

# Design Driven Innovation in Artistic Perfumery: A Case Study on the Value of Design and Designers in Product Development

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## Abstract

This paper examines an innovative and design-based innovation process of a new product in artistic perfumery. The growing segment of artistic perfumery is known for unusual and complex scents. One of the players is a perfume label run by a design agency that has developed an alternative and design-based approach to developing perfumes. The process is driven by a strong sense for aesthetic consistency, a passion for authenticity and an unusual presence of an emotional dimension. The paper particularly focuses on the role of design and the significance of design practices for this product innovation. All in all, it argues that the role of design can hardly be reduced to a problem solving technique. Instead, design practices involve personal, material and aesthetic dimensions.

KEYWORDS: innovation, artistic perfumery, design practices

## Introduction

The following text tells the story of a design inspired product development process in the field of artistic perfumery. Designers in this field reinvent the traditions of artistry and creativity that characterized perfumery until global brands commodified the process. Henceforth, new perfumes are developed according to a commercial logic determined by market research, evaluation boards and data analysis (Burr, 2008; Calkin & Jellinek, 1994; Jellinek, 1991). However, the limits of this approach are increasingly recognized: A “tyranny of sameness” (Dixit, 2009) dominates the market and even new scents launched by major brands fade away within a few months despite tremendous marketing efforts.

In this context the label Humiecki & Graef stands out with an innovative approach. The label was created by two designers who wanted to work beyond the constraints of their client projects. At the beginning of the development of a new fragrance one of the designers develops a visual concept that expresses a specific human emotion. Subsequently, the visual concept serves as a brief for all following design processes (scent development, packaging design, campaign photography, product name and campaign text). This approach is different in so far as a design concept instead of market or branding considerations motivates and informs the entire process. A closer analysis of the case reveals that the approach taken is deeply rooted in “design attitude” (Michlewski, 2008) and “design practices” (Kimbell, 2011). Accordingly, we identified a remarkable sense of aesthetic consistency, personal authenticity and emotional involvement that permeates the entire process leading to the creation of a new fragrance.

Thus, in the context of the track “Design and Innovation” our paper analyses the value of design and design practitioners in a specific but very topical context. It presents rich qualitative data from a design-based innovation process that is deeply intertwined with material practices. The paper aims at making two contributions: We contribute to a theory of design practice that goes beyond a popular design thinking practice. Accordingly design thinking, as a theory of what designers actually do, cannot be reduced to cognitive processes of designers (Tonkinwise, 2011; Stigliani & Ravasi, 2012). Second, we show how design practices impact on the overall quality of the innovation. From a design management perspective, innovation is at the core of the business relevance of design. However, our discussion of the case aims at innovative aspects different from changing the emotional meaning for customers as discussed in the context of design driven innovation (Verganti, 2009).

This paper is part of a larger study on the role of objects in artistic perfumery. In this context we have been able to closely follow the development of the eighth and ninth perfume for Humiecki & Graef. This paper draws on data collected during both development cycles.

The remainder of the paper is organized as follows: We start by briefly reviewing the existing literature on design thinking and design driven innovation. In the following section we describe the current landscape of the perfumery sector. Subsequently, we introduce the field of artistic perfumery and our research context at Humiecki & Gaef. Following the methods section we present our results. In particular, we show how a strong sense for aesthetic consistency, a passion for authenticity and an unusual presence of an emotional dimension impacts on the overall process. The paper concludes with a set of consequences derived from this case.

## Design Thinking & Design Driven innovation

Innovation is at the core of the business relevance of design. Traditionally, design has been described as contributing to a “differentiation of the form, which has an impact on consumer behavior” (Borja de Mozota, 2003). More recently, the literature on design thinking advocated design as a problem solving approach beyond disciplinary boundaries (Dorst, 2011). Accordingly, design professionals make use of a reasoning that evades the common dichotomy of inductive and deductive approaches. This abductive reasoning emphasizes the development of good alternatives (Boland & Collopy, 2004): “design thinking deals primarily with what does not yet exist” (Liedtka, 2000). It is this passion for the new and unknown that accounts for the popularity of design thinking in current management discourse (Brown, 2009; Martin, 2009).

However, design thinking is increasingly criticized from within the design field. Accordingly, design thinking reduces design to an immaterial, intellectual problem solving technique (Kimbell, 2009). In fact, it is described as “design minus the material practice” that downplays the primacy of aesthetics in designing (Tonkinwise, 2011).

The present paper tries to reverse this notion by arguing for the centrality of materiality for design thinking and practice as well as design based innovation. We want to show that designing can hardly be reduced to a cognitive process. The term “design thinking” appeals to an essential notion of design. Accordingly, design thinking is what lies at the core of design activities irrespective of the multiplicity of design disciplines (e.g. architecture, communication design, fashion design etc.). Thus, our case wants to bring back design work and practice.

In addition to the design thinking literature the strong links between design and innovation are also recognized and evidenced in the discussion on design driven innovation (Verganti, 2006, 2009). Design-driven innovation aims at changing the emotional meaning of products. It focuses on product generation and provides specific methods to be followed. However, given the prominence and the visibility of this discussion there is a tendency to identify all types of innovation related to design with this specific type of design driven innovation.

In this respect, our case illustrates how the theme of the track “Design & Innovation” relates to a theory of design practice. The case from the field of artistic perfumery shows how leading innovation through design can be different from a mere market driven innovation approach.

## Perfumery: From Art to Commerce

Perfumery is one of the largest luxury sectors (Chevalier, 2008). It implies developing and selling standardized products in large quantities at low unit prices. Reactions to perfumes are to a large extent subconscious and emotional. Narratives that communicate emotions and sensations in an intimate way dominate the diverse internal as well as the market oriented communication activities (Lampel & Mustafa, 2009). In addition to the olfactory sense, the packaging and advertising appeal to the visual and address broader social implications (Goldman, 1987). Thus, fragrances appeal to aesthetic and expressive tastes. Yet, innovation in perfumery is still mostly technically driven. Thus, mainstream perfumery focuses on the development of new synthetic ingredients, new technologies (e.g. scent identification) or new processes (e.g. extraction etc.).

The fragrance market is dominated by major brands and operators (Kubartz, 2011). All have large advertising budgets. Yet, despite substantial research efforts by the major brands, new scents often fail. What specifies the industry structure further is the central role of the raw material that is provided by one of the remaining four major producers of flavors and fragrances (Firmenich, Givaudan, IFF, Symrise). It was not until the 1970s that the intuitive decisions of the perfumer were replaced by systematic, quantitative calculus based on consumer research: "Industry [had] taken over from art" and changed the scope of the perfumers authority (Ellena, 1991, p. 345). This rather recent commercialization and professionalization of perfumery sharply contrasts with the traditions of artistry and creativity that used to describe the sector.

Accordingly, the perfumer was the acknowledged authority on all aspects regarding a perfume (Jellinek, 1991). Thus, the tension between a tradition of creative freedom and the tough reality of contemporary brand management characterizes the perfumery sector.

Today fragrances are above all efficiently developed along common product development standards (Dixit, 2009). At the beginning of the product development process the brand operator presents the consumer profile to the perfumer. A perfume brief often focuses on a particular target consumer segment. The perfume brief communicates the idea of the fragrance house to the perfumer and specifies the general scent characteristic by referencing a particular scent family (Burr, 2008; Pybus, 2006). Following this brief, the perfumer translates the commercially defined profile into olfactory terms (Butler, 2000; Dixit, 2009a).

More and more, it is recognized that this process encourages the imitation of successful competitors, rather than "new" products. Yet, there is a tremendous pressure to innovate and be special. According to a leading industry database more than 1.200 fragrances are annually launched and compete against the 12.000 fragrances listed in the FiFi database (Jeffries, 2011). This is a further increase compared to the 8 launches per week in 2003 (Turin, 2007). Despite sophisticated testing and elaborated launch campaigns for new scents, most newcomers fade away within about a year. This prompts the brands to come up with yet another launch (Byron, 2007). All in all, it is this paradoxical coincidence of market forces that characterizes the current situation in the international perfumery market and gives rise to the emerging field of artistic perfumery (Dixit, 2009a, 2009b; Turin, 2007).

The growing segment of artistic perfumery is known for innovative designs and concepts. It sharply contrasts the rather recent commercialization and professionalization of perfumery and revitalizes the traditions of artistry and creativity that used to describe the sector. What is still considered to be a niche category is increasingly discussed as innovating the fragrance industry: “Once dominated by commercial brand names like Versace, Dolce & Gabbana, Armani and Bulgari, the stagnant Italian beauty market has seen a recent emergence of selective, or niche, specialty fragrances” (Epiro, 2004). The field of artistic perfumery is also on the rise in terms of new fragrances. According to Michael Edwards, a leading industry expert, there were 219 launches in this segment in 2011 (compared to 9 in 1991) (Jeffries, 2011). All in all there is a consensus that this field “continues to gather steam in a saturated industry heaving with big-budget launches and shaken by the recession” (Olsen, 2011).

## Research Setting: Humiecki & Graef

Within the field of artistic perfumery Humiecki & Graef has been labelled as “the new Comme des Garçons”. International perfumery blogs (such as [www.basenotes.com](http://www.basenotes.com); [www.cafleurebon.com](http://www.cafleurebon.com); [www.fragrantica.com](http://www.fragrantica.com)) also highlight Humiecki & Graef’s uniqueness. They comment on the longevity and “symmetry” of these fragrances over time and remark that their products smell “like nothing else out there”. In fact, Humiecki & Graef conceptually innovates perfumery by organizing its diverse design processes around a “basic human emotion” as its core idea and using a visual concept as a common brief for all related design processes. Each scent is introduced as a scent about a particular emotion. It is “is inspired by atypical, emotionally evocative, motifs such as madness, melancholy and fury” ([www.humieckiandgraef.com](http://www.humieckiandgraef.com)).

The brand goes back to a first experimental collaboration between the designer Sebastian Fisichenich and the internationally renowned perfumer Christophe Laudamiel in 2005. Following a first success the brand was then created by Sebastian Fisichenich as a creative director and his partner Tobias Müksch. Both designers jointly run the design agency Belepok based in Cologne and Zurich specializing on the luxury sector. Facing the constraints of commercially driven innovation in mainstream perfumery Humiecki & Graef was created with a sense of design ambition:

*“We wanted to demonstrate to our clients that there is a different way. This was the trigger for Humiecki & Graef” (interview transcript, creative director).*

At a later stage the collaboration was further expanded to the perfumer Christoph Hornetz. Since its beginning nine perfumes have been successfully launched on the market.

Central to the development of each scent is a visual concept that is developed in various stages over a period of several weeks or even months. Initially, the creative director clarifies the general emotional idea for the new fragrance. He selects diverse visual elements out of magazines, books

and other printed matter and bookmarks the pages. Afterwards, he scans the images and modifies them in an image-processing program. The product, a new image, evolves by overlaying and multiplying the visual material. The concept is completed with a few lines of text that are finally added. The concept is subsequently used in the briefing contacts with the other creative and design professions involved in the process (e.g. perfume-making, packaging, photography, copywriting).

## Research Methods

Our data stem from eighteen intensive months of an ethnographic study on the product development process in artistic perfumery. Eckert & Boujut argue that an ethnographic approach is particularly well suited for design processes, because it allows the researcher to capture the complex processes in their uniqueness (Eckert & Boujut, 2003). In order to learn about the design practices of perfume-making and the role of objects we “zoomed in” (Nicolini, 2009) on the micro-practices of the different contributors including their actions, interruptions, timing, comments, talk, music they listened to, emails they wrote or received, as well as their reflections, own interpretations and reasoning for doing things this way or another.

We collected data by participant observation and – whenever possible – videotaped the practices of the creative director and the perfumers in the design office in Zurich (Switzerland) and in the studio of the perfumers in Berlin (Germany) and New York (USA). We taped most of the talk, wrote extensive field notes, took pictures of the objects, the actors, the infrastructure and surroundings (office, laboratory, desk); we also collected various materials and objects (including the concepts, the failed and thrown out prototypes, old excel sheets, notes, music that the designer listened to) and filed the email correspondence between the creative director the perfumers, the packaging designers, the photographer, and text editor. In addition, we carried out open “de-briefing” interviews in which the actors talked about what they were doing and reflected with us on what we had observed. In addition to the creative director, the perfumers, the photographer and the packaging designers, we also interviewed distributors and marketing managers working for the brand.

Following an inductive, qualitative approach we iteratively moved between data collection, analysis and emerging theory (Charmaz, 2006; Corbin & Strauss, 2008). We cycled among multiple readings of the interview transcripts, videotapes, photographs, field notes, coding of recurring themes and the building of categories. The ambiguities resulting from the initial coding were taken up during the formal debriefing interviews and lead to a better understanding of “what is happening” (Charmaz, 2006). In the course of organizing and interpreting the data we drew upon the key concepts developed by Verganti (2009) and Tonkinwise (2011) as sensitizing concepts. What emerged was an understanding of the role of design for the development of the new scent.

## Results

The development and launch of a new fragrance involves diverse creative as well as commercial disciplines. However, in our case it was the design competence that was leading the overall innovation process. Accordingly, the creative director developed the concept for the new fragrance and coordinated the other creative and commercial professions involved in the process. The designer took all decisions that finally defined the new product. Thus, design was involved in different roles and at different stages in the overall development process. What turned out to be driving this process was a strong sense for aesthetic consistency, a passion for authenticity and an unusual presence of an emotional dimension throughout the process.

### Consistency

Initially, the creative director developed the concept that clarified a specific emotion through a sequence of three visual images. At the very beginning, there was only a mental image (e.g. of a romantic couple that after years met again in the street). Looking through magazines and catalogues, listening to music and skimming through videos the creative director clarified and sharpened this situation.

Working visually on the concept allowed him to elaborate on the consistency of the concept as he explained in a debriefing interview:

*The concept is consistent as soon as it feels right. And it is only me who can be sure about this. In addition, I also strongly believe that the final product tells you whether the concept was consistent and well balanced – that the concept was clear (creative director, transcript).*

Thus, consistency is not only a question of fit between scent, name and packaging. Above all it is a quality of the concept itself. And this internal consistency of the concept impacts on the overall quality of the product.

The idea of consistency also guided the development of the different parts of the final product. Consequently, the concept was not only communicated to the perfumers as a brief but also used for the packaging design.

*Initially, we look for materials the fit to the concept and the specific interpretation of the emotion (senior packaging designer, transcript).*

Later on, it also inspired the communication expert working on the campaign text and the photographer creating the campaign photography.

*There is a common thread in our work. It relates to the strong link to the concept. We understand a product based on its concept – and this truly from the very beginning. This consistency is almost crazy. And then this is even filled into the bottle. This idea of perfumery is shared by very few companies; that there is a concept and then based on this a scent; and then packaging and communication is created and builds on this. This approach is very rare these days (creative director, transcript).*

In the case of the packaging design this sense of aesthetic consistency can be illustrated by comparing the different solutions developed for the different scents. Thus, different materials (e.g. copper, wood, porcelain) resulting from different treatments (e.g. alloy, coating) were identified and selected in accordance with specific concepts. In addition, we could observe this sense of aesthetic consistency when the decision on a material was executed and additional implementation problems (e.g. a lack of precision) occurred. Later on the creative director commented on his decisions and referred to it as dynamic consistency.

*What does not work is a static concept that is literally used on a one-to-one basis. If there is a brand with a kind of metallic feeling, one could argue that in this case metal is important: the packaging is made of metal; metal dominates the counter in the store; you communicate metal; and in the end you might even have a metallic scent. One might think that this is consistent, because metal serves as a recurring theme. But at the end of the day it is a very static, boring product. It is dead because a character consists of tension (creative director, transcript).*

All in all, this sense of aesthetic consistency guided the process at two levels. First, the process focused on the development of a consistent concept. Second, this concept then allowed for the overall consistency of the process.

In addition, this consistency is also later perceived and communicated as a key quality of the brand as interviews with the marketing specialists revealed (marketing director, transcript)

## Authenticity

Contemporary consumer life becomes increasingly saturated with “toxic levels of inauthenticity [that] we’re forced to breathe” (Gilmore & Pine, 2007, p. 43). With respect to the perfumery sector this general observation seems to be even more than true.

In our case we frequently came across questions of authenticity. In interviews industry experts often commented on the name of the brand. One fashion journalist for example asked spontaneously the rhetorical question:

*“How can one use a name that can hardly be pronounced?” (transcript).*

In fact, the two designers named the brand after their grandmothers’ maiden names irrespective of severe marketing concerns. In a debriefing interview the creative director recalled the trade-off situation:

*I remember how critical our marketing people initially reacted: “The name is too complicated! Isn’t there an easier option? Nobody can pronounce this”. Thus, one tried to erase the character out of the brand. However, we remained stubborn. I cannot use a pleasant name if the concept is different only because it might sell better (transcript).*

Thus, the designers’ real grandmothers became part of the brand:

*The mirror image behind the brand name: designers Sebastian Fischenich and Tobias Mueksch each had a profound formative relationship with a remarkable grandmother, Helena Humiecka z Humiecina (1908–*

2000) and Katharina Graef (1906–2004). Helena and Katharina's eventful lives reflect the extreme arc of 20th century history. They were a steady source of love, security, and practical wisdom for their grandsons, and their legacy is self-confidence, the courage to face life, and faith in a better future. With the rare and evocative HUMIECKI & GRAEF fragrances, Fischelich and Muecksch pay homage to two precious and extraordinary women. The brand is dedicated to their memory and every aspect of it is imbued with their spirit ([www.humieckiandgraef.com/company/2](http://www.humieckiandgraef.com/company/2)).

Retrospectively, the example of the name might appear to be in itself part of the intrigue and dramatic tension that is central to the development of meaningful marketing narratives (S. Brown, 2006). Yet, the fact that even today industry experts take a critical stand on the name points at authenticity as a risky design decision.

In fact, the sense for authenticity is also related to core issues of the product and communication design. Thus, in a debriefing interview the marketing manager reported on the campaign photograph promoting one of the earlier Humiecki & Graef perfumes inspired by the pride of a mother. Accordingly, it was a design decision that the photo should show a true mother with her true daughter though this might have been a compromise in terms of advertising standards.

Given the multisensory nature of a perfume this practice of authenticity follows a “what-you-see-is-what-you-get” or “what-you-touch-is-what-you-get” principle that builds on fundamental design decisions that are carefully translated across the senses.

## Emotion

Emotions are deeply intertwined with the sense of smell. Olfactory stimuli trigger strong emotions, and olfactory memories can be more evocative and longer-lasting than sight (Herz, 2009). The direct link between the olfactory receptors and the human limbic system accounts for the smell sense as a strong emotional driver.

This is the reason why particularly fine fragrances appeal to the spectrum of human emotions. One example is the label “Parfumerie Generale”, that creates emotions as a reminder of the intimate bond between a person and a particular perfume. Another example is the label Humiecki & Graef that conceptually innovates perfumery by organizing its production around a basic human emotion as its core idea. Tellingly, the stereotypical emotions found in perfumery (e.g. desire) are replaced by complex, polyvalent emotions (e.g. motherly pride, fury). Thus, this field of design is opened for the dark side of the spectrum of human emotions. In addition, the development of a new scent coincides with the multisensory design of an emotion.

In a debriefing interview the creative director pointed at another more fundamental presence of the emotional dimension:

*When I realized how much grandmothers stand for an emotional relationship I wanted to name the brand after the grandmothers. For me the grandmother is an image that sensually communicates the idea of an emotion and the very idea of the brand is about emotion (transcript).*

Accordingly, the overall design of the brand captures the theme of emotion. Thus, the emotional dimension permeates the entire process. The last example illustrates how closely the three categories are linked to each other.

All in all, the emotional dimension permeates the entire design process. Thus it broadens our understanding of emotional design. Our case illustrates how the design of an emotion can impact on the overall process instead of merely considering the emotional experience of the user.

## Conclusions

What can we learn from this case with respect the overall theme of this conference track? What is the role of design and design practitioners in innovation work? What is the value that design creates in this innovation process?

In contrast to mainstream perfumery design is at the center of this case. It is not a final marketing driven add-on but initiating, directing, mobilizing and strengthening the overall innovation process. Accordingly, a design practitioner leads the process and takes the respective creative and commercial decisions. Thus, the coordination of the different sub-processes (e.g. packaging, campaign photography, scent development) aims at aesthetic consistency among the different design practices. Similarly, it is the “design attitude” (Michlewski, 2008) rooted in a strong sense of an artistic subject that allows for a personal involvement (e.g. selection of dark emotions) that exceeds the potential of any technology driven innovation. In this respect it is a value of this design driven process that it emotionally challenges all contributors. Thus, the perfumers, the packaging designers, the text editor and the photographer are personally involved in the development process and aim at a higher quality.

The differences between this design driven and more conventional innovation processes could be further analyzed. First insights from a more recent round of data collection that focuses on how perfumers work on more conventional projects however confirm the central role of design as analyzed in this paper.

All in all, our case demonstrates how design driven innovation can open a stimulating alternative in mass markets. In the perfumery sector the approach presented in this paper does not simply reverse the commercialization of the sector including the old conflict between perfumery and industry. Yet, it fundamentally changes the roles of the professions involved in the process. Thus, “design takes over from industry” (cf. Ellena, 1991, p. 345) can be the next step in the history of perfumery.

Our study is based on data from the field of artistic perfumery. However, this design-based innovation has implications for other interdisciplinary design processes. In particular, this case can serve as a role model for other sectors of the growing luxury market. Design increasingly focuses on total experiences that harness all the senses: taste, smell and sound in addition to sight and touch. Thus, perfume as an example of multi-sensory design is a true point of reference.

## References

- Boland, R., & Collopy, F. (Eds.). (2004). *Managing as Designing*. Stanford, Calif: Stanford Business Books.
- Borja de Mozota, B. (2003). *Design management using design to build brand value and corporate innovation*. New York, NY: Allworth Press : Design Management Institute.
- Brown, S. (2006). Ambi-brand culture: On a wing and a swear with Ryanair. In J. E. Schroeder & M. Salzer-Mörling (Eds.), *Brand culture*: 44–59., London: Cass.
- Brown, T. (2009). *Change by design how design thinking transforms organizations and inspires innovation*. New York: Harper Collins.
- Burr, C. (2008). *The perfect scent: a year inside the perfume industry in Paris and New York*. New York: Henry Holt.
- Butler, H. (Ed.). (2000). *Poucher's Perfumes, Cosmetics and Soaps* (10th ed.). Dordrecht: Kluwer Academic.
- Calkin, R. R., & Jellinek, J. S. (1994). *Perfumery Practice and Principles*. New York: Wiley & Sons.
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Los Angeles; London; New Dehli: Sage.
- Chevalier, M. 2008. *Luxury Brand Management a World of Privilege*. New York: John Wiley.
- Corbin, J., & Strauss, A. L. (2008). *Basics of qualitative research : techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: Sage.
- Dixit, S. (2009a). Fine fragrance business trends. *Chemical Business*, 23(6): 11–26.
- Dixit, S. (2009b). Fine fragrances & perfumes. *Chemical Business*, 23(4): 7–12.
- Dorst, K. (2011). The core of “design thinking” and its application. *Design Studies*, 32(6): 521–532.
- Eckert, C., & Boujut, J.-F. (2003). The Role of Objects in Design Co-Operation: Communication through Physical or Virtual Objects. *Computer Supported Cooperative Work (CSCW)*, 12(2): 145–151.
- Ellena, J.-C. (1991). Creative Perfumery: Composition Techniques. In P. M. Müller & D. Lamparsky (Eds.), *Perfumes art, science and technology*: 333–345. London [etc.]: Elsevier Applied Science.
- Epiro, S. (2004). Niche Fragrances Exploding in Italy. *WWD: Women's Wear Daily*, 188(107): 18.
- Gilmore, J. H., & Pine, B. J. (2007). *Authenticity: What Consumers Really Want*. McGraw-Hill Professional.
- Goldman, R. 1987. Marketing Fragrances: Advertising and the Production of Commodity Signs. *Theory, Culture & Society*, 4(3): 691 –725.
- Herz, R. S. (2009). Aromatherapy Facts and Fictions: A Scientific Analysis of Olfactory Effects on Mood, Physiology and Behavior. *International Journal of Neuroscience*, 119(2): 263–290.
- Jellinek, J. S. (1991). The Impact of Market Research. In P. M. Müller & D. Lamparsky (Eds.), *Perfumes art, science and technology*: 383–396. London [etc.]: Elsevier Applied Science.
- Kimbell, L. (2009). Beyond design thinking: Design-as-practice and designs-in practice. Presented at the CRESC Conference, Manchester.
- Kimbell, L. (2011). Rethinking Design Thinking: Part I. *Design and Culture*, 3(3): 285–306.

- Kubartz, B. (2011). Sensing brands, branding scents: On perfume creation in the fragrance industry. In A. Pike (Ed.), *Brands and branding geographies*: 125–149. Cheltenham: Edward Elgar Pub.
- Lampel, J., & Mustafa, N. (2009). The Emotional Nexus between Products and Organizations: The Case of Perfume. In N. Koivunen & A. Rehn (Eds.), *Creativity and the Contemporary Economy*: 83–108. Malmö: Liber.
- Liedtka, J. (2000). In defense of strategy as design. *California Management Review*, 42(3): 8–30.
- Martin, R. L. (2009). *The design of business why design thinking is the next competitive advantage*. Boston, Mass: Harvard Business Press.
- Michlewski, K. (2008). Uncovering Design Attitude: Inside the Culture of Designers. *Organization Studies*, 29(3): 373–392.
- Nicolini, D. (2009). Zooming In and Out: Studying Practices by Switching Theoretical Lenses and Trailing Connections. *Organization Studies*, 30(12): 1391–1418.
- Olsen, K. (2011). Smallville: Artisanal brands are finding a welcome reception in Europe's overly saturated fragrance market. *Women's Wear Daily*, (Beautyinc 20 May 2011): 32–33.
- Pybus, D. (2006). The Perfume Brief. In C. Sell (Ed.), *Chemistry of Fragrances: From Perfumer to Consumer* (Revised.): 138–142. Cambridge: RSC Publishing.
- Tonkinwise, C. (2011). A taste for practices: Unrepressing style in design thinking. *Design Studies*, 32(6): 533–545.
- Turin, L. (2007). *The secret of scent: adventures in perfume and the science of smell*. London: Faber and Faber.
- Verganti, R. (2006). Innovating Through DESIGN. *Harvard Business Review*, 84(12): 114–122.
- Verganti, R. 2009. *Design-driven innovation: Changing the rules of competition by radically innovating what things mean*. Boston, Mass.: Harvard Business Press.