included the developing technology of skis, another the rising number of severe accidents, as well as more advanced skiers (also at higher age). A third took into consideration the increased fashion awareness connected to sports. When mixing the signals together, he found an empty spot in the market where helmets could be considered fashionable, cool and preventive at the same time. Furthermore, he worked with sports medicine experts (back specialists) and brain scientists, neurologists, materials specialists, experts in social media and graphic design, industrial designers, professional athletes and top gravity athletes to elaborate on these signals and create a new scenario. This new scenario was not the work of one man, but comes from a combined effort to see and interpret new things, involving both

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14 According to Ricoeur, it always takes two to make a metaphor, Ricoeur, 1977/2010.

15 POC produces goggles, body armor and clothes to customize the look. Their own magazine and website move beyond product information to a level of the lifestyle of extreme sports.
internal, external and “outlandish” networks. It indicates that innovation when driven from a meaning perspective takes place in a context with several interpreters: it is co-generated.

Re-analyzing the proposal of characteristic four
Together with the first theme of being context dependent, this theme of being co-generated was one of the two which received most criticism for being too generic and not exclusive to an innovation focused on meaning. The intention of the term “co-generated”, however, was to stress a wider context than the practice of using networks to innovate (as in the use of crowdsourcing). In this study, this term relates to external actors outside the existing networks, far from the industry in question (see also Verganti and Öberg, 2013). Nevertheless, to increase the validity of the co-generated characteristic, the second phase included observations of the level of external actors involved. The most visible signs of these actors were the invited external experts, or interpreters, representing companies, associations and universities. All the six cases in the second phase involved a meeting with six to eight of these interpreters. In each meeting the interpreters were invited to give their views on a certain pre-defined topic. In the Needles&Pins case the focus was on the “new shopping experience”. By bringing perspectives of, for example, an architect, a priest, a hotel manager, a café owner and a brand manager, the assumptions about this specific experience were discussed by all, leading to new insights that later drove the proposal of a new product meaning further.

After the Shinebridge workshop, for example, the interpreters were assessed by the company managers. It seemed that when they had people with diverse mind-sets in the room being part of the discussion something “clicked” in the participants. As one of them, Susanna, expressed it in relation to one interpreter (E1):

- "And at that point, that's where I got it! Because, at XXX (the first workshop, my comment), yes I got it and I got immersed, but I saw the power specially when I talked to E1! That for me was a click! I was like… "Yes, I get why are we doing this”.

The third manager, Mika, also expressed the value of the different perspectives of the interpreters:

- "It's great… the fact that they came already upon a specific subject. That was great!”

16 These workshops were 2-2.5 days long and planned and run in collaboration between the company and the research team, see Altuna et al 2014 for details on the selection.

17 The managers indicated a positive contribution of the external experts, driving their thinking forward, see also Altuna et al 2014.
All the cases, except Deloitte, included indications of being co-generated: in the RoboCoaster and RobotStudio cases by the influx of external actors, and in almost all cases by the addition of invited interpreters. Despite increasing the complexity of understanding, the interpreters’ perspectives inspired new insights that were referred to throughout the projects. To conclude, the co-generative characteristic seems to be an additional theme during a process of searching for new product meaning. Together with the three characteristics of being context-dependent, being not optimized and being outlandish they serve to depict a background of what this type of innovation project looks like.

Supportive theory

The proposal of four characteristics has been developed by an iterative move between a study of hermeneutics and the empirical material. It finds support in three identified concepts present in the hermeneutic discourse. The first one constitutes the reflective hermeneutic circle, where the parts of an action or situation can be understood only if placed in a context, a wholeness (Alvesson and Sköldberg, 2008). Vice versa, the context can only be understood if the parts are understood. An iterative move between the overall process as well as the micro ones is the basic idea of building new understanding. This reflective process indicates that
there will be a temporary, but no definite solution. Hermeneutics as a model of understanding has also been discussed by Krippendorff but in relation to design practice (Krippendorff, 2006). These concepts resonate with the first characteristics of being context dependent (underlining the idea of a wholeness to reach a deeper understanding) and being not optimized (as in the constant circular motion of interpreting). The second concept connects to a deliberate process of “close reading”, or second interpretation of a situation (ibid). This includes exposing a material to detailed questions, connecting it to a context and finally creating different patterns of understanding. This action is performed by an individual, an interpreter - whose subjective view is seen as enriching the understanding, similar to the use of external experts, or interpreters, in the study. The third concept is the one of critical reflection as proposed by French philosopher Paul Ricoeur. He stresses a diversity of interpretations and allowing these different perspectives to collide, or confront each other (Alvesson and Sköldberg 2008, Kristensson Uggla, 2002). When in search of moving from pure explanation to deeper understanding, both the identity of the author behind a text (or statement) and her message need to be considered. This, in relation to time that can be both chronological (cosmological) and phenomenological (as related to the past, the present and the future). Acknowledging the limits of the narrative “in the face of the mystery of time” can lead to the development of additional perspective in the process of interpreting (Ricoeur 1984). In short, time holds an inscrutability as well as narratives hold limitations. The awareness of this critical perspective, or “triple-hermeneutics” (Alvesson and Sköldberg, 2008), enables a “planned for” distancing of a situation. It happens through a “creative reconstruction” of different perspectives, such as examining the author behind a statement, the parts of the message (for example the actors involved), the narration of it and its relation to the one expressing it (ibid). Similar perspectives have also been described by German philosopher Gadamer, indicating that new understanding is driven from a fusing of different horizons, or viewpoints (Gadamer 1960/2004). By posing questions to a text (or action), “undetermined possibilities” can be brought out and understanding becomes more than a re-creation of someone’s meaning. “Questioning opens up

18 See also Cunliffe 2010, who describes meanings as multiple, shifting and always embedded in time, place and relation to others. Further, as related to a practice where researchers work together with research participants to explore how to “ongoingly interpret, understand and related with others and the surroundings (a reflexive hermeneutic)” . See also Krippendorff, who explains that meaning reflection includes “wholeness, how material connects people to each other, mythology and archetypes that are rooted deep in the collective unconscious, ecology of symbols”. Meaning is “someone’s construction”, “not fixed” and includes several semantic layers (Krippendorff 1989, 2006).

19 This does not imply being conservative, but gives rise to the “exigence to think more and to speak differently”, to quote Ricoeur (1984).
These two additional concepts of the interpreter and the critical reflection resonate with the characteristics of being outlandish but also with the theme of being co-generated. A new “different” interpreter might provide new and “outlandish” perspectives, contributing to a deliberate creation of a common discussion to develop understanding. In addition, the “being—together” of participants (and interpreters) is an existential condition for any dialogical structure of discourse, to quote Ricoeur (ibid). It serves as a trespassing, to overcome human solitude. Still, one person’s experience cannot be transferred “as a whole” to someone else, “my experience cannot directly become your experience”. Yet, something passed from “one sphere to another” and this “something” is not the experience as experienced, but its meaning (ibid page 16).

The relevance of proposing a new product meaning

This study is focused on investigating the process of innovation when in search of new product meaning. It started by building a background understanding of this type of innovation - and thereby identified four characteristics. It continued into an investigation of the strategic relevance and value of it, through a focused study of two cases in particular, the RoboCoaster and the Da Vinci System, both stemming from KUKA. Theoretically, innovation and value can be discussed from different horizons. It can be related to continuous improvements - both in business competition (Tidd and Bessant, 2009) and engineering literature (Pahl and Beitz, 1988, Clark and Fujimoto, 1991). It is discussed as disruptive innovation (Christensen, 1997) and discontinuous innovation (Utterback, 1994) or - as user innovation (von Hippel, 2005). Many of these studies indicate that value can be given to a user through a function, for example by improving products or systems through users or new technologies. A meaning perspective on innovation is less about such a change in function. Rather than improving the product it focuses on the re-interpretation of it, on finding a new potential meaning within it. In this sense, it resonates with the field of design where the meaning of products is discussed (Jahnke, 2013). This discourse gives insights on value, even if design, rather than innovation processes, is underlined.

20 The act of “questioning” was part of an earlier proposal related to the practices of this type of innovation, see Öberg, 2012. It was later developed into the practices of “criticizing”, see Part 2.

21 The outlandishness links to Ricoeur’s third characteristic of a metaphor as “alien”… – a name that belongs to something else.”, Ricoeur 1977/2010.
The focused study on value looked at the competitive performance in the two robotics cases. In parallel to the meaning change per se, the technology change and the surrounding context were also studied (see Öberg and Verganti, 2012, for a detailed description). The first case, the RoboCoaster showed several positive outcomes in terms of economic value. First, it had shown growing sales since its launch in 2002/2003 when the first ten RoboCoasters were delivered to Legoland, Billund in Denmark. In total, more than 140 systems had been launched by 2014. In addition, the concept did not follow the “common sense” of what a robot is meant for (as in high speed and accuracy). As a consequence, no other company in the industry recognized the value of the product, making the product without competition in the market. A third positive effect was the external systems surrounding the product. To be compatible with the software of the amusement parks, special integration competences were asked for. These generated additional sales with margins much higher than a standard industrial robot. A fourth effect of launching the RoboCoaster included the identification of new markets. With a mindset that was already “open” to the connection between human and robots (a “no-no” to many competitors) KUKA found their way into the medical domain, for example with the Da Vinci system, a robot for use in surgery of the human body.

The RoboCoaster, supposed to carry human lives in its arm, had to go through rigorous testing activities before being accredited with the appropriate safety certification. With this unique and well-tested technology KUKA developed the Da Vinci system, in cooperation with the company Intuitive Surgical. This robotic system, used for endoscopic surgery within the human body, consisted of a combination of a robot, several cameras and a remote connection, enabling the expertise of a surgeon to be mobilized through the “hands” of a robot. The surgeon no longer needed to be physically present but could operate from a distant location (operations have been performed as far as 620 kilometers from the patient). From the surgeon’s point of view, the change in meaning is significant. The surgeon retains full control over the procedure while the robot performs the movements commanded. This enables the surgeon to carry out a greater number of operations as they can be performed at a distance, without his being forced to travel to the patient. Moreover, the career of the surgeon is extended since the robotic systems help to counter any shaky movements (tremor) of the hands of the surgeon, a problem that can develop with aging surgeons. An additional advantage is that, on the “orders” of the surgeon (by voice control), the robotic system performs with the same precision, time and time again, thereby increasing patient safety. In other words, the risk of mistakes due to the “human factor” is reduced.

22 As in success factors such as sales, margins, competitive advantages and market share, see Öberg and Verganti 2012.
Despite the risks involved in placing surgeons in a new, perhaps weaker position, the Da Vinci system has been widely accepted. Since its approval by FDA (The Food and Drug Administration) in 2000, it has been used for cardiothoracic surgery, gynecology, urology, pediatric and general surgery by hundreds of surgeons. In prostatectomy, the Da Vinci system has helped to reduce the waiting time for surgery significantly (from less than 10,000 operations in 2003 to more than 70,000 in 2008). From a non-existent position in the early 2000s, the system dominated the “market” from 2004 onwards. It has also served to train future surgeons. To conclude, from a business perspective, the idea of bringing robot technology in contact with and even inside the human body seems to have resulted in several advantages. The RoboCoaster and the Da Vinci System indicate that innovation containing a change in meaning gives business value. As meanings always change, there is always a chance to propose new meanings, giving additional value. The challenge lies in understanding which meaning change to focus on, to recognize the direction to be taken.  

Summary 1 - The proposal of four characteristics and their relevance

This type of innovation benefits from being understood both as part of something larger and also with attention to the details. Within hermeneutics this can be discussed as considering both the parts and the whole, supporting the proposal that innovation from a meaning perspective is context dependent. The awareness of context among the companies in this study can be studied through the project brief and whether it gives room to embrace a wider context or not. Further, the observation of moving between parts and whole helped to explain that innovation in search of product meaning is not optimized. Instead, it includes an ongoing process of interpretation and reinterpretation of both the details and the context, linking it to the iterative mode of the hermeneutic circle. The use and change of metaphors is one way to capture the level of iterations in the cases studied. The focus on introducing new perspectives, even “strange” ideas, showed this type of innovation as something outlandish, something different from the “normal”. This study observed the critical abilities towards new proposals as a way to examine whether feelings of outlandishness were present or not, a theme that also finds support in the hermeneutic “critical stance”. Lastly, by considering the awareness of the interpreter and the value in merging the interpretation of the individual with the beliefs of others, the fourth characteristic emerged, as being co-generated. It arises both from companies, users and many other actors in a network, immersed in a socio-technical-cultural context. In this research, the level of co-generated work was studied by observing the amount of external actors that participated in

23 For a more elaborated discussion see Öberg and Verganti, 2012.
the project, again with links to hermeneutics and the use of many perspectives. Through the two cases of the RoboCoaster and the Da Vinci system, both initiated by the German company KUKA, the study proposes that innovations arising from a meaning perspective create business value such as the discovery of new markets and increasing sales, but that there is a challenge in understanding which meaning direction would be the most promising one.

**Critical Reflection**

This first part of the thesis serves as a background to the main focus, the process of innovation in the search for meaning. It describes four characteristics and the relevance of this type of innovation. As mentioned before, some of these themes were thought of as being too generic, for example the theme of **being context dependent**. Even if all innovation processes belong to a context, in this study it has emerged as a central factor, more emphasized than technology or market driven perspectives. Other types of innovation could also be described as **being not optimized**. A technology, for example, can often be improved, even if today many technologies are approaching saturation. Meanings, however, look less “improvable”; they are intangible from the start. When people reflect on meaning, optimization is rarely a goal – instead a variety of options are considered. In addition, the theme of **being outlandish** aligns with the idea of innovation per se, as in delivering something new and unforeseen. This newness can often, but not always, be related to a new function. A meaning change, though, includes a change in perspective, it often touches our innermost core with its strange proposal. This “outlandishness” seems to resonate on a deeper level than a functional one. Lastly, one might claim that all innovations are **being co-created**. Still, technology and business models often include an option of being created among a few people first, then tested and launched. The proposed innovation in this research has not been “created” by a few but with several people in a wider context. Co-generation has been a basic condition, not an option but a starting point. The proposed characteristics constitute the most dominant patterns of the study. Traits of these characteristics can probably also be found in other innovation processes. The question is whether they are central or complementary factors when compared with market or technology driven ones.

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24 The characteristic was labeled “questioning” in earlier works. “Being outlandish” though, was thought to describe in a more vivid way, for example, the feeling of the board of management of KUKA when confronted with the proposal of a robot like roller-coaster, which later came to be the RoboCoaster.

25 When something “deeper” than a function changes (its meaning), it might touch us in a different way. This is a personal opinion.
Next to these themes additional patterns also shone through. One is that meaning as such can be challenging to explain and distinguish from other concepts. It includes a type of indefinable character making it unfixed and relative. This "vagueness" constitutes an alternative characteristic. One could also argue that a meaning cannot be valid for everyone. Humans builds their own unique world of meaningfulness, so how could a company be the one to "give meaning" to their products? This observation indicates themes such as "being not universal" or a type of "subjectiveness" as alternative options. Lastly, meaning comes from within people. It is abstract until it is turned into something representative (for example as in the metaphors, music and movies used by the participants in this research). An additional theme could have been the one of "being abstract concepts". In all, these themes deserve a closer investigation.

The study on the relevance of this type of innovation focused on the positive value of innovation of meaning in two cases. The dynamics surrounding the competitors and why they did not invest in these meaning directions were not included. In addition, meaning touches upon intangible values that have not been studied or "measured". These are elements that remain to be studied. The findings on relevance should therefore not be generalized but be seen as a first step toward a more detailed discussion.

A more critical perspective on the study could have been used to find "gaps", or missing parts in the empirical material. To balance the findings, they were exposed to a second phase of critical analysis, identifying alternative themes (described above). Another approach could have been to become actively involved in the business cultures of the companies. This would possibly have revealed sensitive hidden information, and helped to identify “unspoken” things, maybe even taboos. The study came to be more inspired by this action/participative research perspective in its later stage. Workshops and discussions were a collective work that gave a deeper insight into the ongoing life and processes of the companies. It enabled a deeper study of the process connected to innovation practices concentrated on a search for new meaning.

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26 To quote Frankl, “The unique meaning of today is the universal value of tomorrow” (Frankl, 1970/1988, page 43).
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THE PROCESS
Practices observed within innovation processes in search for product meaning
From being considered elegant temples with precious pieces of fashion, the stores of the European brand Needles & Pins found themselves in a worrying position. Their young customers seemed less excited about entering, resulting in a slow but steady decline in sales. The stores, which welcome guests with solid, tall doors, security guards and virtually unreachable products on shiny shelves, looked almost like art installations — far from the constantly changing life of people in their twenties. The innovation manager, Mme O, increasingly felt the need to change this retail experience. She wanted to explore the possible meaning of a future Needles & Pins store. With this aim in view, the innovation team started a journey of searching for new product meaning.

First, they deliberately tried to take out and expose their own individual beliefs of the current meaning of their stores. Each member made her own interpretation through homework that was then presented to the others. A long and careful discussion followed to formulate what was thought to be the existing perception among their clients. Next to this reflection, the same procedure was repeated on potentially new experiences in the stores, and what seemed to be the underlying meaning of these new thoughts. The multifaceted result was analyzed and organized into some assumptions of potentially new scenarios. They then organized two meetings, one European and one American, inviting 15 external experts, or interpreters, to reflect on potential future meanings. These two “Interpreters labs” drove discussions that blended commercial, cultural, philosophical and existential issues, giving a dense picture of potential new meanings of a shopping experience. Not all, but many interpreters, seemed to make a significant impact on the team. By joking, surprising and provoking, the interpreters seemed to give energy to all the participants. By challenging, even questioning different concepts they also created room for silence, reflection and new constructs not previously considered. When the project went into its last phase, the participants kept relating to the interpreters, quoting them or referring to reflections they had initiated. Apparently the critical perspective of these outsiders fueled discussions after the two labs as well.

The journey of Needles & Pins towards a new meaning took about 80 days. It included reflections at different levels, within the managers themselves, between them, between managers and interpreters (and participating researchers), in formal meetings and informal settings. It also encompassed interpreters who fueled new thinking that was sometimes absorbed by the innovation team and sometimes not. By an extensive use of metaphors, Needles & Pins slowly converged towards what they felt should be the direction towards a new meaning for their stores. By proposing and testing different representations of it they seemed to take it in, feel it and embody it. This process of realizing that a change is needed, a type of awakening, its reflection and exposing of new thoughts, the critical perspectives and the last embodying phase, has been observed many times throughout the study.1 In this chapter this process will be further discussed through four of the nine companies studied.

1 Spanning nine Interpreter labs and nine cases.
From being considered elegant temples with precious pieces of fashion, the stores of the European brand Needles&Pins found themselves in a worrying position. Their young customers seemed less excited about entering, resulting in a slow - but steady - decline in sales. The stores, which welcome guests with solid, tall doors, security guards and virtually unreachable products on shiny shelves, looked almost like art installations - far from the constantly changing life of people in their twenties. The innovation manager, Mme O, increasingly felt the need to change this retail experience. She wanted to explore the possible meaning of a future Needles & Pins store. With this aim in view, the innovation team started a journey of searching for new product meaning.

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1 Spanning nine Interpreter labs and nine cases.
This second part of the thesis is dedicated to the process surrounding innovation in search of product meaning. To understand it, the study has been focused on whether its process aligns with existing principles of innovation or not. This part starts by returning to current innovation management theories, studied from the perspective of innovation processes being a creative problem solving activity.2 After this theoretical summary a section on method will follow before the empirical material is introduced. This section has been organized according to the themes found in the existing literature. After this, a proposal is presented, describing four themes connected to practices of innovation when in search of meaning and supported by theories outside the field of innovation management. Two of these themes, the theme of exposing and the one of criticizing, will be further elaborated before concluding and providing a reflection on the strengths and weaknesses of the proposal.

2 A discussion of this perspective is provided below and in Öberg and Verganti, 2014 a.
Theoretical perspectives -
Innovation as a process of creative problem solving

To understand the process of how to innovate product meanings this research turned to the existing frameworks on innovation management. The aim was to sort out to what extent the already “known” literature could give guidance to a process of innovating from a meaning perspective. Three streams of research were detected: the problem solving perspective, the creative perspective and the user driven perspective.

The introduction to this thesis explained that studies on innovation have developed within the field of problem solving. Literature has often emphasized technology and engineering perspectives (Clark and Fujimoto, 1991, Teece et al., 1997, Krishnan and Ulrich, 2001) - and to some extent also how to extend markets (Garcia and Calantone, 2002, Kim and Mauborgne, 2005, Calantone et al., 2010). In these approaches, “finding” a solution is a more or less explicit target. The assumption seems to be that if the problem is well defined, existing information and capabilities can help find its solution. This approach of “innovation as problem-solving” seems to favor the search for a new, optimal solution to a given problem. But meanings, as described in the first part, belong to a socio-cultural context that constantly changes. They are not to be solved but rather to be under constant interpretation.

Innovation studies also include a less analytical and more intuitive perspective. By leveraging established theories on abductive reasoning (Pierce, 1903), problem solving perspectives developed in the 1960’s into a more human-related “creative problem solving” activity with methods such as brainstorming and decision making (Gordon 1961, Osborn 1963, Simon, 1969/1982). The perspective of the individual grew in importance with the discourse of “reflection in action” (Schön, 1983) and further by scholars working on design thinking (Boland and Collopy, 2004, Brown, 2008, Martin, 2009) and integrative thinking (Martin, 2007). Innovation, in this sense, has become connected to idea-generation and creative thinking (Eng et al., 2010). Studies on innovation have also addressed the connection to society. Both studies on involving users to define needs (von Hippel, 2005) and studies on expert users to find solutions (Chesbrough, 2003) take innovation to an external context. But, these perspectives of user innovation and crowdsourcing still give importance to solving a defined problem. They give guidance on how to innovate a product solution rather than a product meaning. There is a common trait spanning literature, namely that innovation emerges when users have a need or a problem. Innovation implies understanding the problem and then creating ideas to solve it. With all its limitations, this current research departs from this
position that innovation is about creatively solving problems. From this starting point four themes will be presented (see also Öberg and Verganti, 2014a).

**Theme 1 - Unfreezing**

Like a parent shaking her children to wake up in the morning, this theme is about waking up to something new. Theoretically, this implies that the first phase in an innovation process is to recognize – and motivate - the need for change. According to Lewin (Lewin, 1947) change is preceded by an unfreezing phase where the organization is preparing itself to accept that change is necessary. To do this the status quo has to break down. The organization unfreezes itself, a new approach develops, and then the organization refreezes again. Similar arguments can be found in literature on product innovation and major technological transitions. A big dilemma is that incumbents seem blind to signals from competition and this prevents them from addressing change (Christensen and Rosenbloom, 1995 and Christensen, 1997). This process of unfreezing is mostly described as benefiting from top-down support (Montoya-Weiss et al. 1994). The organization needs to be made aware of the need for change that top management has recognized. It is as if the organization is sleeping and it needs its mum or dad (the top leaders) for a wake-up call in order to start innovating.

**Theme 2 - Naïveté**

The idea of the second theme is that with a clean, even “naïve”, mind innovation prospers (Dunbar, 1995, Brown, 2009). Innovation comes from people who are not experts, free from preconceptions and able to address the problem with a clean mind (Sutton, 2002, Lehrer, 2010). If the existing solution is “inside a box”, beginners who do not know where the box is, are more likely to search “outside of the box” (Kelley, 2001). This perspective also stresses the contributions of outsiders to innovation (Chesbrough, 2003). The assumption seems to be that in the face of a problem (and its solution) a naïve beginner’s mind, without preconceptions, does exist. In this sense, naïveté is a desirable quality.

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3 The variety of innovation management literature also holds other common traits, or perspectives, that could have been used, for example a social, individual or sustainable perspective of innovation processes.

4 The beginner’s mind is a well-established concept also in Zen Buddhism, see for example Suzuki, 1970
Theme 3 - Information

The third theme focuses on reducing uncertainties. It looks at innovation from the perspective of information processing. Attention is directed to initial uncertainties such as market needs and technological feasibility and later, to obstacles such as product launch. Importance is given to collecting, processing and sharing as much information as possible. All kinds of cross-functional integration are optimized, between R&D and marketing, engineering and manufacturing (Moenaert and Souder, 1990, Galbraith 1973, Gerwin, 1993, Clark 1989, Littler et al. 1995). This theme also embraces the importance of information and team working (Krishnan and Ulrich, 2001) to limit the birth of uncertain activities.

Theme 4 - Outsourcing

Finally, innovation can be considered as coming from outsiders, as suggested by the paradigm of open innovation (Chesbrough, 2003) and crowdsourcing (Surowiecki, 2005). The perspective of these “others” also includes studies inside organizations. In this case “others” relate to others within the company, either from a team or even anyone who has an idea (Bjelland 2008, Sutton 2002). Whichever the case, a common theme is that the role of leaders is to support their organization - while outsiders are the ones to be creative and propose ideas. It seems that once an idea is proposed, a leader may easily recognize its value, despite not being involved in the innovation process herself. The creative problem solving here relies on external perspectives.

The method used to investigate the innovation process

To identify innovation processes connected to a meaning perspective, two empirical analyses have been performed. The first was based on exploratory cases introduced earlier in this thesis (KUKA’s RoboCoaster, ABB’s RobotStudio, POC). Empirics were transcribed from interviews and workshops and mapped in categories together with notes from observations and meetings. The pattern was compared with both existing literature and with hermeneutics. This led to a proposal of four practices named: building scenarios of meaning, questioning, building critical abilities and envisioning. In the second phase, the proposed model was verified in relation to six new cases by using the three-step model of three workshops

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5 For a closer description on methods connected to the development of this model see Öberg, 2012.
described in the Method section. As the empirics grew in size, new observations emerged, sometimes transcribed but often captured through participation in the projects. These insights indicated that the model of practices did not capture the dynamics fully and would benefit from being reconsidered. In parallel, the existing literature was re-examined, and resulted in the four themes described above. In the matching between literature and empirics some similarities occurred, but in most cases there were also clearly visible contradictions. These led to the development of four revised practices, presented below through the practices of four of the companies (three from the second phase and one from the first).

Given that these case are more recent and have an impact on the strategic path of the companies, it has not been possible to disclose their names. All companies, except one (the Polish furniture company Vox) have been re-named. What will follow is the story of Shinebridge, a company within consumer goods, facing challenges with their younger customers, Needles&Pins, a worldwide player in the fashion industry, faced with decreasing sales among their youngest customers, Trewig, a furniture manufacturer, and the official story of Vox. To protect the informants these have also been re-named, as in the case of Mr Q and Mme O.

The empirical material

In this section, each of the themes will be related first to the existing literature and then towards a new proposal of an innovation practice. It will start from the theme of Naïveté, where the difference between the existing literature and the observed practices differed the most6. See the appended papers for a more detailed description.

How Shinebridge slowly recognized their existing beliefs and cleared them out

Observations connected to Theme 2 Naïveté

Oct 2012 “We are like canned beer, says a mid-age female manager. But we want to be like a bespoke cocktail”. People laugh. About 20 managers engage in a lively discussion about who they are. They find themselves in a difficult situation – competitors are getting close and there is a need to do something new. They have decided to reflect deeply on the reasons why someone would use their product. In a two-day workshop, they try to go beyond client needs and instead search for the less visible meaning of the product. In parallel, they ask themselves what a new potential

6 Elaborated descriptions of these themes can be found in Öberg and Verganti, 2014a.
meaning could be.

**February 2013** About 70 individual pieces of homework on new meaning are slowly being described by each and every manager. It is a detailed process of personal sharing that results in patterns of “must haves” and “delighters” (Kano et al, 1984). This three-day workshop ends at a large table, where they openly expose their thoughts as they spring to mind. A vague emerging meaning starts to take shape, but it is still not clearly sculpted.

**June 2013** The assumptions behind the potential meaning are discussed together with invited experts, interpreters, far from Shinebridge’s industry (see Altuna et al, 2014). Their presentations are mixed with metaphors of sports and music with lyrics connected to the reflections, revealing both professional and personal experiences (see the section on Criticizing below). This multimodal reflection gives further guidance to possible paths of meaning.

**Oct 2013** After a year of discarding the “taken for granted” assumptions of the managers, Mr Q, the marketing manager enters the project. With a mother tongue other than English, he becomes puzzled by the words selected to describe the emerging meaning. Through this questioning, not only Mr Q but the whole group undertakes another round of the process of questioning and reflecting deeply again. Once the current meaning has become clear to him, it seems he can leave it and start to reflect and, later, absorb the new proposed meaning. At the final presentation later in 2013, he even answers most of the vice-president’s doubts with strong conviction.

The action of discarding one’s own beliefs can be seen in all the cases studied. One example is the small interior company Trewig who, in the search for new meaning of their product, turned, not to the market, but to themselves. By daring to expose the values and beliefs of each employee, they prepared their minds for taking in new perspectives.

Within design thinking the idea is not to question or criticize. Also theories within creativity, such as brainstorming emphasize the “cleaning” of your mind (discussed above). Employees are often encouraged to “look outside the box”, to embrace the fact that times are changing, to “unfreeze”, and to stay open to “external” inspiration. In these approaches focus is on idea-generation - not on meaning. But, neither idea generation nor creativity are “neutral” assets. They come from individuals. Their values and pre-understanding naturally steer the way they look at things and how they identify ideas. As the empirical material shows, being aware of your preconceptions and what they stand for - their meaning - is valuable in a process of innovating meanings. When articulating their pre-understanding, employees exposed themselves and thereafter opened up to new perspectives. This study therefore proposes a move from innovation from...
the perspective of a naïve beginner’s mind to an act of **exposing**.

### The journey of Needles&Pins to meet people, listen and learn

*Observations connected to Theme 3 Information*

**Jan 2014** From being considered as elegant temples of high-end fashion, the stores of Needles&Pins realized that their young customers looked less excited about entering, resulting in declining sales. The innovation manager, Mme O, felt the need to change and explore what could be the meaning of a future retail experience. Together with a team of researchers, the company organized two meetings, each spanning 2.5 days, one on European soil, and one across the Atlantic, to take out, or expose their beliefs and preconceptions concerning the existing meaning of their stores. This thorough mapping of personal thoughts resulted in more than 100 proposals of new product meanings from about 30 managers.

**Feb - March 2014** A considerable amount of time was then spent clearing out different streams of proposals and the assumptions behind them. What quickly emerged were two very different set-ups of understanding the brand and its potential new meaning. To “test” the assumptions, two so called “Interpreters labs” took place, one in US and one in Europe with 16 invited experts. They represented a few companies, but also a researcher, designers, an anthropologist, a monk and an artist. The meeting therefore blended commercial, cultural, philosophical and existential issues, prompting a rich, multifaceted discussion and several informal reflections, even wonders.

**June 2014** The core team and Mme O invited their American colleagues to a 2.5 day exercise on a rural farm. The setting was selected with care, and quite the opposite to the previous two more metropolitan meetings. In between the formal agenda, there was time to socialize, take walks or just relax. The research team noticed a direct and friendly atmosphere between the Europeans and Americans, conversing on both personal and professional matters. Needles&Pins’ journey to find a new meaning direction took 80 days and five official meetings. Noticeable was the openness of Mme O and her core team, who looked assured and relaxed, sharing both jokes and personal issues. Also the employees, with their vast range of backgrounds, from store assistant manager to digital experience designer, helped to create a colorful palette of interpretations. The blend of cultures and competences in inspiring milieus seemed to encourage discussions beyond the agenda, creating a platform of reflection rather than
information sharing.\footnote{One reflection from the research team was that the willingness to reflect, wonder, and mull over different interpretations might be more common within the fashion industry, used to constantly changing fashion.}

Innovation management can be considered as a systematic sharing of information and reducing uncertainties. In this process, external networks are described as important to improve existing products. What was observed in the cases studied, however, more than information sharing, was engaged discussions and reflections, both internally and with external experts. More than an act of informing, this included debates and criticism. From considering innovation management as information sharing, the empirical material sheds light on a deeper process. Instead of eliminating sources of information along the process, it points to an embrace of several sources of advice (despite being “unknown”) throughout the process. Rather than information sharing, this seems to include a deep discussion where many actors meet and reflect in a complex but enriching way. Where meanings are concerned, this research indicates a move from the perspective of innovation as information giving to an act of criticizing.

**When Vox transferred the meaning of a bed from a prison to a joy**

*Observations connected to Theme 4 Outsourcing*

**March 2011** Piotr, CEO with many years in his business, wanted to offer something new to his long-standing loyal customers. His interest was in senior people with changing life conditions, for example as when moving to a smaller home or faced with physical constraints or declining health. With a large team of employees, covering sales people, R&D and designers, he threw himself into a process of searching for new meanings of furniture targeted at the elderly. As in the cases of Shinebridge and Needles&Pins, a 2.5 days long meeting was set up to lay bare the current mindsets of the team.

There was no doubt about the excitement of Piotr, who spent a considerable time discussing and reflecting on future product meanings with the team. He personally invited several of the seven guests to the Interpreters lab and carefully listened to their views of what a meaningful scenario might look like. When insights were transferred to product proposals, a small part of the team gave a vivid portrayal of the situation of many elderly people. They described a sad situation of lying alone in a bedroom, in need of rest, but closed off from the activities of the daily life taking place in kitchens or living rooms.

They first described a scenario of being stuck in bed, almost like a prisoner. Then
they mirrored it with a new scenario, by proposing a multi-functional “Living Bed”. By first identifying the need to feel independent and capable (despite disabilities), they created a platform, a new meaning, on which to build. This starting point led them to propose a product language of modern home interiors and less of hospital-style beds, with space for storing books but also drawers for private objects. The bed offered a TV screen but also curtains for privacy, exercise equipment and a baby seat for visiting grandchildren. Their rich description combined with sketches of the bed as an integrated piece of the living room made the situation come alive. It seemed the rest of the team could take in both the old situation and the potential in the new.

By being constantly present in the workshops, Piotr had experienced how the new meaning slowly developed. He did not have to question underlying assumptions but said he just “felt the new meaning” of the bed, giving him the courage to start producing it. Over time the participants also started to express how they “felt” the new meaning. Rather than being convinced by rational arguments, the use of metaphors, music, narratives, personal stories and sketches seemed to support the way they could take in, or embody, the new meaning. As already mentioned, the innovation discourse includes a stream of involving “outsiders”, implying that creativity is “out there” to be leveraged. Managers are then expected to accept new concepts - without being involved. Instead the findings of this research point to a need for “insiders” to feel and understand the new proposed meaning. Piotr was involved throughout and therefore easily grasped the new meaning and potential of a “Living Bed”. In contrast, in the case of Shinebridge, an external person (Mr Q) experienced difficulties when confronted with the new meaning proposal. Not until he had discarded his own preconceptions did the new meaning make sense to him. This implies that when innovation is focused on a search for product meaning, it benefits from a shift in perspective: from innovation as outsourcing to the perspective of innovation as an internal **embodying**.

**The Aha-moments that hit seekers of meaning, silently or all of a sudden**

*Observations connected to Theme 1 Unfreezing*

The stories of Shinebridge, Trewig, Needles&Pins and Vox contain many similarities. There is the recurring theme of exposing personal beliefs, of discarding one’s own assumptions (even hopes!) in the search for new meaning. There is the constant activity of talking and discussing, creating reflections, often unstructured and without a clear direction. There is the curiosity and the openness to take in new meaning and then the willingness to find ways to explain it. There is the striving to find metaphors, music or stories to embody what could be a new meaning so that it makes sense to others. But there is also something more that has been observed, something that puzzles me as I cannot see clearly where it starts or how it happens. Still, I will describe this observation and contrast it with
existing perspectives.

In every story (often early on, but also later) there are moments when someone felt the need to find new meaning. Piotr clearly showed it in his bed project. Both project managers and designers indicated it, even if in a vague way, at the beginning of the Shinebridge project. Mme O expressed it early on, at the start of her project at Needles&Pins. It has been difficult to pinpoint what drives this need for change of product meaning, and still today a single clear direction of this fuzzy theme has not been developed.

Current innovation research explains how managers inspire employees to act in different ways. New methods, such as brainstorming, Innovation Jams and Idea boxes are applied to organizations that are supposed to be creative, not to criticize, to accept change and to unfreeze from present thinking. More rarely in literature the employee herself is described as the starting point of innovation. When this is the case, focus is normally on solutions to problems, not on proposals for new meanings. What shines through in the empirical material of this research, is that when innovating meanings, the individual is central. In the starting phase of all the cases, one or a few individuals seem to feel the need for something new and start to search for new product meaning. The motivation for this is unclear. This indicates that the “wake up” of an innovation process focused on a search for meaning looks different than in established theory. First, it is not obvious when this wake up takes place. It seems to be virtually invisible and has been hard to trace. Second, it is not even clear why this process emerges. When asked, employees cannot give a clear and straight answer to what happened when they decided to think differently. Their interest in a change of meaning looks like a personal discovery, an inspiration that slowly evolves and grows inside a human being.

This evolving theme, therefore, does not really explain itself as a phase, situated in time. It would be better described as a continuous process of slowly understanding more. Sometimes this understanding is implicit but sometimes it turns out as “Aha-moments”, as, for example, the German project manager at Shinebridge, referring to one such moment, the Interpreters lab: “Suddenly I got it! Not until this point could I clearly say what the meaning really was (today) and what it could be.”

The evolving nature of this theme is also clear at the end of the projects. It seems that it is not until the end that employees manage clearly to express the old meaning, and as a consequence to genuinely feel and embody the new proposed meaning. To sum up, when in search of innovating meanings, this research suggests a move from the perspective of innovation as unfreezing to one of evolving.
Analysis and proposal

From Unfreezing to Evolving

One of the established themes within the innovation discourse gives leaders outside the innovation team the role of awakening the employees. This general role of leaders to inspire the team is visible also in this research. But, existing theory also stresses an “unfreezing” step, early in a process of change. This practice, instead, has not been recognized among the cases studied, neither before nor during the projects. There were no signs of organizations preparing to unfreeze, to accept change and break down the status quo. Moreover, no external leader initiated a call for a change. Instead the recognition of the need for change evolved during the entire process. The projects did not start with a first phase of “unfreezing” and recognizing that the current meaning did not make sense anymore. Rather, as the teams reflected on a new potential meaning of products, they also started to see the current meaning in a new light. Most often the teams did not share what the current meaning of their business was, if they could express it, at all. In other words, the recognition of the current meaning, the status quo, came as an output of the process, not an input in the cases studied. To conclude, instead of an unfreezing perspective as in the existing discourse, this study proposes an evolving perspective as far as innovation and meaning are concerned.

From Naïveté to Exposing

A second theoretical perspective proposes the use of a clean, even naïve beginner’s mind when in a process of innovation. The study struggled to find this perspective in the empirical material. No clear signs of the teams being naïve or taking a naïve stance towards the projects have been observed. Instead of searching “outside the box” with a clean mind the members brought their own perspectives and pre-understanding, from “inside the box”. They deliberately created actions to bring these out, to expose them. By sharing them openly, reflections deepened. Consequently, in a process where meanings that spring from individuals and their interpretations are discussed, being “clean as a sheet” contradicts rather than confirms the empirical material. To conclude, when it comes to innovating meaning, the perspective of a “naïve, beginner’s mind” in current literature would be better represented by an act of deliberately exposing one’s own perspectives.8

8 The theme exposing has been labeled “pre-emptying” in earlier works but evoked reactions as it, by definition, means to “act in advance of (someone)” and/or to the exclusion of others.
From Information to Criticizing

The third theoretical perspective concentrates on how teams transfer pieces of information and thereby reduce uncertainties. Focus tends to be on the move from A to B, from a sender to a receiver. There are signs of this information transfer also in the companies studied, but information in this study includes another important factor, namely the reflection of the content of the information, rather than its transfer and exchange. When the teams were studied, they moved beyond transporting pieces of information. Instead they displayed the behavior of discussing, debating—even questioning. Conversations occurred, between team members and with external interpreters and a type of critical reflection took place. This drove the processes forward by refining some concepts and leaving others out. It indicates that the quality and depth of conversations seem to matter more than the quantity and breadth of pieces of information. Therefore, innovation research from the perspective of handling information leaves out the dynamics visible in the empirical material. It would be more closely captured by a perspective of an act of criticizing when in a process of innovating meanings.\(^9\)

From Outsourcing to Embodying

The last perspective emphasizes the value of externals in an innovation process. This constitutes a similarity to the empirical material of this work as it gives importance to externals, as in the invited interpreters. However, in none of the cases did these externals propose or “deliver” a ready-made meaning. Instead, the most elaborate final meanings came from cases where top management became deeply immersed in the meaning discussions. By having a chance first to question the ongoing work and then to bring their own personal perspective they could slowly take in the meaning under development. Eventually new interpretations emerged when the meaning was embodied by the employees. This implies that innovations of meaning are sculpted from within organizations and their managers rather than from external suppliers. In this sense, meaning looks less like a matter to be outsourced, opposing also the theoretical perspectives of outsourcing innovation. Innovation when connected to meaning instead seems to contain a perspective of embodying.

This analysis concludes that the existing perspectives on practicing innovation do not assist in understanding the process of innovating meanings. Instead, the

\(^9\) Traits of the importance of this “critical ability” are discussed in earlier work, see Öberg, 2012.
themes observed often point in an opposite direction.\textsuperscript{10}

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<tr>
<th>INNOVATION</th>
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\textit{Picture 14} The different practices of innovation as creative problem solving and innovation when searching for meaning

To conclude, the presented themes within existing literature struggle to support the practices discovered in the empirical material. To increase the understanding of the practices of innovation from a meaning perspective other theories came to be of assistance.

\textbf{Supportive theories}

\textbf{Hermeneutics}

As described in previous sections, this philosophical field was early on a domain for searching for guidance on how to interpret and build new meaning (see Öberg and Verganti, 2011, Öberg, 2012, Verganti and Öberg, 2013). The German philosopher Gadamer (1960/2004) underlined the fact that knowledge is something situated in history. Therefore, individuals do not enter situations “clean as a sheet”, but with a filter - a pre-understanding that steers their interpretations. The presence of a pre-understanding contradicts the perspective of innovation as “creative problem solving”, where “stepping out of the box” or keeping a beginner’s mind are commonly discussed approaches. According to Gadamer, interpretations emerge from the interplay between our own horizon (who we are, our pre-understanding) and the horizons of others. This horizon can be explained as

\textsuperscript{10} For a discussion on the themes selected see the Critical reflection in the end of this Part 2.
the world an individual lives in, at a certain moment of time and place. To understand someone else, a person needs to place herself in the field of meaning, or “horizon” of the other person by the use of empathy. By entering this unknown “world” and then referring back to her own system of references, her understanding of both grows and is refined (Alvesson and Sköldberg, 2008). This interplay of moving between the world of one’s own horizon and the one of others has been noticed in the early phases of the studied cases. It is apparent in the way managers engaged in a process of “taking out” and expose existing beliefs on the one hand, and in interaction with the interpreters on the other. Gadamer’s perspective of a pre-understanding (or prejudice), links to the theme of exposing by stressing the importance of leveraging the individual horizon - and in considering it as the starting point of new thinking.11

Further, French philosopher Ricoeur has given guidance on the proposal of the theme of criticizing. Rather than information-sharing, Ricoeur underlines the need for a critical stance in the interpretative process (Ricoeur, 1984, Kaplan, 2003). This includes an active search for a diversity of interpretations, stemming from both the interpreter herself and the external world, to actively bring in new channels of information and make use of different perspectives. Ricoeur gives guidance on the creation of new alternative understanding through the three stages of interpretation of the Aristotelian notion of Mimesis. To start with, a story or an action can be seen as “pre-figured” information (Mimesis 1 - a pre-state of the field of action). This is the understanding an individual can obtain from a narrative, as when listening to a story.12 Secondly, this understanding can change when the same story is “embedded” into a text, such as a book13 (Mimesis 2 - a configuration of the field of action). Thirdly, this understanding may change again when “transfigured” by the reader in the encounter with the text, when taking in the written information provided14 (Mimesis 3 - a re-configuration of the field as new understanding develops) (Ricoeur, 1984, Kristensson Uggla, 2002). He calls for a continuous “detour”, to lose oneself in an action of “distancing” from the problem and to “rediscover oneself as another by multiple appropriations” (Kristensson Uggla, 2011). When established perspectives point to innovation as a convergent process of reducing uncertainties, Ricoeur stresses several perspectives to raise new understanding. His perspective aligns with the practice of reflection taking place with the interpreters. Their different viewpoints created a plethora

11 Prejudice, should not been considered as having a negative connotation though, but can have either a positive or negative value, Gadamer 1960/2004

12 Or performing for example an interview.

13 Or, as in the case of the interpreters, an oral presentation, a report or a website.

14 Or as in the reflection and coming discussions of participants after the encounter with the interpreters in the cases studied.
of interpretations, even an “excess of meaning” (Jahnke, 2013). Ricoeur also refers to the use of metaphors in describing meaning, in fact he even states that “newly invented metaphors are evidence of the creation of meaning” (Ricoeur, 1977/2010, page 3). This is a practice frequently used in the cases to reflect on discussions and envision new meanings.

Connected to cognitive science and less to hermeneutics, American philosopher Mark Johnson has provided a third perspective that resembles the observations of this research. Johnson indicates that individual understanding of meaning necessarily passes through aesthetic experiences, through the senses and body (Lackoff and Johnson, 1980 and Johnson, 2007). This reasoning looks close to the observations of “feeling” the new meaning as explained by the participants in the projects. Johnson also reasons that reason (as in making sense of things and reaching understanding and further, meaning) is not “dispassionate” but emotionally engaged. Differently than rational thought, it is not literal or logical but “largely metaphorical and imaginative”, it is not disembodied but “embodied” and “evolutionary” (Johnson, 1999). It this sense, understanding meaning links to the proposal of the theme of embodying.

**Theory U**

Analogies to the themes are also apparent in the Theory U (Scharmer, 2008). From a reactive problem solving perspective (in Scharmer’s words “downloading”) (the top of a U-shaped model), Scharmer shows how understanding evolves via an engaged and more reflective process (“seeing”) to also include empathy (“sensing”) and finally to a deep personal reflection (the base of the U). Scharmer calls this level “presencing”, a combination of the words being present and sensing. In this way, Theory U stresses an opposite direction than innovation research considering new thinking as starting from a phase of “unfreezing” (and erasing old thinking). It emphasizes that personal understanding develops over time, in a continuous and ongoing process, as in the theme of evolving proposed in this research. Scharmer also describes how interpretation starts by releasing ourselves from the mind (what we see), to include the heart (what we sense) and further, down to our innermost will (what we really wish). This approach of listening inwards to take out personal thoughts mirrors the proposed theme of exposing existing beliefs in a process of developing new product meaning. Further, by opening

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15 This resemblance comes as no surprise, as Johnson used to be the student of Ricoeur (as he explained to me when meeting him in the Qualitative Research in Management Conference in Albuquerque 2012). See also Stiver (2001)

16 See also Krippendorff, 2006, who explains that “Sense is an embodied phenomenon”.

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not only the mind but also the heart, an individual can make space to take in several perspectives. This is apparent in the way the participants engaged in empathic reflections when sharing their own visions, and how these were then fused with others, regenerating new interpretation. In addition, Scharmer also gives importance to the senses and to the innermost self (who we are) and a coming “Self” (who we have the potential to be in the future). New understanding comes when acknowledging not only the present but new, not yet existing constructs, by taking in new, still uncreated scenarios of products and creating visions, as in the theme of *embodying* when in a process of searching for new product meaning.18

**Design**

The last stream that mirrors the observations made is the field of aesthetics and psychology of experiences. Paul Hekkert’s model of vision design shows similarities both to the Theory U of Scharmer and the detours proposed by Ricoeur (Hekkert, 2011). It brings design from the level of product to the level of interaction and further, to the level of context19, in which meaning becomes manifest. By combining questions of “how” with those of “why”, the aim is to “allow designers to take a personal position and fully express themselves in the process of producing a product”. In this sense, methods are enriched with philosophy and reflection. Despite directing the message towards the designers, (rather than managers, or “non-designers”) the idea looks close to the theme of *exposing* in this research. Design, according to Hekkert, “is about looking for possibilities, and possible futures, instead of solving present-day problems”, a quote aligning with Scharmer’s perspective on emerging futures.

**A process of four practices**

When in a process of innovating from a meaning perspective, the companies seem to work differently than the processes described in existing literature on innovation management. The study proposes four practices that find support in theories outside this domain; from hermeneutics, Theory U and the field of

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17 See also the Introduction of the thesis.

18 Theory U is further described in the coming section on the In-depth study 1 of the practice “Exposing”

19 As in the characteristic of “being context dependent”, described in the background work to this thesis, see Part 1.
design. The proposal aims to give structure to the process and thereby increase the understanding of this type of innovation. What can be concluded is that the process of innovation of meaning differs from the process of innovation as creative problem solving. Its practices are often opposite to what is described in innovation literature. Moreover, the practices are connected to four themes. From a silent evolving of interest, to a conscious exposing of existing beliefs, an iterative and multifaceted criticizing and an embodying of new proposed meaning. These four themes are in line with processes of interpretation, change and search for meaning explored by philosophers (Gadamer, Ricoeur), within leadership (Scharmer) and design (Krippendorff, Hekkert). The identification of the four practices and the aligning theory enabled a second study of the process. In-depth studies took place on two of the practices that had yielded a significant amount of empirical material: the theme of exposing and the theme of criticizing.

In-depth study 1 The practice of exposing

Theoretical perspectives

In a 2013 interview with Fast Company, Tim Brown, the CEO of design firm IDEO, discussed some basic principles of their innovation process. “We come with what we might call a beginner’s mind”, he noted. “We do rely somewhat on the value of having an open mind when we approach a new question”, Brown said (Baer, 2013). But, as discussed, this study instead points to a value of an “experienced” mind, towards preconception as a positive, rather than negative factor. Also academic perspectives on innovation design bring forward the idea of a “beginner’s mind” (Stefik and Stefik, 2005, Brown, 2009, Bokeno, 2009, Kao, 2011). The assumption seems to be that solutions are often found within a certain context or “inside a box” but that beginners (unaware of the context) are more likely to search in other directions, or “outside of the box” (Kelley, 2001). In this way, people who are free from existing frames of solutions and therefore free from preconceptions, innovate more easily. This approach does not only exist within the field of design innovation. Also within innovation management the same arguments are put forward, for example by theories of open innovation (Dunbar, 1995, Chesbrough, 2003, Lehrer, 2010) and of innovation as “problem solving” (Sutton, 2007).

As discussed, other studies, such as those of organizational change, contrast the “clean as a sheet” perspective. They show that norms and values inside an organization affect the deployment of change (Lewin, 1947, Levy, 1986) - in other words that preconceptions are an issue to be dealt with rather than “washed
away”. New thinking, therefore, benefits from making those assumptions explicit and recognized. When these become visible, discussed and even challenged, people can “leave them aside” and enter the innovative thinking with a clean mind. Still, these perspectives indicate that preconceptions are “in the way”. They seem to hinder the innovation process and need to be “taken out and then erased”. They are described as creating resistance to change, being negative, rather than positive factors (Kanter, 1992).

The method of the in-depth study 1

Even if traces of an exposing activity shone through already in the early stages of this research, it came to be more in focus in its later phase. The proposal of the theme therefore, does not build on all the nine cases studied, but on a study of four of them. Through a period of four years the study took an active part in four projects in which companies were searching to develop new proposals of product meanings.20 The projects belonged to the companies Marron, Blanc, Jaune (mentioned as Shinebridge before) and Vert (named Needles&Pins in earlier discussions). In order to compare the cases three different parameters were used.

First, the combination of internal and external insights gained by the companies. The invited interpreters represented the external insights whereas the employees themselves were considered to deliver the internal insights. Second, the extent of a “clash” of interpretations, observed through a) the level of critical depth in the discussions, b) the level of facilitation by the researchers involved and c) the level of new participants entering the projects. Lastly, to be able to indicate something about the outcome: whether the innovation project had created a common arena for discussing product meaning and additionally, if new understanding was shared among the participants or restricted to just a few people.

20 In other words, the research group, me being one of the members, had a chance to take an active role in the projects.
Marron is a multinational corporation in the consumer electronics industry. The innovation project aimed at repositioning the company and launching a new range of products. “We would prefer first to meet outsiders. If we start from generating visions ourselves I’m afraid we would always come up with the same ideas that have been circulating for the last few years”, said the R&D manager. Out of two options (starting from external experts and then generating visions inside, or starting from internal visions and then bringing in external views) the firm opted for the second one. After a workshop with eight interpreters, the managers presented 107 directions of new product meanings. Later, when critically discussing the meanings, the team struggled to make sense of the insights. Questions were few and the discussion scarce. Still, they developed a new meaning. But, when asked to describe it, they narrated different perspectives colored by their own preconceptions. There was no shared understanding and the new meaning did not move into implementation. In short, Marron did not show a strong activity of exposing current beliefs. It started with an external outlook to deepen the understanding but contained no deeper critical analysis. Instead the facilitation from the researchers was light (rather than widely present). The outcome of the project was the creation of a common arena to discuss product meaning (the dark square) and to some extent, a shared understanding (the white square).

The empirical material – a study of four cases

Marron - Rethinking core products - starting from external insights and getting nowhere

Marron is a multinational corporation in the consumer electronics industry. The innovation project aimed at repositioning the company and launching a new range of products. “We would prefer first to meet outsiders. If we start from generating visions ourselves I’m afraid we would always come up with the same ideas that have been circulating for the last few years”, said the R&D manager. Out of two options (starting from external experts and then generating visions inside, or starting from internal visions and then bringing in external views) the firm opted for the second one. After a workshop with eight interpreters, the managers presented 107 directions of new product meanings. Later, when critically discussing the meanings, the team struggled to make sense of the insights. Questions were few and the discussion scarce. Still, they developed a new meaning. But, when asked to describe it, they narrated different perspectives colored by their own preconceptions. There was no shared understanding and the new meaning did not move into implementation. In short, Marron did not show a strong activity of exposing current beliefs. It started with an external outlook to deepen the understanding but contained no deeper critical analysis. Instead the facilitation from the researchers was light (rather than widely present). The outcome of the project was the creation of a common arena to discuss product meaning (the dark square) and to some extent, a shared understanding (the white square).

21 For a more detailed description of the cases, see Öberg and Verganti, 2014c
no shared understanding and the new meaning did not moved into implementation. In short, Marron did not show a strong activity of exposing current beliefs. It started with an external outlook to deepen the understanding but contained no deeper critical analysis. Instead the facilitation from the researcher was widely present (rather than light) and no new participants entered the project. As a consequence no common arena and hence, no common understanding developed (see graphic below).

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<tr>
<th>PARAMETER</th>
<th>Insights</th>
<th>Level of clash</th>
<th>Outcome</th>
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Picture 16 The parameters used to analyze the observations in relation to the four cases

Blanc - Entering a new market — starting and keeping old internal thinking

Blanc is a global corporation in the consumer goods market. The innovation project aimed at expanding into a new business. In this case the company decided to start first from the internals. Starting from some preliminary research each member of the team (about 15 people) envisioned 1 new meaning. The researchers facilitated a framework and together generated one tentative new meaning. This was then discussed with seven external interpreters in a second workshop. In this project the meeting with the interpreters was more lively than in the case of Marron, with several questions and discussions. However, the framework remained unchanged. It delivered a new product meaning proposal, but still team members had different interpretations of it. The project moved into implementation, but
with a focus on the most conservative products, promoted by the most influential managers and their preconceptions. In short, Blanc contained elements of an exposing/pre-emptying activity. The company started from internal insights, but again made no large investment in deepening their understanding by bringing new participants or taking “control” of the frameworks developed. Instead the facilitating researchers proposed these. But despite managing to create a common space to discuss the new proposed meaning, understanding was diffuse rather than shared.

Jaune \(^{22}\) - Addressing a growing market segment - leveraging internal visions

Jaune is a global corporation in the consumer goods market. The innovation project aimed at addressing a growing market segment. Again, the first part consisted of an internal phase and the second an external meeting. By contrast though, more engagement and deeper reflection resulted in 70 possible new product meanings. The facilitators did not propose any framework but two additional working meetings took place where the meaning was once again deeply discussed. It was supported by new participants who first challenged it by delivering their own visions. By exposing them, they managed to open up to new thinking. The team managed to create an arena to discuss and engage top executives outside the project. They established not only a new clear vision but also an understanding of the old meaning and why it was outdated. Despite its radical nature, it moved into implementation. In short, Jaune showed clear signs of an exposing activity. This project started off with the internal insights of the team members, and when new participants joined the projects deepened their understanding of the proposed meaning dimension (see also the outlandish characteristic of this type of innovation discussed in Part 1). They also developed their own ways of describing it, leaving the facilitators to take a lighter role. This also enabled a clear shared understanding and creation of a common space in which the new product meaning could be discussed and elaborated.

Vert \(^{23}\) - a new shopping experience

Vert is a luxury fashion brand. The purpose of the process was to radically change

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22 Jaune has also been named Shinebridge earlier in the thesis and in other publications

23 Vert has also been named Needles&Pins earlier in the thesis and in other publications
the meaning of the shopping experience in their stores. The process was similar to the Jaune case with the difference that much more time was dedicated to critically analyzing the individually proposed meanings, without time constraints. The discussion went on until everyone felt that their proposed meaning was thoroughly listened to, reflected upon and criticized. In this way there was time to transform each individual proposal into a common understanding, fusing it into a shared reinterpretation. The team fully shared a common interpretation of the new meaning, even though it was radical. It moved into implementation bringing on board the top executives who had not attended and had, at first, been less supportive. In short, Vert represents the case with the most profound exposing activity. Here, the internal insights were deeply reflected upon in iterations and with the help of new participants (see also the not-optimized characteristic of this type of innovation discussed in Part 1). The researchers functioned as light facilitators which resulted in a common arena and understanding growing strongly and vividly within the company.

**Analysis and proposal**

The four cases provide a rich material to explore whether and how a “not” beginner’s mind, that is, a mind with preconceptions, contributes to the search for a new potential meaning of a product. The material has given rise to the following four insights.

**The importance of exposing existing beliefs**

This observation confirms the theoretical stance of hermeneutics and Theory U: the beginner’s mind is a contradiction to the process of innovating meaning. Project Marron, which explicitly opted for the beginner’s mind at the start, did not succeed. Similarly, project Blanc, which did expose the beliefs of the participants, but only partially, achieved only partial results. These teams seemed to not take in the new meaning fully, and did not grasp its implications. There was no arena for engaged assessment and therefore, when moving into development, the new meaning seemed to dissolve along the way. Projects Jaune and Vert instead acknowledged that when it comes to meaning, a person’s mind is never empty and no one can pretend to be a beginner. They dedicated a lot of energy to exposing existing understanding. First, every individual reflected on possible new meanings which enabled them to bring out what they had inside, and second, these individual visions where taken on board by the other team members, signaling that every person’s vision was considered. This indicates that the process of innovation in search of meaning requires an explicit action of exposing existing beliefs.
The act of exposing as a journey

The second proposal is that the action of exposing is not a simple act in which a person “lays bare” her vision. “Exposing your beliefs” does not happen in a moment. This is clearly visible in the story of project Blanc, where the company started from the inside, and asked each member to envision a new meaning. But, it seemed the company did not dedicate a lot of time to critically discussing these new meanings internally and criticizing each other’s perspective. Project Jaune and Vert instead show that the act of exposing beliefs is a detailed journey consisting of different actions of envisioning and narrating, coupled with an engaged sensing and fusing, as in Gadamer’s “fusion of horizons” (Gadamer, 1960/2004). Therefore, the team (and the facilitators) avoided pushing towards convergence. To sum up, what matters is not the quantity of ideas (as in creative brainstorming) but how much vision on new meaning is discussed and shared. An example is case Vert, where, instead of considering all 108 proposals, the company focused just on a smaller number (26) but each one was discussed by the entire team.

Exposing as an on-going journey

The third major finding is that the act of exposing does not happen only at the beginning but instead throughout the whole process. In case Vert, the team embodied the new meaning at the same time as it embodied the understanding of the old one. This is in line with Scharmer and Theory U: the past and the future co-evolve; you understand the past (your “self”) by learning from the future (your “Self”). It’s the clash between the future and the past that occurs all along the project, that makes your pre-understanding clearer. Second, exposing is an ongoing journey as the team expands, and new team members are enrolled. In project Jaune, for example, a top manager joined the project towards the end, and only after he shared his own vision and the others discussed it carefully did he finally feel comfortable enough to embrace the new vision and meld it with his own. This implies that the team benefits from not simply transferring a proposed project meaning but providing space and engagement to allow the newcomer’s understanding to be exposed as well.

Exposing as a generative on-going journey

Finally, exposing is not only an act of forgetting the past. It is also a generative action: it is the first step to imagining the new, the future. It’s an act of designing, by envisioning a new meaning for the future. Instead of “emptying” a mind loaded with preconceptions and then filling it with a new vision, the practices
in this research look different. They indicate that when new insights develop, “old” pre-understanding flows away in favor of “new” thoughts, under development. To interpret Gadamer, by feeding in new horizons one get rids of the old. Rather than searching for individuals with a beginner’s mind (if they exist at all), organizations may instead acknowledge the existence of pre-understanding, and deliberately create actions to make this pre-understanding outspoken and shared within an innovation team. As Gadamer says, there should never be a state of empty horizons.
Supportive theory for the theme of exposing

Hermeneutics

As described earlier, this field advances the importance of personal interpretation. By explicitly addressing an individuals’ own point of departure and then leveraging it, hermeneutics contradicts the idea of a clean, empty beginner’s mind. As both Ricoeur and Gadamer have proposed, bringing other (conflicting) views eases the development of one’s own understanding. By deliberately exposing one’s own personal thinking and asking questions on the subject to oneself and others, what is meaningful passes into individuals (Ricoeur, 1984) (Gadamer, 1960/2004). Both Ricoeur and Gadamer indicate that a novel meaning does not come from an empty mind, but, on the contrary, from a mind built on pre-interpretations, a mind with a horizon. A person that has no horizon risks not seeing far enough and “overvalues what is nearest at hand, whereas to have a horizon means being able to see beyond what is close at hand” (Laverty, 2003). In other words, the existence of pre-understanding is a positive and necessary asset to drive reinterpretations. Without pre-understanding there would be nothing to fuse, nothing to clash.

The Theory U

Theory U too gives guidance to how people and companies can strive deeper in their awareness of, for example, products (Scharmer, 2008). Through the concept of presencing, this perspective stresses that only when an individual starts to be present but at the same time to feel the future, can she also let go of the past. This process encourages individuals to freely open up and “dive into” a situation instead of sticking to the present version of oneself (the “self”). It includes a move beyond pure information handling - to an action of seeing the most intimate part of oneself (the potential of the individual, or the “Self”). From a clash of old thinking (the self and the pre-interpretation of something) and one’s future will (the future Self) new understanding emerges. In other words, new thinking implies looking inwards, or as Scharmer puts it: to “connect to the deepest source from which the field of the future begins to arise” (ibid). From a theoretical point of view, both hermeneutics and Theory U challenge the idea of the beginner’s mind. They suggest that no one can be a beginner when searching for new meaning. Instead, acknowledging one’s pre-interpretation, making it explicit, and fusing it with the pre-interpretations of others (as in hermeneutics), or with one’s own interpretations of the future “as it emerges” (as proposed by Scharmer) looks...
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Summary 2 - The practice of exposing

With inspiration from the theories of hermeneutics and Theory U, what has emerged in the empirical material is an activity of clearly expressing the meaning a person believes in. By thoroughly describing, reflecting and criticizing a personal view the companies in these cases have created space for new thinking. Rather than starting from a “beginner’s mind” organizations may instead acknowledge the existence of a pre-understanding, and deliberately create actions to leverage them. This activity has been labeled exposing, extracting existing beliefs. The study shows that when the participants do not expose their thoughts with conviction, the process of searching to innovate product meaning seems to struggle. It seems the unspoken old meaning implicitly drives the discussions. As a consequence, the space for new interpretations becomes restricted. It looks as if the participants “project past patterns and see reality as a shadow” (Scharmer 2008, p. 160).

But, hermeneutics and Theory U do not give guidance on what to do in practical terms when exposing your beliefs. Here, the empirical material has given rise to two insights. First, that exposing does not happen in a moment. Instead it takes several iterations to thoroughly analyze, discuss and fuse every team member’s vision with the others. Second, that the act of exposing does not focus solely on the past but on the future. Existing (and old) interpretations fade away when individuals open up and take in new horizons. The starting point is an interchange of old and new thinking between the members in the team - not an empty beginner’s mind. In other words, this work proposes that, rather than searching outside the box, a valuable way to unlock interpretations is to search “inside” the box, inside

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24 As acknowledged by Seidel and Fixon (2012), this “team-reflection” may be “particularly difficult”, especially when working with complex tasks that include not only the objective of a design process, but also the strategy behind and its processes. Such skills of reflection may already be part of professional designers’ approach (see Schön 1983), (a group that was not widely represented in the cases studied).

25 While in previous work it was labeled pre-emptying.
In-depth study 2 The practice of criticizing

Theoretical perspectives

“We would prefer first to meet outsiders. If we start from generating visions ourselves I’m afraid we would always come up with the same ideas that have been circulating in the last few years”, said the R&D manager of Marron, one of the cases studied. He represents a perspective on innovation that has been observed repeatedly among the managers in this research. As discussed before, the idea of external input as a driver of innovation is not new. “Thinking outside the box”, that is, outside your own everyday reality, is one of the most commonly used expressions when in need of new thinking. Google, for example is an example of a company that applied this approach through allowing a 20% share of workload to be something other than normal “duties” (Steiber, 2012). This outside-in perspective makes new matches between old ideas and new ones, driving creativity forward to the birth of new ideas (Brown, 2008, Martin, 2007). External sources of inspiration can come from far, as in user innovation and crowdsourcing where expert users contribute to the growth of ideas (Von Hippel, 1988, Chesbrough, 2003). But, they can also be parts of existing networks, inside or close to organizations. One such concept is the one of interlocutors or “alloy people” (Lester, 1998). These are people that might be loosely connected to a firm, with a certain skill in transferring signals from the “outside” world or market to managers of a company. More intra-organizational is the theory of the intermediates, people within companies that cross borders to enable different competences to meet (Hargadon and Sutton, 1997). This perspective also stresses the ability to give insights and discuss across borders in an organization. Still, the above-mentioned frameworks give value to ideas, signals or competences rather than their underlying meaning. Interlocutors might enrich the perspective but the “networking-absorbing and transferring” ability creates a distance between the observer and the receiver. A signal passes several “filters” and risks being watered down, losing its color and turning to a pale, weak signal when presented to a manager. Intermediates, on the other hand, raise awareness of new perspectives, but at an internal level.

When shifting the focus from idea creation to proposing meaning, external sources are still valuable. In this research they have consisted of the interpreters, external experts who bring not only their professional knowledge but also give value as the individuals they are. But in addition to bringing ideas from outside the “company walls” (Chesbrough, 2003) they seem to possess the ability to be critical.

The method of the in-depth study

To learn more about the interpreters a special study was designed, focused on one “Interpreters lab” by the company Shinebridge. The company wanted to clear out the meaning of their current product and propose a new, different meaning. They organized a meeting (the Interpreters lab) consisting of seven interpreters from different fields, as well as their own managers from research and development, product design and marketing. During a one-day meeting six themes, predefined by the company in an earlier workshop, were discussed. The interpreters shared their knowledge and insights on one theme with an oral presentation and also through metaphors and music. After each presentation an open discussion took place.

The empirical material was collected in several ways. First, secondary sources were used to access the CVs and past experiences of the interpreters. Second, the selection process - of which interpreters to choose and contact - made it possible to form a richer picture of each interpreter, especially through a scheduled phone call with each interpreter, prior to the lab. Third, the three participating researchers took notes on the individual behavior of the interpreters and how it seemed to affect the conversation. It was done without a predefined protocol but with the critical ability perspective in mind. The notes were supported by a video recording and collection of the digital presentations. In addition, the participating managers filled in an assessment form where they indicated the perceived value of each interpreter. This was done twice, directly after the lab and also six months later. Finally, four of the participating managers were interviewed resulting in around three hours of tape-recordings. These were then analyzed by coding the principal elements individually by each researcher. The material was then coupled with the

26 Note that the way participants and interpreters manage to express their reflection on potential new products/artifacts is connected to language. To quote Krippendorff “the fate of all artifacts is decided in language” (page 148, Krippendorff, 2006). The dimension of language is a domain left out of this study, but it provides an avenue to be further explored.

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28 This was a collaborative project planned and performed in cooperation between the company and the research group.
literature studied, giving birth to the findings presented in the next section.³⁹

When it comes to the participation of the researchers, being part of the discussion probably helped to understand the process of this type of innovation, connected to the construct of meaning.³⁰ As meanings evolve within and between people, staying to one side and not participating would have hindered this understanding. This mind-set connects to participatory research and the idea that validity comes from understanding and creating rather than observing and predicting. The social psychologist Kurt Lewin said it well: “If social scientists truly wish to understand certain phenomena, they should try to change them. Creating, not predicting, is the most robust test of validity-actionability”, (Kaplan, 1998).

The empirical material – a study of seven interpreters³¹

The interpreters will now be portrayed through their background and how they acted during the Interpreters lab. For the sake of confidentiality, the names of Greek Gods and heroes replace their real names - but without connection to gender or abilities. The Interpreters lab was directed towards one of the young target groups of Shinebridge and their lifestyle.

Metis – a research perspective

Metis was one of the first to accept the invitation to the Interpreters lab. Being a researcher by profession Metis came with both theoretical knowledge in the area (of adolescent development) and practical experience from the field. She seemed used to the situation of discussion and reflection, of going beyond the “taken-for-granted” concepts. She used the assumption that “teenagers dislike their parents” to show the opposite, namely that many teenagers actually like (and need) parental support. She underlined her perspective by bringing the metaphor of a compass, an object to indicate the need of something to “hold on to” while “navigating” your life. To further express her standpoint she played the song “What’s up” by 4 Non Blondes, a song that provoked a discussion about the search and struggle that many teenagers go through. The music and its lyrics evoked memories and laughter in several participants. Metis also showed interest in the meeting before it was held, she asked many questions in advance, and also during and after it. It seemed she wanted to deeply understand its purpose, and when she did she even questioned one of its proposed themes. Metis’s idea of the compass looked challenging to the managers, who did not perceive its value when they first assessed the interpreters’ contributions. Six months later though, it was highly appreciated, as was all the input given by Metis.³³

Nike – experience driven

Nike, despite being in her 60s and the oldest of the interpreters, had a very close and rich picture of the young potential users. With a long experience within sports as an Olympic champion, Nike brought to the participants the world of extreme sports. Being an athlete and a coach at a center for young people, Nike described what motivates many young individuals today. She explained how important the recognition of friends is. But also that other, older friends work as role models and inspire the younger ones to take on challenges. This message was fueled by the many personal stories that Nike shared from her own experience in interacting with these young people. Using the voices of Macklemore and Ryan Lewis, and their song “Can’t hold us”, Nike put forward the complexity of the world for teenagers today, and the fact that many care most of all for their closest reality.

Nike also showed some movies from the extreme sports camp to communicate the feelings she wanted to get across. With a highly agreeable attitude³⁴ she managed to stimulate several conversations where all the participants engaged, and she was perceived (by both researchers and managers) as someone who spread good energy in the room.

²⁹ In addition, the personal characteristics of the interpreters were mapped through a multidimensional personality inventory (The BFI-framework). The interpreters were asked how well 44 different adjectives describe them. Linked to this, the company filled in an assessment form to evaluate the interpreters. This part of the material connects to the personality of the interpreters and will not be discussed in this thesis.

³⁰ Other researchers might think differently. This is my personal opinion.

³¹ See Altuna et al 2014 for details.
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32 https://www.youtube.com/watch?v=6NXnxTNIWkc

33 For details on the assessment of the contribution of the interpreters (undertaken by the managers), see Altuna et al 2014.

34 For details on the assessment of personal characteristics, see Altuna et al 2014.
Leto – driven by first-hand insights

Leto, the insights director of a worldwide multinational company, has spent most of her career working on youth brands. She conducts research on existing trends and future scenarios and explained that she saw the Interpreters lab as a unique experience for sharing insights. Like Metis she showed interest in deeply understanding the idea of the lab before it took off, both in phone calls, mails and during the day as such. Coupled with this willingness to understand Leto also generously shared her experiences. She gave first-hand insight into the work they continuously do with their research partners around the world and also shared personal anecdotes (like pictures from one of her latest work-trips to Brazil and her children’s friend’s latest pictures on social media channel Snapchat). Through a magazine article she also mildly provoked some common assumptions about teenagers. These contributions and the perceived openness and honesty of Leto made the participants engaged, to the point that they even questioned some of the ideas presented.

Aura, Eusebia, Demeter, Sophrosyne

The input of these three interpreters above was enriched with four additional perspectives; the product-driven Aura, the visionary Eusebia, the passionate Demeter and the data-driven Sophrosyne.

Aura, the consumer and market knowledge manager at a multinational consumer goods company, was the youngest invitee (age 25). She focused on the relationship of young people with their bodies and demonstrated her point through Nirvana’s “Smells like Teen Spirit” - a metaphor of the main message she wanted to share. Aura also showed some You-tube clips but unfortunately her participation during the day was limited. She also got a lower assessment in terms of contribution.

Eusebeia is a senior marketing analyst at a multinational food and beverage corporation. With experience in brands and product innovation she addressed the issue of bravery and how young people deal with it. She raised a few questions that she later answered by providing evidence from first-hand research done directly with young people. To close her talk, she played a commercial they had recently launched into the market that encapsulated the main points. Like Aura, she did not participate much during the general discussions.

Demeter worked (at that time) for a non-profit organization empowering the growth of youth ventures. With a degree in political science she helped young people follow their passions to make their ideas come true. Her main message had to do with the community’s role among young people and the individual’s role within communities and she chose the song “WorldCitizen” by Jahcoustix feat. Shaggy.
to exemplify this. Demeter actively participated in the debates and her contribution was perceived as being valuable.

Sophrosyne, a camera enthusiast with a Master of Fine Arts degree, works in advertising for a social networking company. He presented statistics on people’s behavior in social media. Through the voice of Macklemore and Ryan Lewis and their song “Same love”, he raised the dilemma of stereotypes. His point was that stereotypes are a challenge that young people need to face. Sophrosyne gave a description rather than an interpretation of his theme.

**Analysis and proposal**

The interpreters and their way of acting in the Interpreter lab contain several elements of a critical character. Many of them did not only deliver what was expected from them but went beyond the official “assignment” and gave “a little extra” to their insights. This indicates an opposite direction to, for example, user-driven innovation where experts would be asked to contribute in a certain direction – and not to deliver unplanned events. Observation of the interpreters revealed a number of patterns. Selecting the metaphor of a dance floor, these themes came to be divided into the four themes of asking, giving, daring and playing. A dance floor is a common place (be it on a night club or on the street or elsewhere). Here, people choose to participate in different ways, some traditionally asking for a dance, others maybe daring to try the unexpected.

**Asking** - Just as a person who wants to dance with someone is willing to ask for a dance, an interpreter who wants to know more is willing, even eager, to ask other interpreters (or participants) to learn more. She asks “why”, “how” and “tell me more”. The act of asking is an “invitation” to a deeper discussion, as in the idea of a critical stance described by Ricoeur (Alvesson and Sköldberg, 2000, Kristensson Uggla, 2002). Some interpreters, especially Metis and Leto, showed a clear and considerable interest in understanding the underlying ideas of the Interpreters lab. They asked several questions before the lab, in the preparation phase, during the workshop and in later contacts.

**Giving** - Just as a dance involves giving something from yourself and your ways

35 https://www.youtube.com/watch?v=DSlp-7Kkw2E

36 https://www.youtube.com/watch?v=hlVBg7_08n0
of moving, an interpreter is generous in sharing her personal opinions and experiences. She is not afraid to show her real “me”, being passionate about themes that engage her. The theme of giving is clearly visible in Nike's strong engagement and sharing of personal stories. She contributed by having “lived the experience” (Gadamer 1960/2004) thereby being authentic. Even her style and language felt closely related to the young people discussed. Leto too shared her real experiences “from the field”, as a mom of six girls and their boyfriends. She also openly shared data from her studies. This openness and personal experience gives trustworthiness and authenticity to the insights.

**Daring** - Some dancers might be courageous enough to try something unexpected, or even provocative; they defy and take the risk of being refused, even ridiculed. This also goes for an interpreter who is eager to go deeper into a discussion, beyond the obvious, and challenge herself. As a dancer can choose to be brave, an interpreter might take the chance to do the unexpected. She might be producing thoughts and ideas even when it is not “asked” for. An example of daring is Metis, who, before the Interpreter lab and to the surprise of the organizers, took the opportunity to question one of the themes. She also helped out with answering questions not expected from her but from other interpreters. This daring capability shows similarities to the proposal of “losing yourself” (to find yourself anew) as discussed by Ricoeur (Kristensson Uggla, 2011).

**Playing** - Good dancers are not perfect but have a great personality. They show new moves, try, test and play with tensions, combining the established form with something new, even crazy. Like the dance group Bounce, leaving the “conven-
tional” dance floor for city squares, the “expert” dancing for an ordinary dancing crowd. Good interpreters, it seems, do the same. They have fun stretching existing concepts by the use of metaphors or stories to explain what they feel inside. They propose something in the hope of creating a reaction. Several, but not all, interpreters moved beyond their everyday language by bringing an object or metaphor. Nike showed movies, Eusebeia used a commercial from her company, Leto related to a well-known article in the worldwide magazine Time with a somewhat provocative message. Metis brought a powerful metaphor, the compass that grew in importance over time and eventually scored very high marks.

Second Insight - Expertise is not enough

By mapping critical abilities, they become visible and their value in the process of discussing meaning of products shines through. This implies that when in search of helpful interpreters, the usual way of studying competences, for example through a CV, or the institutional context, such as the position in an organization, might not be enough. Instead, these factors would benefit from being coupled with a critical ability.

Supportive theory for the theme of criticizing

Hermeneutics and critical perspectives

In this research, external interpreters contributed by face to face discussions with managers. They delivered their expertise but more than this, also their personal opinion of things. Instead of cooperating to find solutions, as in user innovation processes, they actually made things more complicated by adding more perspectives. By unexpected actions and questions they increased the complexity of things, challenging and criticizing the managers. To explain this critical be-

37 See https://www.youtube.com/watch?v=IvJVRywgYNM
havior\textsuperscript{38}, two theoretical streams of critical abilities were studied.\textsuperscript{39} The first one, discussed throughout the thesis, is the “critical stance”-inspired one that gives value to rendering alternative understandings. Importance is given to understanding the world of others as in the fusion of horizons of Gadamer or the fact that interpretations benefit from being exposed to tensions of different perspectives, as described by Ricoeur (Gadamer, 1960/2004, Alvesson and Sköldberg, 2000, Kristensson Uggla, 2002).\textsuperscript{40} The second stream, “critical thinking”, advocates an opposite direction. It gives importance to a well structured, systematic approach to prove whether a fact is correct (true) or not within a given framework (Bailin, 1987). The aim is to isolate problems, take out errors and balance “uncritical and subjective knowledge” (Glaser, 1984). By drawing conclusions on logic and reason, biased thinking is left out and with this, personal feelings and ideas. This stream of research is closely coupled to (innovation as) problem-solving. But, it contradicts one of the major observations of the interpreters, namely the contribution of them as the humans they are, with their personal views and standpoints. Here, both Gadamer and Ricoeur acknowledge that prejudice (or pre-understanding) is fundamental to understanding (Jahnke, 2012).

Critical literacy and Education

One theoretical framework that shows similarities to the themes of criticizing is that of Lewison (Lewison et al 2008) and their proposed framework connected to teaching situations.\textsuperscript{41} A critical ability is suggested to include an act of \textit{consciously engaging}, not only responding but paying attention to the language (as in the proposed theme of Giving and Playing). Further, this ability is described as \textit{entertaining alternate ways of being} by \textit{trying alternatives and creating tension} (as in the theme of Daring). In addition, it includes \textit{taking a responsibility to inquire}, to ask and question beliefs and move beyond (as in the theme of Asking). Lastly, this critical approach

\textsuperscript{38} Being critical, as defined in this research, does not necessarily mean to be negative, but to be open-minded and use all senses to develop new thoughts.

\textsuperscript{39} Parallel to the study of a critical ability the research group also studied the personality of the interpreters, taking inspiration from the field of psychology. The Big-Five Framework was used (indicating extraversion, agreeableness, conscientiousness, neuroticism, the opposite of emotional stability, and openness to experience). However, in this thesis this dimension is left aside (for details see Altuna et al, 2014).

\textsuperscript{40} Even though Gadamer has been criticized for keeping the focus on history, tradition and understanding existing situations rather than informing the understanding of potential future meanings, see Jahnke, 2012.

\textsuperscript{41} See also Scherff, 2012
also holds an ability to be reflective, to be aware of the risk of maintaining the status quo and to converse in such a way as to “outgrow” ourselves, (as in the theme of Daring and Playing). Another framework with a similar perspective is that of Mingers (Mingers, 2000) (and the aspects of rhetoric, tradition, authority and objectivity). Even if the focus is directed towards the practices of critical literacy and education and less towards innovation processes these frameworks contain insights worthy of further study.

Summary 3 The practice of criticizing

This section on the practice of criticizing aims to enrich theories on how meanings evolve between external sources and the employees of a company. The purpose has been to enrich the field by introducing the concept of interpreters. They are a type of outsiders who, rather than generating ideas (as in user innovation) seem to fuel discussions on product meaning. By being part of the reflections taking place inside a company, their perspectives, far from the products of this company, enrich the process of searching for new product meanings. Even so, the interpreters cannot drive meaning change alone. They are part of a conversational process where the capability of absorbing and transferring insights also belongs. The breadth of this process has not been in focus here. Instead, the interpreters, who constitute an important portion of this conversational process, have been studied. To conclude, the following has been revealed. First, that interpreters possess a critical ability that seems to drive the process of finding new product meanings forward. This critical ability can be divided into four subthemes, namely asking, giving, daring and playing. Second, that when they want to move beyond existing meaning, companies need to look not only at the expertise or organizational context of an interpreter, but even more, look for signs of a critical ability.

Summary 4 The proposal of four practices

This part of the thesis has been focused on its main question, What are the practices that support innovation processes driven by a search for meaning? It proposes four themes of how to practice this type of innovation. By organizing the existing discourse in innovation management into four themes of practices (called Un-freezing, Naïveté, Information and Outsourcing) four new themes of practices were detected in the empirical material. These discuss the acts of evolving, exposing, criticizing and embodying and point in an opposite direction to the themes in established frameworks. They align with theories outside the discourse, in the fields of hermeneutics, learning and leadership (especially Theory U), design and within critical literacy and education. The study gives additional insight into two of the practices. The first of these is exposing, an action of extracting and clearly
expressing the meaning a person believes in. Rather than starting from a “be-
ginner’s mind” organizations may instead acknowledge the existence of a pre-
understanding, and deliberately create actions to leverage it. The second practice
is criticizing, discussing how meanings evolve between so called interpreters and
the employees of a company. Rather than generating ideas (as in user innovation)
these external experts seem to fuel discussions on product meaning, feeding the
process of searching for new product meanings. To summarize, the purpose of
finding answers to the research question has been to provide insights into how
meanings can evolve and therefore constitute a source of innovation.

Critical Reflection

A first reflection concerns the identification of these four themes of practices.
Why were these the four themes selected? One main reason is that this research
takes a certain perspective on innovation, namely viewing innovation as focused
on “creative problem solving”. Innovation studies can start from other viewpoints as
well, for example connected to processes of building teams or inspiring employ-
ees. Nevertheless, as resources were limited, only one perspective had to be select-
ed. This perspective was not fixed, but developed throughout the study. From
considering innovation as a “problem solving” activity, it came to be framed also
through its creative angle, as “creative problem solving”. By keeping the same basic
direction throughout the research cycle, findings were built on a thorough investiga-
tive perspective, aimed at an increased robustness of the study. Considering the
four themes, they were identified in a two-fold process: first, by sorting existing
theories into clearly visible domains and second, by studying alternative theories
that gave alternative explanations to the empirical material. Over time, themes in
the existing innovation literature helped to carve out themes of alternative theory
by showing opposing directions.

A second reason for the proposal of these themes, is the supportive theory that
guided the empirical study. Alternative theories would have sparked different re-
flections and shed light on other pairs of opposites. But when starting out from
hermeneutics, especially, and with inspiration from Theory U as well as the design
field, the practices proposed major corresponding streams within these fields.
Still, this research does not consider the themes as mutually exclusive to the dis-
course on meaning innovation. Traits of evolving, criticizing or embodying can
also be seen in innovation processes focused on creatively solving problems. But
where innovation and meaning are concerned, the practices observed seem sel-

42 Including several perspectives was beyond the feasibility of the study. Themes that have been sug-
gested include organizational perspectives (for example Dougherty, 1992), cross team understanding
(for example Huber and Lewis, 2010), semiotics and linguistics (for example the works by linguist
Noam Chomsky) to mention a few.
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dom, if at all, to have been studied.

Moreover, the proposal of the four practices builds on two platforms. First, on

the early research findings resulting in a Licentiate Thesis (Öberg, 2012) propos-

ing the four practices of building scenarios of meaning, questioning, building critical

capabilities and envisioning. Second, the final proposal also builds on the later case

studies. The four practices proposed in this thesis were therefore not studied

from the very beginning of the study, but evolved as the empirical material be-

came more abundant. Signs of, for example, the exposing activity could be traced

all the way back to the first cases studied. But it was not until halfway through

the PhD work that it started to appear as a repeated pattern. This resulted in an

increased focus on the process of innovation in the search for meaning, prior to the

on the dimension of meaning (its characteristics). Concentrating on the practices

could therefore be seen as a partial result of the study.

In addition, the participative approach in the later stage of the study enabled the

research team not only to observe ex-post learnings - but also to share the strug-
gles with the companies and how these challenges were addressed during the pro-
cess. In this way, it was possible to capture dynamics of the process as it unfolded.

Reflection on how to frame and improve research is an undertaking that is always
evolving. The themes are not to be considered as definite, but serve the purpose
of giving structure to a field that has not been studied in great detail. Some al-
ternative research avenues will be discussed in the last section of this thesis in its
“Future research” section.
CONCLUSION

Meaning and innovation
- processes observed
This thesis describes an alternative path of innovating. It focuses on the meaning dimension in an innovation process - on the reason for using a product. Rather than being driven by the "how of innovation" (as in new technology or market strategies) it turns to a reflection of "why" to use a product. And - whether this reason - or product meaning - might change. One example of a product including such a meaning change is the I-phone which, when launched in 2006, changed the purpose of a mobile phone from a communication device to one of lifestyle and entertainment. Another example is the Polish furniture company Vox and their Living Bed. They transformed the meaning of a bed for elderly (and, in some cases, disabled people), from a "prison-like" and private place to a platform that enabled socializing and interaction.

Meaning is a dimension that is only sparsely discussed within innovation management literature. Still, meaning is always present in every product or service used by individuals. Most often, however, these product meanings remain constant within companies. Instead what is often refined is its features (a technology focus) or the business model (a market oriented focus). The change of meaning, however, can be a source of innovation. The study describes several innovation processes where companies have explored, and proposed, new interpretations of product meaning.

Findings

The major contribution of the thesis is the identification and proposal of four practices within the process of innovation when carried out through a meaning perspective. In particular, the practices of exposing and criticizing, which distinguish this process from the practices described in the existing literature. In order to introduce the subject, this study has also elaborated a deeper understanding of the dimension of meaning in relation to existing innovation perspectives. It has also elaborated on the economic value of this approach to innovation.

Empirically, it consists of nine case studies of companies within the fields of manufacturing and robots, furniture, accounting and consumer goods. Theoretically it has found support mainly within the philosophical field of hermeneutics (Gadamer, Ricoeur, Alvesson and Sköldberg) and the Theory U within the discourse of learning and leadership (Scharmer). The findings conclude that the process of innovation of meaning differs from the process of innovation as "creative problem solving" which is much discussed within the existing discourse. It also supports ongoing research within innovation management, especially Verganti's work on design driven innovation (Verganti, 2009) and Jahnke's work on meaning making and designers (Jahnke, 2013).
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Through observations and interviews as well as active participation, the study has elaborated a proposal of four practices that define the process of innovation from a meaning perspective. The practices are described as:

**Evolving** – indicating that proposals of new potential meaning of products do not come in an instant. Instead, they come through a continuous process of slowly understanding first the existing meaning of a product. As insights into the current situation evolve, so reflections on new meaning perspective grow.

**Exposing** – indicating that when in a process of discussing perception of product meaning, personal perspectives needs to be expressed. By sharing beliefs and preconceptions openly, participants expose themselves and their thoughts and reflections deepen.

**Criticizing** – indicating that through a practice of taking in different opinions, debating and questioning, critical conversations drive forward the processes of seeking to innovate product meaning. Rather than information sharing, the depth of discussions creates new avenues of meaning to consider.

**Embodying** – indicating that new product meanings are not easily carved out from the inside of an organization. Instead they evolve slowly, through deep reflection and critical thinking. Meanings need to be embodied, to be “felt”. They are not to be explained to top managers. Instead these executives need to be present, to immerse themselves in the process, so as to feel the reason behind the new meaning emerging.

The study gives additional insight into two of the practices. First, the one of exposing, an action of taking out and clearly expressing the meaning a person believes in. Rather than starting from a clean “beginner’s mind” (or as in the expression “looking outside the box”), organizations may instead acknowledge the existence of a pre-understanding, and deliberately create actions to leverage it (looking inside themselves, a type of “looking inside the box”). Second, the practice of criticizing, an action that discusses how meanings evolve between external experts, or interpreters, and the employees of a company. Rather than generating a large amount of ideas these external experts fuel discussions on product meaning by deep and alternative reflections, feeding, even criticizing the process of re-thinking product meanings.

The practices connected to such an innovation process are graphically depicted as a “thinking circle” below. The circular geometry represents the proposal that the practices are equally important and concurrent. Just as new product meaning comes as a result of many cycles of reflection, the graphic contains several circles. A “tail” represents the start and endpoint of this type of innovation process. Without this tail the graphic would risk representing an endless circular motion of
reflection, never leading forward to new product proposals. The proposal of the practices rests on a background study of the dimension of meaning per se, where four characteristics of this type of innovation were identified.

![Diagram of practices connected to innovation process](image.png)

**Contribution**

Theoretically, this research makes its contribution primarily within the field of innovation management. In this discourse, there is still no robust study of the process of innovation processes and change of meaning, apart from a few scholars who have moved in this direction (Verganti, Jahnke).

What can be concluded is that the process of innovation of meaning differs from the process of innovation as creative problem solving. Four themes explain the practices as a silent evolving of interest, to a conscious exposing of existing beliefs, an iterative and multifaceted criticizing and an embodying of new proposed meaning. These practices are often opposite to what is described in innovation literature.

Where existing theory stresses an “unfreezing” step early in a process of change, (Lewin, 1947) this study points to an evolving practice where the recognition of the need for change grows throughout the entire process. As the teams reflected
on a new potential meaning of products, they also started to see the current meaning in a new light.

Further, contrary to the use of a clean, naïve, beginner’s mind when in a process of innovation (Dunbar, 1995, Brown, 2009), the study proposes a deliberate action of exposing one’s own beliefs. By taking out and leveraging individual perspectives and pre-understanding, reflections on meaning deepen.

A third perspective concentrates on how teams transfer pieces of information and thereby reduce uncertainties in the search to innovate products (Clark, 1989, Krishnan and Ulrich, 2001). The study complements this approach by proposing a practice of discussing, questioning and criticizing, indicating an increase, rather than decrease, of complexity when in searching for new product meanings.

In addition, existing theory also emphasizes the perspective of externals and their contribution to innovation (Chesbrough, 2003). The proposal in this work indicates instead that meaning springs from the inside of organizations and their managers — not from external suppliers. In this sense, the process of innovation and meaning looks less suited to outsourcing.

Still, the study goes beyond the notion of the “innovator’s dilemma” (Christensen, 1997) in its emphasis of driving innovation from inside the organization. It stresses a combination of internal managers’ vision, but in co-development with external actors, far from the domains of a company. In this sense it moves from a scanning of new markets and technologies by skilled managers (a search for how) to opening up to a search for meaning (a matter of why, at all, to offer a product). The study thereby creates room to discuss swimming into “Blue Oceans” (new markets, Kim and Mauborgne, 2004) on a deeper level, beyond the existence of the market as such, to the reason, or meaning, of the product proposal for that market. In other words, it focuses attention on a greater complexity, or “the sea as such rather than... the foam of its waves” (Johansson and Svenegren, 2006).

The study started with an investigation of the framework of design driven innovation as proposed by Verganti (Verganti, 2009) and makes further contributions with additional insights into his proposed themes of listening, interpreting and addressing. In particular, the practices of exposing shed additional light on what takes place before such a process. Before “listening” to the discourse in socio-technical and cultural systems, this study proposes a deliberate practice of taking out, or exposing one’s own personal beliefs on existing and potential future meaning. In addition, this study provides insights into the interpreting phase by proposing the practice of criticizing. More than embracing different perspectives, the ability to be reflective, even deliberately critical, is needed to inspire new, hitherto unseen product meanings. Moreover, before a new potential product meaning is addressed, this study proposes a phase of embodying it. The executives connected to an innovation
process of changing product meaning need to feel the shift inside before starting to communicate it.

The study also aligns with the work of Jahnke (Jahnke, 2013) on meaning-making between designers in interventions with companies, especially when considering the early phases of a design process. First, through his observation of the un-reflected and uncertain understanding of current user and product situations among managers; second through the actions of “teasing out” these pre-understandings. These are patterns connected to an “emerging something” in Jahnke’s work and similar to the evolving practice in this study. Thirdly, his description of personal interest among the participants and the deliberate practice of expanding horizons, (sometimes even through critical questions and metaphors), is similar to the practice of exposing one’s own beliefs and the practice of criticizing in this study. Jahnke emphasizes designer practice of using visual work of images and material. He also discusses this practice in relation to the changing roles in organizations. This thesis complements his perspective in a non-designerly setting, connected to managers far from the aesthetic and the “natural” reflective practice of designers. In this sense, it offers an additional path to consider product meaning.

Further, this research complements the study of interpretative management within organizations and the use of “interlocutors”. This study brings a meaning perspective to the practice of identifying and transferring signals outside the company when innovating products (Lester et al 1998). The findings might also be valuable within the design discourse as a practice focused on human needs and meaningful human experiences. It complements the discussion of meaning creation within design practice (Krippendorff, 1989) by a parallel focus on the non-designers’ practice of the same.1 It also connects to Frankl’s reasoning within psychotherapy which points to the fact that the creation of meaning is not a self-fulfilling objective (Frankl, 1970/1988). Instead meaning is created when the purpose is to make something good for someone else. He proposes that meaning is something to strive for, rather than to be driven by, in other words that, “If experiences in life push us forward ‘from behind’, meaning is what pulls us forward ‘from the front’” (ibid, page 26). This reasoning captures the personal interest and deep engagement among the managers in this study, who genuinely wanted to create something better for their users. The dynamic is embedded in the practices of evolving and exposing.

Hence, an overarching but important finding of this research is the identification

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1 For example, The hermeneutic movement between the parts and the whole has been described by Krippendorff (Krippendorff, 2006) as a process of creating meaning. But even if he states that many professionals engage in design activity (without calling themselves designers) his proposal relates to designers and their practical work of artifact composition such as features, component parts and testing the artifact “in hand” (ibid page 97).
of the word “striving” that more precisely explains what is going on in the cases studied. This discovery also explain the title of this thesis, “Striving for meaning - a study of innovation processes”.

In the early phases of the thesis this type of innovation was referred to as “innovation of meaning”, then as “innovation driven by meaning” and later as “innovation in the search for meaning” and “innovation in the quest for meaning”. When consulting a dictionary the term “driven” describes “someone who is so determined to achieve something or to be successful that all their behavior is directed towards this aim”. “Strive” on the other hand, indicates “to make a lot of effort to achieve something (towards something) - to try very hard to do something”, a term that more accurately captures what has been going on in the cases studied.

**Implications**

One company that reconsidered the meaning of their product is the German-based KUKA with their Da Vinci system in which a robot, instead of replacing humans in an industrial application, interacts with humans by acting as a surgeon in performing invasive surgery. Other examples include the Living Bed of Polish company Vox which offers a new meaning of a bed for the elderly. These two examples indicate that innovations springing from a meaning perspective can be relevant. They create value and economical benefits for companies.

A first implication therefore is that the meaning dimension is a perspective to consider when seeking to innovate products. Next to technology and market focuses it brings new reflections, beyond existing solution heuristics. Rather than the creation of ideas, this process demands that managers reflect individually and are willing to expose their personal beliefs. Further, it brings a critical “air” to the conversation of product meaning. By inviting external experts, so called interpreters, from far-flung fields, what is currently assumed to be meaningful by a company can be questioned and new perspectives added. The process of innovating meanings therefore requires seeing external partners not only as providers of knowledge and solutions, but also and especially, as providers of arguments and novel interpretations, in a continuous iterative dialogue.

A second implication is that this type of innovation demands present leaders who are open to new visions. A new potential meaning might look strange, even outlandish to someone that did not participate in its development. It needs to be

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2 Cambridge Advanced Learner’s Dictionary
understood in a wider context and be embodied into the people who support it. Therefore, leaders must be a part of the process that will bring complexity and criticism rather than rationality. A third implication is the ability of managers to search for employees beyond the formal CV. When innovating through a meaning perspective, the abilities to be open and engaged even on a more intimate level are helpful, along with the ability to be constructively critical. Next to formal competences, capabilities of reflection and using alternative languages such as metaphors support this process of describing evolving meaning.

This research project has been strongly supported by industry. It is not only the enthusiasm of the researchers that has driven the project forward, but also the engagement and interest of employees in several of the cases. Insights have been continuously shared and developed with the companies. The findings in this thesis, therefore, should come as no surprise to the participating companies. One overall contribution to the industry might therefore be an increased awareness on how a “meaning-perspective” might be valuable within an innovation process. The thesis might serve as a reflective thinking frame to guide the approach to this type of innovation.

### Future research

Throughout the study several observations had to be left aside, not fully explored. One of them is the practice of exposing one’s own beliefs, which raised questions on where in the process of innovation this activity could be incorporated. As this practice demands devotion and time it might be challenging to create space for it in the constant change of organizations today. The proposal of an exposing activity takes inspiration from the theoretical frameworks of hermeneutics and Theory U. One way to elaborate on it could be through the studies of Hansen, who despite agreeing on the importance of innovation springing from “within” gives emphasis to something beyond feelings, namely to the more abstract level of “wonder” and mysteries (Hansen, 2012). This stream would also give insights into the theme of evolving and the reflection on how and why managers start to engage in meaning making at all. Further, as meaning comes from individuals, the personal perspective of employees would deserve attention in the innovation process. To take out more intimate thoughts might be a practice that asks for other competences among employees. Whether or not this is an ability that can and should be trained remains to be answered.

Another area for further study is the theme of criticizing that so far has been focused on one of its elements, the interpreters. This proposal does not include a detailed investigation of the abilities and personalities that go to make up a valuable critical interpreter. In addition, the focus was on external experts and
their ability to be critical and not on internal interpreters who also play an important role in a process focused on product meanings. A practical consideration of this study is that including interpreters in the process of proposing new product meaning is not always an uncomplicated matter. Early thoughts of new product propositions are often sensitive, making a negotiation of openness versus disclosure agreements an important issue. The balance of sharing reflections is a subject to be studied further.

Early on, one question was how entrepreneurs, such as Gino De-Gol and the Robo-Coaster or Piotr in the Vox case, find the energy to drive products with a new meaning forward and how they persuade the surrounding world to believe in their vision. This suggests further studies related to, for example, entrepreneurship in connection with innovating meanings. An additional path left unstudied is the one of communicating proposals of product meaning internally. It seems that many executives make use of metaphors to explain an existing or new meaning. But also drawings, music and objects look helpful in this process. Is the use of metaphors more common within certain fields of competences or industries? And do design practices of sketching also include a meaning perspective next to visualizations of a more practical/functional character? The concept of affordance, how an individual (or agent) sees, acts and recognizes an artifact depending on her capabilities (and thereby give meaning to it) consists another possible future study (Gibson, 1977, Johnson 1999).

From a methodological standpoint the fact that both team members and researchers have been immersed in the process makes the domains of action/participatory research valuable sources for elaborating the methodology of the study. This merge of scientific, business and personal perspectives is also acknowledged by Scharmer, emphasizing the need to integrate science (third person view), social transformation (second person view) and the evolution of the self (first person view) (Scharmer, 2008).

Lastly, when turning the dimension of meaning into an educational perspective, students confronted by the new emerging scenarios of the world we live in will need an increased cultural and global awareness, perspectives that many business schools do not offer today (Datar et al., 2010). As a consequence of this discrepancy between the world we live in and what is taught, today managers and recruiters are questioning conventional business education (ibid). In the face of this new reality, the reflection of meaning and what is really considered meaningful might spur new approaches on how to develop education within innovation management.
Final thoughts

This study has been undertaken with the intention of increasing the understanding of innovation processes when they spring from a meaning perspective. Early on, this phenomenon was referred to as “innovation by meaning” as the study was directed towards products, launched on to the market and to be considered as innovations. Later on though, the study became immersed in cases where innovations were still not launched – but were foreseen. The reason for this direction was the research interest in the process of this type of innovation, the people and their practices of reflecting and striving towards what they felt as a meaningful scenario, to be proposed to their customers. This is both the beauty and the struggle of a study on innovations. When new practices evolve they cannot always be coupled with its final outcome. As a consequence, the reliability of the process cannot yet be guaranteed.

Further, the study has also been questioned by scholars skeptical about the word “meaning”. For example, it has been compared to the concept of “hidden needs” (Goffin et al., 2010). Meaning, however, goes beyond a “need”. It is about making proposals to users without always meeting a “need”. What would be the neediness of a RoboCoaster? Of a socializing game console such as Nintendo Wii? This study has also been compared to the discourse on creating “value” (Osterwalder et al., 2014). While these studies take a business perspective, the discussion on meaning starts from the perspective of the user.

Despite these limitations, the study aims at an increasing awareness of the dimension of meaning and its value when innovating. It aligns with theories less used within innovation management, which might be an indication of a need for new approaches in this discourse. Its findings need to be considered as an early proposal in a field where more research is needed.
APPENDICES
Appendix 1
Appendix 1 On the definition of meaning

Meaning is discussed in fields such as philosophy and psychology, within different cultures, theology and within science. In the Wikipedia on-line dictionary (a source constantly updated by individuals) meaning is defined as something that brings reflection on "existence, context, happiness, value, ethics, afterlife - almost everything that could be connected to life".3 Other English dictionaries, state the following:

Meaning
1) The thing, action, feeling, idea etc. that a word or words represent
   1a) The ideas that signs, symbols, or ways of behaving represent
   1b) The ideas that writers, artists, musicians etc. try to express in their work
2) The special importance or purpose of something
   (old fashioned) communicating a feeling of intention very clearly
   (Macmillan, English Dictionary for Advanced Learners)
   1) The thing or idea that a sound, word, sign etc. represents
   2) The thing or idea that somebody wishes to communicate to you by what they say or do
   3) The real importance of a feeling or experience, painting etc.
   4) The quality or sense of purpose that makes you feel that your life is valuable.
   (Oxford Advanced Learner's Dictionary)

Meaning, clearly can mean (!) a lot of things. Either, it relates to 1) ideas or things communicated in different ways through objects or other means, or 2) to the importance of something or 3) to the purpose of something. The Online Oxford dictionaries summarize the three main meanings as follows: "what is meant by a word, text, a concept or an action… implied or explicit significance… important or worthwhile quality, purpose…".

Note that the explanation contains the words "implied", describing "something" not directly expressed and "explicit", something directly expressed. The Merriam

3 Wikipedia, 2015-05-31
4 The Oxford dictionary (http://english.oxforddictionaries.com, 2015-05-31)
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Webster Dictionary\(^5\) indicate this in their explanation (the bold font added):

**Meaning**
1a) The thing one **intends** to convey especially by language
1b) The thing that is conveyed especially by language
2) Something meant or **intended**
3) Significant quality, especially: **implication of a hidden** or special significance
4a) The logical connotation of a word or phrase
4b) The logical denotation or extension of a word or phrase

To summarize, explanations of “meaning” seem to be of two main types: Firstly, semiotic explanations using the words “word, text, concept, action”. (Semiotics is the study of the way in which people communicate through signs and symbols\(^6\)). More precisely, it relates to semantics, a subdivision of semiotics, (as this is the study of the relation between signs and the things to which they refer, their denotata, or meaning. In short, semantics is the meaning of words and phrases).\(^7\)

Secondly, explanations that include a philosophic, less tangible and visible concept by including the words “implied, explicit, important, worthwhile, quality and purpose”. These terms suggest a personal involvement and judgment and could be connected to philosophy (defined as the study of theories about the meaning of things such as life, knowledge, and beliefs and as the study of general and fundamental problems, such as those connected with existence, knowledge, values, reason, mind, and language).\(^8\) In short, philosophic views bring more than signs – they also bring reasoning.

This study concentrates on meaning as in “innovation from a meaning perspective” and as connected to “a user, the product and the surrounding context, to interpret a product or service proposal in the way that the purpose changes”. This makes the research relate more to the second definition, the philosophic perspective rather than the semantic. Focus is directed towards the purpose of a product, on the “why” rather than on the “what”.

**An etymological perspective on meaning**
Etymologically, meaning is explained as intend, have in mind. It has roots in the Old English mænan “to mean, intend, signify; tell, say; complain, lament”. Fur-

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5 Merriam Webster, http://www.merriam-webster.com/dictionary
6 Macmillan English Dictionary for Advanced Learners
7 Ibid
8 Macmillan English Dictionary for Advanced Learners
ther, to West Germanic mainijan,”to signify,” to Old Saxon menen, “to intend, signify, make known,” Dutch menen, German meinen “think, suppose, be of the opinion”.

A note on meaning connected to the Swedish language

In relation to the Swedish language, “meaning”, as it is used in this study, should be translated as “mening”. But what does “mening” mean, in Swedish? In the dictionary of the Swedish National Encyclopædia, “mening” is explained as:

1) Åsikt (opinion)
2) (Åsyftad) innebörd ((intended) content), bemärkelse (sense), betydelse (importance, significance)
3) Planerad följd av visst handlande, avsikt, syfte. (Planned consequence of a certain action, intention, purpose), med svävning mellan syfte och innebörd (on the border between purpose and content)
4) Största språkliga enhet vars delar står i ett väldefinierat syntaktiskt förhållande till varandra (A complete linguistic entity whose parts are assembled in a well-defined syntactical relationship)

Worth noticing, in comparison with the English explanations, is that the first Swedish explanation of “mening”, is “åsikt”, (opinion). This way of using the word is, indeed, very common in Swedish. Many Swedish people understand “mening” as opinion. But, this is not the definition that this study is referring to. Instead, meaning, or “mening”, should be understood as in the second and even more, the third Swedish explanation, as “innebörd, avsikt, syfte” (content, intention, purpose). Note also, that the Swedish explanation expresses an unclear border between syfte (purpose) and innebörd (content) and indeed, it is difficult clearly to separate these two.


10 English translation Åsa Öberg and Vic Miller, translator of the Licentiate Thesis Öberg, 2012
Again, to clarify to Swedish readers, this study focuses on “meaning” as “purpose” (syfte). In Swedish this is one way of explaining “mening”, but not the first and most obvious one. In addition, “mening” is also used in a linguistic context but this is not a matter for this study.
Appendix 2
Appendix 2 Meaning in different discourses

Meaning is not the subject of a substantial stream of research within the innovation management discourse. The study of meaning, therefore, naturally came to be directed towards other fields. This review of the literature was necessary to understand how meaning is discussed in these fields— and how it could be related back to the innovation management discourse. What will follow is an overview of research streams that connect to meaning. It is not intended to be a full coverage of all possible perspectives of meaning but it serves the purpose of describing the complexity of this concept, especially to scholars within innovation management research.

The overview relates to meaning in three parts. First, by discussing theories of meaning in connection with life. Then to meaning in relation to theories of artifacts, and lastly to meaning in frameworks close to business perspectives (see also Part 1). The study is built on a so-called “snowball” effect starting from the work of Verganti (Verganti, 2009) and Jahnke (Jahnke, 2010, Jahnke, 2013), leading to studies of other scholars. In parallel, the theories have been considered through a continuous interaction with different research communities (see also illustration and text in the method section of this thesis).

Meaning and life

Philosophic views

What is meaningful has been a question for humans throughout the ages. Religion has served as a guide, and so has philosophy. In ancient Greece, for example, Aristotle wrote that knowledge and meaning could be found by posing the question why, in relation to four “causes”. The first cause relates to the material, the second to a formal cause, the third to a moving cause and the last, to a final cause. This last “cause”, defined as telos, focuses on “the purpose, the end, aim, or goal of something”, “for the sake of which the process is initiated”.11 When this research defines meaning of a product, it refers to the same level of meaning as Aristotle did in his fourth cause (Aristotle 1929/1957, Aristotle 1933/1947).

A classic, scientific view of meaning, as in logical positivism, would argue that

11 Aristotle gives the example of health to explain the fourth cause: “…as when a man takes exercise for the sake of his health. “Why does he take exercise?” we ask. And the answer “because he thinks it good for his health” satisfies us”, page 131 Physics II, 3. The final cause is described as “the end”, “as the “end” of walking is health”, page 215 Metaphysics V 2.
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the act of defining something should relate to **objectivity and facts**. A similar approach can be found in post-modernism, where the definition of meaning, as such, is not in focus. Instead, what is important is the underlying powers that construct meaning, and how language (but also society) actually limits individuals when they want to construct something (Giddens, 2009, Alvesson and Sköldberg, 2008). The field of hermeneutics provides yet another form of seeing meaning. In this approach, an **individual**, the interpreter, gives her explanation of an event or object, which, as a consequence, becomes one out of many descriptions of the “thing” per se (Alvesson and Sköldberg, 2008). The meaning of existence is not examined only from a functional, biological and scientific angle but connected to the individual.

According to Austrian psychiatrist Victor Frankl (taking a philosophic view despite his vantage point within psychotherapy) the meaning given to an object (by an individual) is relative and subjective, while the object itself is neutral - (Frankl 1970/1988). Meaning, he says, “is just something we are projecting into the things around ourselves, things which in themselves are neutral” (ibid p.40-41). Starting from the individual, Frankl underlines the **will of a human** as fundamental to the creation of meaning.

A phenomenological view on how humans can address their existence (and hence see meaning) is described in Martin Buber’s concept of I-Thou (Buber, 1923/1970). An individual (“I”) can find meaningfulness by focusing on **relationships** instead of relating to entities (“it”). Being in the world is therefore two-fold; through experience, the “I-it”, and in relations, the I-thou. Existence and meaning grow through I-thou, which is something unexplainable, something that simply “is”. When Buber discusses “I and thou”, he sees meaning in relationship to something outside himself.

The many nuances between I and thou are also put forward by Danish philosopher Finn Torbjörn Hansen. Rather than the creation of meaning in a wider system (Verganti, 2009), Hansen stresses the several layers of an individual and her colored “lens” (in Hansen’s words: “det bulede spejl” or, as looking through a dark (tinted) glass before creating a “gestalt” and finally, the official even scientific, interpretation of something. Hansen’s point is that we need to give more attention to the very first and “core” source of meaning creation, namely, the **“act of wonder”** within ourselves, rather than a subject-object meaning making (Hansen, 2012).12

An additional perspective on meaning is presented by German scholar Otto Scharmer and the Theory U (Scharmer, 2008). From a perspective of organizational learning, he gives a thorough explanation of how one can find a deeper

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12 As discussed in Aalborg October 2014
purpose (a meaning) by connecting not only to your inner ”self” but to your 
real nature, your “Self”. By moving from a cognitive open “mind”, he states 
the need for a more empathic “open heart” and a profound “open will”, aligning 
him with the approach of man's will (to meaning) of Frankl and to the core of an 
individual, the “thou” of Buber (see above). This theory describes the journey of 
finding your own (new) meaning – in other words a change in meaning. It con-
trasts with the “fast problem-solving” mindset of organizations and individuals.

A glance at Psychology
As within the field of philosophy, over time the field of psychology has also 
constructed and modified “what meaning is”. From being a clearly structured 
process of measuring humans' mental processes, the more “modern” psychology 
has shown greater “modesty” in its explanations (Robinsson, 1995). Still, it avoids 
addressing complex phenomena before solving the fundamental processes of 
man and only deals with problems that can be settled “experimentally” (ibid) in 
a particular context. In this sense, it focuses on investigating the existing rather 
than questioning it.

This somewhat reductionist perspective has been criticized by Frankl, despite be-
ing part of this field. Specialists, or in Frankl’s words “the terrible simplificators”, 
tend to generalize and simplify facts instead of embracing the complexity of 
a human being. Frankl explains that unlike mankind in former times, humans are 
o no longer told what to do by traditions – and instead often do not even know 
what they wish to do, becoming victims of what other people do (conformism) 
or what others want us to do (totalitarianism) (ibid p. X (10), foreword). This lack 
of meaning might drive humans in other directions instead. One is the Adlerian 
concept of a will to power and status, another the will to pleasure or satisfaction, 

Instead, meaning, according to Frankl, comes from the individual’s capability 
of self-awareness, towards herself and in relation to the world around her. This 
awareness rises above biological and psychological dimensions, to a noological, 
or a spiritual one (spiritual used here without religious aspects). It makes humans 
more inclusive and encompassing and includes a self-transcendence, the ability to 
relate to something outside oneself. According to Frankl, the act of relating to 
something “other” than oneself makes human existence authentic.

This “otherness” manifests itself through conscience and also through love, as 
when one human embraces the other human in his “very uniqueness”. Meaning 
therefore, is unique in each and every person and situation (ibid p.6), it is relative 
and subjective and it puts forward certain values in favor of others. Frankl quotes 
German psychologist Charlotte Bühler to underline the human being “as living 
with intentionality, which means living with purpose”. Instead of being pushed by 
different drivers in life, she should be pulled by meaning (Bühler, 1965).
Another more pragmatic approach to meaning, can be seen in the works of Mark Johnson who has discussed meaning from both cognitive and aesthetic perspectives (Lakoff and Johnson, 1980, Johnson, 2007). Meaning-making, according to Johnson, includes images, qualities, emotions and metaphors (Johnson, 2007). Meanings that are unconsciously created within us, even before we are aware of them, come to full expression through the arts, for example music (Romanowska, 2014).

Meaning and artifacts

Cultural and symbolic perspectives
Meaning is constantly constructed by humans within the culture of their social environment and in interaction with artifacts of different kinds. A product, for example, can be seen as a cultural artifact. When launched, it contains connotations, or “markers” (Holt, 2003a) such as its design and company logotype, that over time are filled with content and create meaning. These meanings become conventional, create “truths” and become widely accepted in society. But, despite this clear connection between society, culture and product, understanding culture is normally something that is “sorely lacking” in the agenda of managers (Holt, 2003b).

Culture consists of a complex system of interactions and beliefs that are constantly shifting. Buchanan points to the value of this complexity and the fact that the mix of different minds in a society plays a vital part in creating meaning (Buchanan, 2001). Hirshmann (Hirschman, 1982, Hirschman, 1986) describes this mix as a “culture production system” where creative sources blend with managerial and communicative ones before reaching the humans or “consumers” of the system. In this system consumers act as “active contributors of product symbolism”, instead of as “mere recipients” of product meaning.

Becker (Becker, 1974) has also described the connection between the actors in a cultural system or creative industries and how they contribute to the creation of culture by proposing symbolic elements. This is also done by Hesmondhalgh (Hesmondhalgh, 2007) discussing “cultural industries” and Tuomi (Tuomi, 2006) in describing innovation and change of meaning through networks. Instead of proposing “technology” Toumi stresses the technology in use when looking for the source of an innovation.

This thinking, that meaning originates from the human being and her interaction with something, is also supported by the philosopher and anthropologist, Claude Lévi-Strauss (Lévi-Strauss, 1979). To be able to “get the meaning out”, we need some rules, or some kind of order, a system in which we can navigate.
Hence, he says there will never be one single frame in which to translate or explain the world around us. What we can do, however, is to increase “very slowly the number and the quality of the answers”. We therefore need to embrace many perspectives to increase our understanding.

Product meaning
When moving from discussing meaning in a cultural system to a more tangible level, meaning can also be connected to the artifact as such, to its “product language”. Methods for expressing, defining and identifying these meanings include the use of metaphors, (Monó, 1997), icons (Holt, 2003a), totem building (Dumas, 1994) and figures of speech (Dell’Era et al., 2011, Leigh, 1994) to mention a few. Through the concept of multimodality, meanings can be described as established between people, places and images. In this way meanings not only represent certain entities, but also show the interaction between viewers and what is viewed. In this way multimodality gives multiple readings to an object (Kress and Leeuwen, 2006).

Describing products based on meaning is not however the most usual way to classify products. Usually they are described according to function, as in old original classification schemes that described the product as a “bundle of utility”, allowing solutions to problems or taking control of situations (Copeland, 1923, Kotler, 1984) or according to consumption experiences (Hirschman and Holbrook, 1982, Myers, 1985). Nevertheless, a holistic picture of the relation between products and consumers would also include an understanding of the dynamics behind the relations between consumers and products. Fournier (Fournier, 1991) has proposed a classification based on meaning in relation to three dimensions, putting forward both emotional and symbolic values in addition to utilitarian values. Here the similarities between Fournier’s approach and this research become clear. But in contrast to this research, Fournier’s work does not include a wide investigation of the interpretative process.

Design
Design studies
When studying the etymological definition of design, its connection to meaning becomes apparent. Design, deriving from the latin de-signare, indicates to mark out, set apart, give significance by assigning it to a use, a user, or an owner, to designate and to make sense of things (Krippendorff, 1989, 2006). It stems from Middle French desseign, purpose, project, design, from Italian disegno, from disegnare “to mark out”. The definition of design as making sense of things, and as creating meaning (Heskett, 1985) is what this research relates to.

But, not all design perspectives make the meaning dimension explicit. In the 1960s, design practice was mainly concentrated on discovering the potentiality of new materials, on product design and on the creation of artifacts (Simon, 1969). Later,
in the 70s, design came to be connected to more human-related perspectives, where it was considered to “help” humans achieve a better life (Schutte, 1975). In the 80s, design had a more integrating function in companies, as a builder of bridges (Gorb, 1988). If these perspectives gave different functions to design, Schön contrasted them by putting forward a level including conversations and reflections. By seeing it as a “reflective practice” Schön pointed out the importance of “reflection in action” while designing. To arrive at a meaningful output, he stressed the value of distilling yourself and reflecting on the ongoing work to be able to refine it (Schön, 1983). Further, several scholars see design as connected to problem solving (Buchanan, 1992) or as a practice-based activity (Lawson, 2006, Cross, 2006). To conclude, design studies touch upon the intrinsic value of meaning, however their main focus has not been on innovation and strategy.

Design management

Even if research on design has tried to demonstrate its monetary and strategic value (Svengren 1995, Candi and Gemser, 2010, Johansson, 2006) its implementation seems to have puzzled both practitioners and researchers. The field of design management has attempted to structure the function of design within an organization (Borja de Mozota, 2003), but with a tendency to de-contextualize design to a static rather than a dynamic process, a “tool” in the value chain. In this field, design looks to be more about execution than reflection and meaning making.

Closer to a reflective practice is the notion of “silent design”. It gives attention to people in organizations that are not designers, but still perform design activities “silently” (Gorb and Dumas, 1987). The value of the human ability to cooperate is present in this research but it does not stretch as far as creating meaning. The notion of “design thinking” has emerged as an additional answer to the difficulty of implementing design in management. It is a more “popular” and more management-connected version of design (Brown, 2009, Martin, 2009, Boland and Collropy, 2004). In this discourse, “design practice and competence are used beyond the pure context, for and with people without a scholarly background in design” (Johansson et al., 2011) It has been criticized for being shallow, using arguments built on experience rather than academic references or methods (see for example the books from the design firm IDEO (Brown, 2009, Kelley, 2001, Kelley, 2005, Johansson et al., 2011).13 The focus in this field is on the execution of design, sometimes in connection to entrepreneurship and “effectuation” (Dorst, 2011) - while investigations of meaning and especially change of meaning have not been the priority aim.

Nevertheless, the idea of bringing “designerly” thinking to companies and their innovation strategies has intrigued several researchers. From a meaning perspec-

13 Some “eminent design researchers” even “rally against using the term “Design Thinking” at all, vocally pronouncing its “death”, see Dorst, K, 2011.
tive, Jahnke for example (being both an engineer and industrial designer himself) has investigated the intersection of design and innovation. He points to the importance of bringing external designers and their sometimes critical views to an ongoing design project, to create “meaning in the making” (Jahnke, 2013). Other perspectives see design as an artistic process, based on the dynamic between seeing, doing and “bodily being in the world” (Digerfeldt-Månsson, 2009), or in the use of intuition (Thornquist, 2005). These studies look more closely at meaning creation. Yet they give attention to meaning making at an individual level, rather than connecting to larger contexts as in the innovation strategies of large corporations. Another closely related stream of research is visible through the newly founded DESMA\textsuperscript{14} Network of young researchers, that engage in several topics of meaning, but in connection with innovation.

Meaning and business

This overview began by glancing at meaning from the field of philosophy. Then at meaning in the somewhat less abstract field of psychology. Further, meaning has been related to the artifact, by including cultural and symbolic views, finally reaching the practice-based field of design and its management perspectives. Now, the focus turns to the world of business. Here, there is awareness of meaning, but not at a product level and connected to design, as in the previous sections. Instead, the business and innovation perspectives are stronger.

Organizational perspectives on sensemaking and sensegiving

One stream of organizational innovation studies concentrates on issues such as the employees, the leaders and the organization and how they relate to the creation of meaning in different ways. This stream includes studies of sensemaking (Weick, 1995) and sensegiving (Gioia and Chittipeddi, 1991), studies of the context, its events and the network surrounding the organization (Van de Ven, 1986, O’Reilly and Tushman, 2004) and the capacity to see, reflect and react to changes (Ocasio, 1997, Ocasio, 2010, Weick and Sutcliffe, 2006). Meaning, in these studies, comes as a part of the process of making sense of things, or from a context that needs to be understood, or from changes in this context. Nevertheless, the focus is not directed towards the innovation process and the change of a product meaning.

\textsuperscript{14} DESMA - Design plus management, http://www.desmanetwork.eu
Organizational perspectives on Human and social context perspectives

Another stream of research concentrates on individuals in an organization as participants in an innovation process. It sheds light on how humans interact through conversations (Brown and Duguid, 1991) and using a common language (Boland and Tenkasi, 1995). In this common context, sometimes also called “communities of practice”, individuals can learn new things and thereby create meaning (Wenger and Snyder, 2000). In this sense meaning comes from a collective action, not just from one sole individual. Related to this research are studies on the importance of values and norms (Leonard-Barton, 1992) and the social construction of the environment of employees (Smircich and Morgan, 1982). They focus on institutions and their roles in making sense of things (Van de Ven, 1986) and on social settings (Nonaka, 1994). They link to the concept of meaning, but this time with a more human/social dimension.

Entrepreneurship

Meaning is also present within the entrepreneurship discourse, for example through the creation of stories intended to legitimize entrepreneurs to investors and visionaries (Lounsbury and Glynn, 2001, Hjorth, 2007). Entrepreneurs seem to be able to envision future scenarios through their stories, acting in the same way as designers by different means such as storyboards. In this way “entrepreneuring” relates to the levels of design thinking where outsiders bring new frames and themes of addressing problems (Steyaert 2007, Dorst 2011). In addition, they hold the ability to “envisage” business opportunities (Debackere et al. 2013), to question and experiment (Dyer and Gregersen, 2008) and to create a range of alternative paths forward from within, a type of “inside-out” perspective.

Brand management and marketing

Close to the organizational perspectives related to meaning is the discourse of identity, or the core values that constitute the brand of an organization (Tripsas, 2009). Within this field focus is directed towards the product concept introducing abstract associations, more than the product features, since a brand is a bundle of symbols and identity to which people give meaning. In this way, brand management is close to a philosophic, meaning-related perspective.

In relation to brand management, marketing is more closely connected to the product concept and understanding the needs of users (Vredenburg et al., 2002, Veryzer and Borja de Mozota, 2005). Marketing also applies user-analysis in order to understand how to steer activities and segment products (as in the classic 4P marketing mix by Kotler, (Kotler, 1984). See for example Abell’s three dimensional model for business definition (Abell, 1980). Here, focus seems to be on understanding, capturing and then spreading an existing meaning - rather than creating and changing it. The construct of meaning is present both within brand management and marketing - but could be complemented with a perspective of
innovation management.

**Service innovation**
Yet another research stream in which meaning is discussed is in the field of service innovation and the concept of the “value in use”. This concept, coined by Vargo and Lusch (Vargo and Lusch, 2004) begins from the user and her/his experience. It is the situation of the user that determines the value of a product or service, not the different parts and content of the value chain. This is the so-called Service-Dominant Logic which is close to the practice of design, as it involves a user perspective in addition to the business perspective (see Wetter Edman, 2011, Wetter Edman, 2014). This stream of research is interesting as it introduces a concept where the user constructs value in a context of several actors that are interacting and exchanging services in value networks (Normann, 2001, Vargo and Lusch, 2012). The perspective is close to the research focus of this work and can give valuable insights, despite its pragmatic rather than cultural and philosophical perspective.

**Business innovation**
Another approach that combines value and user involvement has been proposed by Osterwalder. The Business Model Canvas is a conceptual model that facilitates an overview of the complexity of activities, resources and networks of a company (Osterwalder and Pigneur, 2010). It is said to “foster understanding, discussion, creativity, and analysis”. Second, through Value Proposition Design, Osterwalder and colleagues move closer to meaning through the discussion of value creation (Osterwalder et al., 2014). The business model perspective as crucial to innovation is also underlined by Pisano, who gives insights into the strategic process of innovation, from a company point of view (Pisano, 2015). These works take a business, market and client perspective rather than a meaning one.

By the use of words such as “profit”, “reducing risk”, “systematically applying adequate tools” and “what customers want,” the discussion is directed towards something measurable and valuable, implicitly in monetary terms. Meanings, though, are not better or worse, they are just different. When pursuing a meaning, people even need to embrace some friction and uncertainty. If striving for a meaning, this tension is “inherent in being human and indispensable for mental well-being” (Frankl, 1970/1988). My own personal interpretation of this is that meaning springs from humans, and value is what comes next.

**A note on ethics**
When reviewing different perspectives on meaning, an ethical perspective on the “use” of meaning could also be included. For example, is the dimension of meaning something that companies “exploit” to increase their market share? And if so,
does it have a positive or negative impact for individuals? The answers to these questions touch upon ideological issues and have to be answered by the reader herself.

Worth noticing though might be that the discourse of “value in use” above also relates to market and “business thinking” (as does the main part of the innovation discourse). The word “value” proposes a concept of proportions, of scale and measurement and might be used to create attractive offers to users, implying that “value” is beneficial to companies and to their users. Meaning, on the other hand, does not spring from a company perspective. It springs from human beings, free from the context of business. There have always been reflections on meaning, even far from business settings.
does it have a positive or negative impact for individuals? The answers to these questions touch upon ideological issues and have to be answered by the reader herself.

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