Please cite this article as:

Language Brokering:

Stimulating creativity during the concept development phase

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Abstract

To improve product styling and ergonomics, a growing number of companies are exploring new ways to involve design consultants in their innovation processes. Many studies have underlined the importance of designers in the innovation processes of successful companies, and some designers have achieved "superstar" status. By capturing, recombining, and integrating socio-cultural knowledge and product semantics across social and industrial settings, designers can help create breakthrough product meanings. The relationship between briefs written by managers and solutions developed by designers is quite complex. Very often managers are unable to appropriately communicate and commercialize new products and services conceptualized by designers because they know only the final output of the innovation process rather than its entire story. The Language Brokering Process can enrich the dialectic between managers and designers, and consequently, it can improve both current and future innovation projects. This methodology elucidates the structure and process adopted by several designers and also illustrates an effective framework for communicating choices to managers. We present results from a student application of this methodology in the development of a new product-service system for Aquarius (a brand of the Coca-Cola Group) for two target demographics: "desperate housewives" and "young adults".

1. Introduction

Innovation is often necessary for firms to successfully compete in the marketplace, and improving product design is one way that firms can innovate. To improve product styling and ergonomics, a growing number of companies are exploring new ways to involve design consultants in their innovation processes. Many

studies have underlined the importance of designers in the innovation process of successful companies (Cillo and Verona, 2008; Verganti, 2009), and some designers have achieved "superstar" status – for example, Jonathan Ive for Apple, Jacob Jensen for Bang & Olufsen, and Philippe Starck for several furniture companies, as well as Nike and Puma. A widely-used practice in many industries is to collaborate with external designers to source fresh insights, creativity and new knowledge. Case studies including Alessi, Apple, Bang & Olufsen, Kartell, Philips, Sony and Swatch, demonstrate how designers are becoming key actors in terms of product innovation and strategic renewal (Ravasi and Lojacono, 2005).

Industrial design practitioners and academics alike understand that management of the semantic dimension of design is important for product and service innovations. Designers provide access to knowledge of product languages and meanings. Design deals with the meanings ascribed to products and with the language that can be used to convey those meanings to the point that some scholars go so far as to state that design is "making sense of things" (Krippendorff, 1989). Each product, along with its functionality and performance, has a meaning, which is the underlying reason why people buy it and use it. Product signs and languages allow products to speak and convey precise meanings. Verganti (2003) illustrates the unique approach that successful Italian manufacturers are using to involve designers in their innovation processes. They collaborate with companies to introduce radical innovations in product meanings and act as brokers of languages to do so. Capturing and integrating knowledge about different socio-cultural contexts and industry settings, designers combine different product languages to propose breakthrough product meanings. In other words, they play a crucial role as brokers of languages. The Apple iMac G3 (1998) represents an interesting example because it adopted a design language that was novel for the industry (translucent colored plastics), but already diffused in other industries. The same translucent plastic and the same colors had spread into household products in the early 1990s. The emerging language of objects in homes inspired the iMac because it was meant to live in houses. Steve Jobs selected Jonathan Ive (an independent design consultant that mainly operated in the bathroom and plumbing industry) to design the iMac G3 because he understood that personal computers should speak the friendly language of modern household products rather than the cold, remote language of business and offices. Ive gave to

Apple the opportunity to access the world of household meanings and languages unknown to any other computer company.

Several literature contributions describe the processes used by design consultants in order to capture and combine different pieces of knowledge (Twigg, 1998; Tennity, 2003; Verganti, 2003). At the same time very often managers (and more generally companies) are not able to appropriately communicate and commercialize new products and services conceptualized by designers because they know only the final output of the innovation process rather than the entire story behind the product (Sonnenwald, 1996; Ramesh and Tiwana, 1999; Chiu, 2002). An enriched dialectic between managers and designers can improve the performance of innovation projects. How can managers improve their interactions with designers during concept generation? How can they share their diverse knowledge and approaches in the concept development phase? In this paper, we propose a Language Brokering Process for stimulating this creativity during the concept development phase, and facilitating collaboration between managers and designers.

Using two design student teams, we have explored this methodology in the development of a new product-service system commissioned by managers at Aquarius (a brand of the Coca-Cola Group). This paper is organized in the following way: The first two sections (Section 2 and 3) establish a theoretical context by introducing the concept of radical design-driven innovation, and then exploring the designer's critical contribution to the innovation process. In Section 4, we introduce and ground our methodology proposing the Language Brokering Process. In Section 5, we present results from the two design student teams, and in Section 6 we discuss these results and their managerial implications.

2. Semantic and semiotic innovation

Both the industrial design and academic worlds (Csikszentmihalyi and Rochberg-Halton, 1981; Margolin and Buchanan, 1995) have recognized the importance of the semantic dimension of products in the development of new goods and services. The semantic dimension is able to modify the meanings embedded in products to allow them to evolve with society. Pierce (1935) proposes one of the most widely

cited theories about semiotics, whereby product messages, and therefore meanings, are represented by signs such as indexes, symbols and icons that are in turn embedded within products. According to Pierce (1935), a sign is not a thing or an object but a relation, and it can be defined as "something that stands for something to somebody in some respect or capacity." This theory of semiotics can be applied to products, and in this case, the set of signs used to make a product speak can be called product language. Consistent with this idea, Butter and Krippendorff (1984) define "product semantics" as "the study of the symbolic qualities of man-made forms in the cognitive and social context of their use and application of knowledge gained to objects of industrial design."

Verganti (2009) defines radical design-driven innovation as *"an innovation where novelty of message and design language is significant and prevalent compared to novelty of functionality and technology."* According to Verganti (2008), innovation may concern a product's functional utility, its meaning, or both. Moreover, functional innovation may imply an incremental or radical improvement of technical performance (Garcia and Calantone, 2002; Chandy and Tellis, 1998); at the same time innovation of the semantic dimension may also be more or less radical. The proposal of a product language aligned with the current evolution of socio-cultural models allows us to introduce an incremental innovation; while a radical innovation of meanings happens when a product has a language and delivers a message that implies a significant reinterpretation of meanings. Design-driven innovation is based on the idea that each product has a particular meaning; style is just a possible language that can be exploited to communicate it. The Swatch, launched first in 1983, was a radical design-driven innovation. It completely transformed the interpretation of watches from jewels or time instruments into fashion accessories (Glasmeier, 1991; Verganti, 2009). The Family Follows Fiction product line introduced by Alessi in 1993 adopted signs and languages completely different from classic products of the kitchenware industry (plastic material, translucent surfaces and daring colours) in order to stimulate new user experiences such as, the need for tenderness, delicacy and intimacy (Dell'Era and Verganti, 2009). The Nintendo Wii has redefined the meaning of playing on a game console; it is no longer defined as a passive immersion in a virtual world targeted at young players, but as active form of entertainment in the real world for people of all ages and demographics (Verganti, 2009). According to this interpretation the Nintendo Wii can be considered a

breakthrough in product meanings. Product signs and languages can also be analyzed from the standpoint of company differentiation, particularly when product re-design is interpreted as a means to continuously improve a product portfolio. Conversely, a consistent product identity can increase brand recognition, differentiate the company and its offerings from those of competitors, and create coherence across different markets, product categories and over time (Karjalainen, 2001). Kapferer (1994), Aaker (1996) and Holt (2004) underline the importance of identity in terms of values and meanings shared with the customers.

Olins (1990) identifies three mains areas that can be exploited to reinforce the identity: products/services, environments, and communications. Several studies such as Warell (2001), Muller (2001), Karjalainen (2004) and McCormack and Cagan (2004) demonstrate that product design conveys messages to the customers and, consequently, can develop meaningful visual recognition and brand-specific associations. In an analysis of the automotive industry, and more specifically the Volvo, Nissan, Volkswagen and Citroën case studies, Karjalainen and Warell (2005) describe design elements through which users distinguish products. They argue that similar connotations allow a consistent message to develop and create a product/brand identity. Beginning with the assumption that a strong identity on the market is increasingly important for product development and manufacturing companies, Warell and Nåbo (2002) point out the necessity of developing products that speak coherent languages. In this sense, it can be important for customers to recognize products developed by the same company when new models or generations are introduced on the market.

3. Designers as brokers of product languages

Many recent studies underline the importance of designers in the innovation process of successful companies (Krippendorff, 1989; Gotzsch, 1999; Gierke et al., 2002; Lloyd and Snelders, 2003; Tennity, 2003; Verganti, 2003, 2006 and 2009; Boland and Collopy, 2004; Durgee, 2006). Some even go so far as to point out the rise of the design "superstars" like Jonathan Ive for Apple, Jacob Jensen and David Lewis for Bang & Olufsen, and Philippe Starck for several furniture companies, as well as Nike and Puma. Gierke (2002)

argues that designers play a unique role in predicting trends and patterns. He says that "Like an almanac of wisdom, designers can help to prepare a company for the weather on the way." Design can help to build a strong brand identity that differentiates the company or product from competitors, that makes an emotional appeal through style or personality and that communicates benefits. Design acts as an interface between company and customer, ensuring that the company delivers what the customer wants in a way that adds value in all of these ways.

Designers can support companies in the identification and interpretation of future trends. Designers can propose new meanings to modify future scenarios. The involvement of designers in the innovation process is a channel through which a firm can gain knowledge about its customers and their needs. Designers may act as crucial gates that provide a firm with access to different socio-cultural contexts (Verganti, 2008). They are bridges between different industries, and therefore facilitate the transfer of knowledge of meanings and languages. Designers are able to interpret different cultures and may be regarded as cultural gatekeepers. The opportunity to collaborate with companies on different categories of products (i.e., chairs, kitchens, sofas, lamps, etc.) and in different industries allows designers to transfer languages from one sector to another (Capaldo, 2007). As a result, in many cases product signs and languages are not industry-specific. The nature of product languages enables their transfer from one product typology to another or from one industry to another.

The role of brokers able to move technological knowledge among different industries has recently been studied (Harada, 2003); similarly, some research has analyzed the brokering role played by designers (Bertola and Texeira 2003, Hargadon 2003). For example, Hargadon and Sutton (1997) demonstrate that IDEO (one of most successful design firms in the world in the last 20 years) acts as a technology broker, providing access to 40 different industries and exploiting its network position to move solutions across industries (Hargadon and Sutton 1997). Designers act as brokers of knowledge of languages as well as technologies. From a managerial perspective, this property implies great innovative and creative stimulus. There are many examples of how product languages have moved across industries. For example, the product line "Family Follows Fiction" launched by Alessi in 1993, several products developed by Kartell in the 1990s and Apple's iMac introduced in 1998 all use similar materials, transparency and colors.

Designers support manufacturers, particularly during the concept generation phase. From a transaction-cost economics perspective (Williamson, 1985, 1996; Shelanski and Klein, 1995) and a knowledge-based view perspective (Kogut and Zander, 1992; 1996; Conner and Prahalad, 1996), literature on outsourcing presumes that firms use outsourcing when concerns over specific assets and appropriability are low and when advantages of intra-firm learning, communication, and identity are less important than those offered by outsourcing. The collaboration with different clients allows specialized suppliers such as designers to develop superior expertise in professional knowledge in comparison to internal teams. The opportunity to aggregate requests and briefs coming from different clients allows designers to accumulate knowledge of and experience in problem solving and idea generation.

Twigg (1998) argues that companies must look to the network of suppliers for design and process expertise. This is particularly relevant in design-intensive industries because the knowledge about the subtle and unexpressed dynamics of socio-cultural models is distributed and tacit. As opposed to traditional socio-cultural investigations, which describe extrapolations of current phenomena, design-driven innovation foresees the proposal of new meanings able to modify the current scenario (Verganti, 2009). Leading Italian manufacturers such as Kartell and Alessi develop a continuous dialogue on socio-cultural models about patterns of consumption, behavior and societal values because they understand that the knowledge about socio-cultural models is diffused within their external environment. Raw material suppliers, universities, design schools and especially designers develop their own investigations, representing a sort of large research laboratory. Each actor participating in this dialogue can support the company in the identification and interpretation of emerging phenomena as well as influence the meanings, aspirations and desires held by users by affecting their daily lives.

4. Language Brokering Process

Managers are very often unable to appropriately communicate and commercialize new products and services conceptualized by designers because they know only the final output of the innovation process rather than its entire story. Taking this into consideration, this paper proposes a Language Brokering

Process that aims to stimulate creativity during the concept development phase and facilitate collaboration between managers and designers. It is comprised of four sequential steps, and each of them takes inspiration from literature streams previously introduced (see Figure 1). *Step 1 – Semantic and semiotic introspection* aims at identifying meanings and languages that represent the identity of the company. This step is particularly critical because the Language Brokering Process aims at developing innovations able to reinforce the company identity and product recognition. As Dell'Era and Verganti (2007) argued, in the trade-off between variety and brand identity in product languages, innovators are more attentive to the latter than are imitators. Innovators of the Italian furniture industry avoid proposing a wide range of product signs and languages to protect brand identity. They tend to adopt strategies that allow customers to easily reconnect specific product signs to their brands. Gilmore and Pine (2007) describe the concept of authenticity as the new business imperative, especially through the case studies of Disney and Starbucks, they show that today's consumers are looking for authenticity where and when they buy.

Step 2 – New meaning development represents the core of the process. Several studies demonstrate the fact that consumers increasingly make brand choices on the basis of the aesthetic and symbolic value of products and services. Verganti (2009) explores how firms create innovations that customers do not expect but that they eventually love. Until now, the literature on innovation has focused either on radical innovation pushed by technology or incremental innovation pulled by the market. Design-driven innovations do not come from the market, they create new markets. They do not push new technologies, they push new meanings. Exploring case studies such as Nintendo Wii, Apple iPod and WholeFoods, Verganti (2009) investigates an innovation paradigm based on collaboration with a network of interpreters that allows to propose new meanings and values on the market.

Step 3 – Language scouting operationalizes the concept of language brokering proposed by Verganti (2003). As previously mentioned, similar to technology brokers (Hargadon and Sutton, 1997), designers are able to transfer product languages and meanings across industries, exploiting their connections and networks. Kolb (1984) says that "knowledge results from the combination of grasping and transforming experience." His Experiential Learning Theory describes two dialectically related modes of grasping experience: concrete experience and forming abstract concepts. He also describes two modes of

transforming experience: observation and reflection, and testing in new situations. The construction of knowledge arises from the creative tension among the four learning modes. The process is drawn as a circle or, better yet, as a spiral to signify a recursive exercise in which the learner "touches all the bases:" experiencing, reflecting, thinking and acting.

Step 4 – Language translation exploits potentialities provided by rhetorical figures. According to Casakin (2007), metaphors help designers to understand unfamiliar design problems by juxtaposing them with known situations. The implementation of metaphors in design practice can contribute to creative thinking and thereby to more innovative products. The relevance of metaphors to problem-solving is pertinent to three fundamental steps (Gentner et al., 2001):

- The first step consists of extracting a variety of unfamiliar concepts from remote domains, where possible relationships with the problem at hand are not always evident;

- The second step involves establishing a map of deep or high-level relationships between the metaphorical concept and the problem. Correspondence between the two comes in the form of abstractions and generalizations. Relationships of secondary importance are discarded, and only structural correspondences between the metaphorical source and the problem are retained;

- The last step deals with transferring and applying structural correspondences associated with the metaphorical source to the problem at hand, which at the end generally leads to a novel solution.

In this way, metaphors not only assist in problem reflection, but also help to break away from limitations imposed by initial problem constraints (Snodgrass and Coyne, 1992), to explore unfamiliar design alternatives and to establish novel associations with the design problem (Casakin, 2006; Coyne, 1995). Karjalainen (2001 and 2007) interprets metaphor as a tool for brand/product identity analysis and argues that metaphorical connections can be created between existing brands (or products) from totally different product categories, offering great potential for value-added associations. With these reflections in mind, we have explored the following methodology in the development of a new product-service system commissioned by managers of Aquarius to two design student teams.
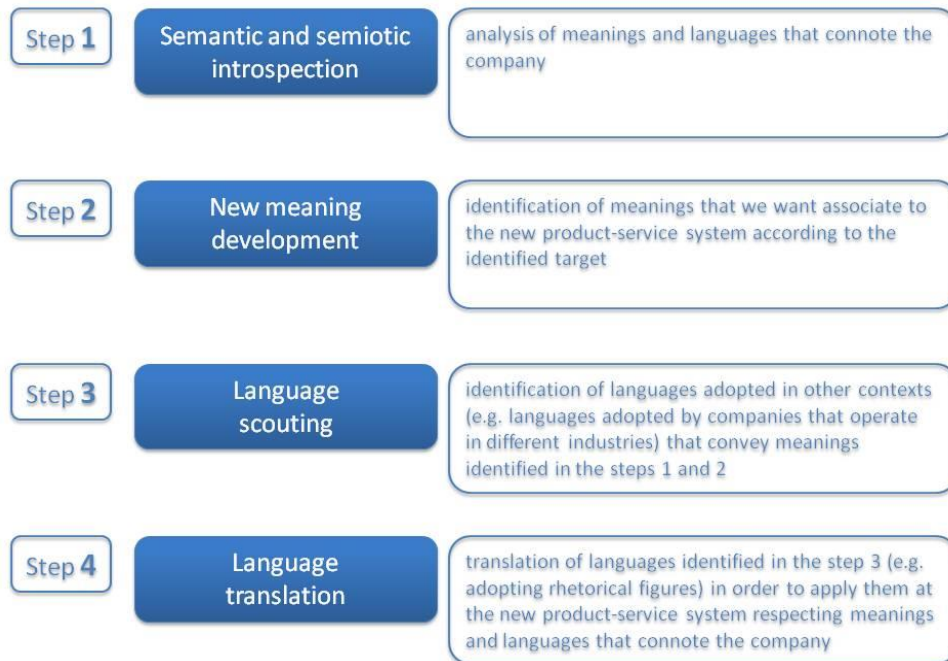
Figure 1: Language Brokering Process

Each design team, comprising five Italian design students (24 years old), developed the project over a period of three months. Especially during *Step 1 – Semantic and semiotic introspection,* each team was supported by an Aquarius Marketing Manager to collect information and materials (products, catalogues, brochures, leaflets, TV spots, etc.) that allow them to interpret meanings and languages that represent the identity of the company. More precisely, each design team has dedicated 12 hours per week over three months to the development of the project. Four hours were dedicated to design review in collaboration with the authors, while eight hours were dedicated to team activities.

5. Empirical results

The brief proposed by Aquarius was quite specific – they wanted to develop different product-service systems that, through the use of a beverage product, improve an otherwise stressful supermarket shopping experience. Each design student team worked on a specific target customer. The first one analyzed the

specific target of the "desperate housewives." These are women with more than one child, little time for themselves, and who are busy running the house and shopping for their family. When they go to the supermarket, their shopping cart is always filled with several kinds of products. The second team worked on the target of the "young adults". This group consists of men and women between 20 and 30 years old who are predominantly students living away from home. They go to the supermarket only on the weekend to buy foodstuffs for the next week and are substantially less time-constrained than the "desperate housewives."

Desperate housewives

The students began with a detailed analysis of meanings and languages that connote the brand and principal products of the company, such as joy or freshness associated with its logo, feeling fit and healthy based on the ingredients of the drink, or practicality transferred by the shape of the bottle (step 1). The design student team then identified the specific needs of the target customers (e.g., to ease their workload, to find enough time to relax, etc.) and developed new meanings and messages to introduce in a new product-service system (step 2): for example, "you can stop for a while, relax, re-hydrate and regenerate yourself" or "after this break you will be ready to deal with your work day." During this phase the design student team paid great attention to the original meanings of Aquarius to propose coherent innovations. In the third and fourth steps, they searched for languages adopted by other companies to convey these messages (step 3) and then used the same languages to create the new product-service system (step 4). To do so, they chose four different product lines (see Figure 2):

- From Estathè, the iced tea from Ferrero with the cheerful and easy-to-use glass packaging, they picked the ergonomic benefit of an easy opening and attached a drinking straw;

- From Kinder Pinguì, a snack with milk and chocolate proposing to give new energy to children and adults alike, they took the idea of a fresh and satisfying beverage. This feeling was conveyed by focusing on ingredients and some graphical elements like lemon, drops, and ice cubes;

- From Dove with its skin, body and hair care products and its attention to women and real beauty, they picked the concept of a re-hydrating beverage infused with mineral salts;

- From Mastro Lindo, the floor cleaner line from Procter & Gamble positioned as a "magical ally for housekeeping," they extracted a service idea: an "Aquarius-team" positioned near the supermarket check-out, ready to help the consumer with a shopping bag.
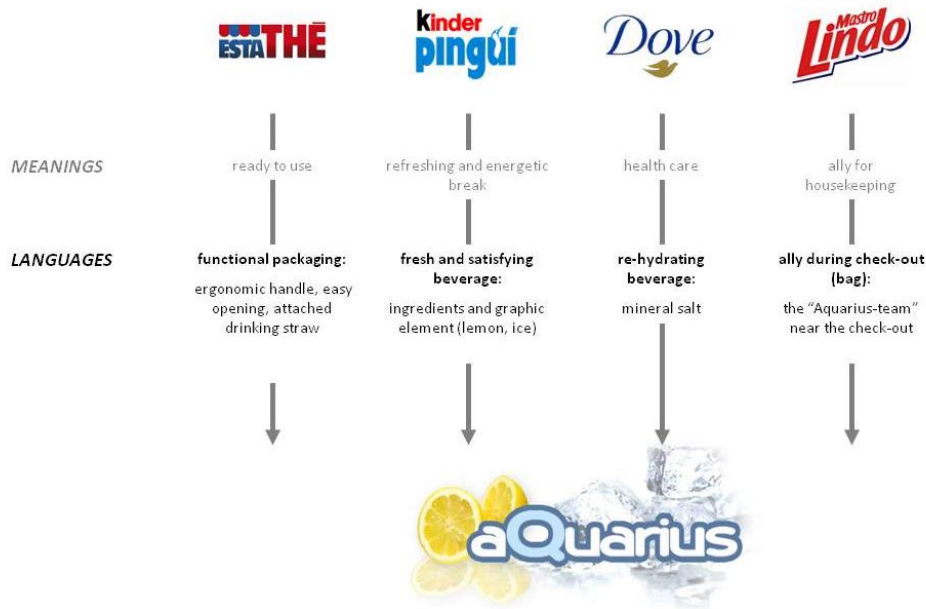
Figure 2: Language scouting (target "Desperate housewives")

The students tried to combine these messages and design elements taken from the four brands and to create a new visual identity (see Figure 3). They chose to discard the original bottle shape and, instead, to use a package shaped like that of Estathè, which conveys a feeling of familiarity and emphasizes relaxation. With the spherical shape of the glass they gave special importance to the tactile experience. This shape was chosen to convey a sense of pleasure and softness. Finally, the students designed a new logo to communicate a sensation of freshness with colors (light blue, white and yellow) and with graphical elements (slice of lemon, ice cubes, and water).

The packaging contains 33 cl. glass shape package transfers a feeling of familiarity and emphasizes the idea of take a break and relax

The film that closes the packaging is thin, so you can make a hole with a straw and drink the beverage like a cocktail

The tab allows to remove the covering of the packaging and drink as from a glass

The spherical shape conveys a sense of pleasure and softness

The new logo contributes to communicate a sensation of freshness with colors and with graphical elements

Figure 3: Language translating – Visual identity (target "Desperate housewives")

As a term of service, the design student team adopted a position near the check-out where a "desperate housewife" could find an Aquarius team member who could help her put products in her shopping bag. During this moment, she can take a moment to rehydrate herself with the soft drink and satisfy her thirst (see Figure 4).

1
Kate goes to the supermarket, chooses the product that she needs and then goes to the check-out with her shopping cart.

2
Here she founds the "Aquarius-team" ready to help her with the shopping bag.

3
In the meantime she can take a break in a relax point, drinking her Aquarius.

4
The shopping bill is transferred from the cash to the relax point.

5
6
Kate can pay directly at the relax point and the "Aquarius-team" gives her the shopping bag with her products.

Figure 4: Language translating - Storyboard (target "Desperate housewives")

Young adults

The second design team identified other meanings and languages connected with the Aquarius brand and its products: spontaneity, freshness, sharing and a capacity to recharge and regenerate the energy spent during daily activities (step 1). Then they considered the needs and requirements of the specific target: a desire to have fun with friends, to share amusing experiences, to transform a boring moment (weekly shopping) into a moment of joy and conviviality and to have customized products (step 2). In the next two phases, students identified four brands that have these values and meanings, studied how these messages are expressed, and strategized how to transfer them in a new product-service system (step 3 and 4). The four chosen brands were (see Figure 5):

- Air Action Vigorsol, a chewing gum with a fresh mint liquid inside that promotes a sensation of freshness;

- The Pocket Coffee by Ferrero, a chocolate candy with espresso coffee inside, that gives energy and boost in every moment of the day;

- The new Fiat 500, from which they extracted personalization and the ability to express yourself;

- And Hard Rock Cafè, from which they extracted idea of a fun experience that is memorable and an opportunity to show off;
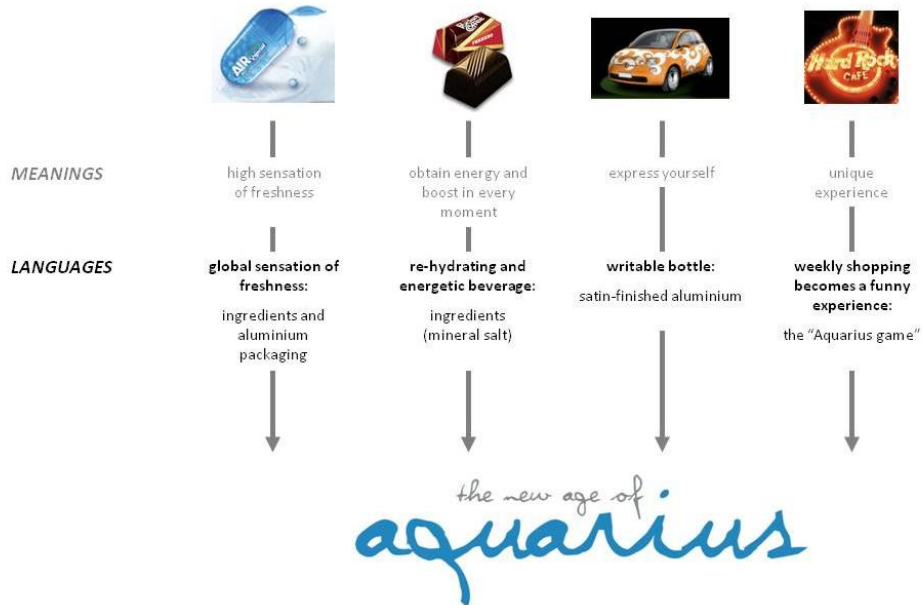

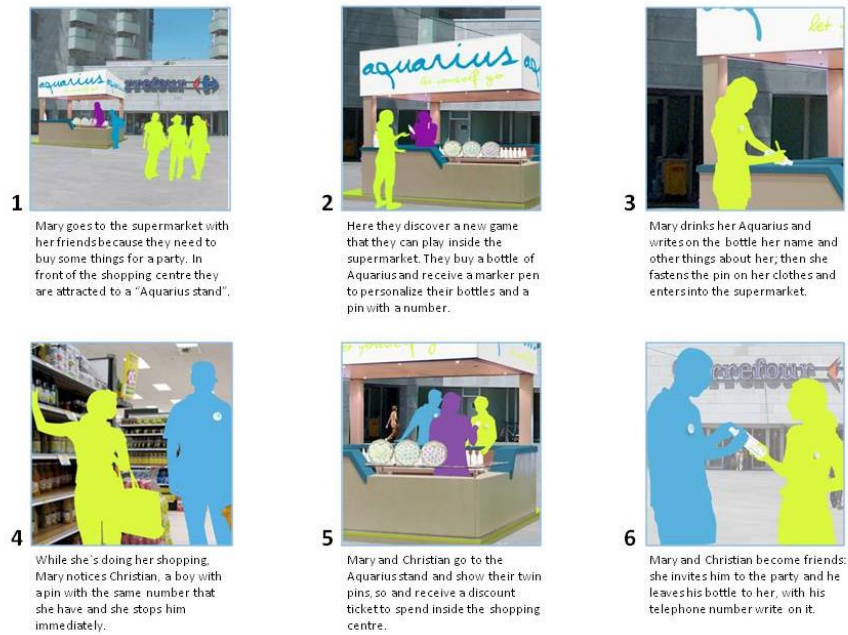**Figure 5: Language scouting (target "Young adults")**

Combining the elements from their analysis, the design team created a new visual identity for the drink and connected it with a new service model for the supermarket. Their redesigned bottle has an opaque surface made of satin-finished aluminum that can be written on with a pen. The logo is written in calligraphy to convey the appearance of being hand-written. The colors imply freshness and dynamism (light blue, acid green and white). The bottle has a shape that looks like long drinks or beers that you can drink in pubs and lounge bars. The intention was to differentiate Aquarius from other energetic drinks or fruit juices with a relaxing or party-like atmosphere (see Figure 6).

1. **opaque surface**, you can not see the drink inside, so the package becomes more important and gains more meanings and values

2. **bottle in aluminium** to give a tactile sensation of freshness

3. **use of satin-finished aluminium** to make possible to write on the bottle with a pen

4. **calligraphic font** for the logo, as if it was hand-written on the bottle

5. **colours** that recall freshness and dynamism (white, acid green and light blue)

6. **shape** that looks like the bottle used for long drinks and beers, to differentiate the beverage from fruit juices and energetic drinks

Figure 6: Language translating – Visual identity (target "Young adults")

The associated service was a game to play inside the supermarket. Before entering the shopping center, the "young adults" would find an Aquarius stand where they could buy a drink, personalize their bottle, and receive a special PIN to start a game. During their shopping inside the supermarket, they could then try to find another person with the same pin. If two people with the same pin came back to the stand together, they receive a discount ticket that they can spend in the shopping center. The aim of this service is to make the weekly shopping at the supermarket more pleasant and to give the users the potential to find new friends (see Figure 7).

1. Mary goes to the supermarket with her friends because they need to buy some things for a party. In front of the shopping centre they are attracted to a "Aquarius stand".

2. Here they discover a new game that they can play inside the supermarket. They buy a bottle of Aquarius and receive a marker pen to personalize their bottles and a pin with a number.

3. Mary drinks her Aquarius and writes on the bottle her name and other things about her; then she fastens the pin on her clothes and enters into the supermarket.

4. While she's doing her shopping, Mary notices Christian, a boy with a pin with the same number that she have and she stops him immediately.

5. Mary and Christian go to the Aquarius stand and show their twin pins, so and receive a discount ticket to spend inside the shopping centre.

6. Mary and Christian become friends: she invites him to the party and he leaves his bottle to her, with his telephone number write on it.

Figure 7: Language translating - Storyboard (target "Young adults")

6. Conclusions

Many recent studies underline the importance of designers in the innovation process of successful companies, and even point out that some are considered "superstars." By capturing, recombining and integrating knowledge about socio-cultural models and product semantics in several different social and industry settings, designers help in creating breakthrough product meanings. The relationship between product briefs written by managers and solutions provided by designers is quite complex. According to Borja de Mozota (2003) and Philips (2004), the design brief initially developed by managers is often reiterated in a document issued by designers explaining its interpretation of the problem. This co-evolution of the design brief is essential for designers to absorb and prioritize the information outlined in the brief and align the relationship. In several situations, managers need more information to understand the reasons for designers' solutions. Managers (and more generally companies) are not able to appropriately communicate and commercialize new products and services conceptualized by designers because they know only the final output of the innovation process rather than its entire story. The Language Brokering Process can enrich the dialectic between managers and designers, and consequently improve both current

and future innovation projects. The proposed methodology can help designers improve concept development and help managers understand how designers developed new product ideas. The concepts developed by our design student teams demonstrate that this methodology may help managers and designers share knowledge and collaborate to develop solutions. According to Aquarius managers product-service systems are not only innovative in themselves, but they are particularly interesting because they provide concrete tools to communicate the innovation to several stakeholders: for example they used the output of the Language Brokering Process to brief the advertising agency that developed the communication strategy about the concept dedicated to "Young adults". Moreover, they used the visual identity and the storyboard about the concept dedicated to "Desperate housewives" in order to propose the project to the Aquarius top management. The Language Brokering Process can represent a collaborative platform where managers and designers can interact, adding value through a mix of specific competences. Furthermore, this methodology can support managers in the appropriation of basic concepts that connote the new product-service system, and consequently it allows them to better present and narrate the innovation. The Language Brokering Process represents a design tool based on different literature streams such as brand and product identity (Kapferer, 1994; Aaker, 1996; Karjalainen, 2001; Holt, 2004; Dell'Era and Verganti, 2007; Gilmore and Pine, 2007), radical innovation of product meanings (Csikszentmihalyi and Rochberg-Halton, 1981; Margolin and Buchanan, 1995; Verganti, 2009), brokering of technologies and languages (Kolb, 1984; Hargadon and Sutton, 1997; Verganti, 2003), and metaphors as a design tool (Gentner et al., 2001; Karjalainen, 2001 and 2007; Casakin, 2007). Very often managers provide specific knowledge about the industry where they operate, while designers combine bits of knowledge coming from different contexts. This methodology elucidates the structure and process adopted by several designers and also illustrates an effective framework for communicating choices to managers. In addition, the connections created among brands and metaphors employed provide additional insights and incentives during the concept generation.

The results obtained during these two student projects can provide additional insights to improve the Language Brokering Process. Future research is needed to verify its application for different product categories and industries. Specifically, we believe that attention to "language translation" (Step 4) can

enrich the capability to combine and recombine signs and languages (e.g., rhetorical figures, metaphors) in ways that can improve brand and value to the customer.

7. Acknowledgments

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