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A COMPARISON BETWEEN TWO EUROPEAN DESIGN MODELS IN THE JEWELLERY BUSINESS

By Luana Carcano and Gabriella Lojacono

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Abstract

The paper illustrates a model to manage design, adopting an overall perspective. This model includes three main fields of action: product design, retail design and visual identity design.
The paper proposes a classification of companies adopting design as a leverage for differentiation: design-oriented companies and design-based companies. These companies have a different approach to consider and manage design.
Such a model is applied to a specific industry where symbolic aspects are extremely important: the jewellery industry.
Two cases are compared in the industry (Tous and DoDo Pomellato), located in two European Countries (respectively, Spain and Italy).

KEY WORDS: design management, design strategy, jewellery, retail design, product design.

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1. CORPORATE DESIGN MANAGEMENT

Multifarious definitions of design exist deriving from the fields of figurative arts and aesthetics, yet they do not apply to corporate strategies (picture 1). Based on the meaning we take into account here, design refers to conceiving one element of the supply system and it is defined in terms of:

- *Sectors it can apply to*: industrial design, web design, graphic design, fashion design, to name but a few;[2]

- *Economic and competitive ends*: the design process is not an end in itself, it aims at meeting specific corporate requirements, from increasing the company market share, to making its sales network loyal, to enhancing its profitability, to strengthening its *brand image*;

- *Set of constraints:* any project must take account of the competitive and economic goals behind it, of the opportunities that technology offers, of the company history, of the performance the product is required to offer, of sustainable costs, of the structural and evolutionary features of the target market;[3]

- *Outcomes, that prove to be unique and original*: the distinctive element lies in the design process innovative contents and irreproducible outcomes, as many industrial design experts maintain.[4]

[2] Cf. G.Bonsiepe, Teoria e pratica del disegno industriale, Feltrinelli, 1993; A. Branzi, Introduzione al design italiano, Baldini&Castoldi, 1999; G.Dorfles, Introduzione al disegno industriale, Piccola biblioteca Einaudi, 1972 e Design: percorsi e trascorsi, Lupetti. 1996; T.Maldonado, Disegno industriale: un riesame, Feltrinelli, 2001; B.Munari, Artista e Designer, Laterza, 1999.

[3] In particular, managing a set of constraints helps to explain why companies adopt different design strategies although they operate in the same industry. For instance, Riccardo Sarfatti from Luceplan, when commenting the design guidelines his company implements, defined formal constraints as less relevant than "available technology that often helps identifying innovative solutions that other sectors adopt; the end customer has to cope with different lightening needs throughout the day, this leads to modify the product typologies; the history of the industry offers solutions that can be re-proposed by using new technologies and new materials; the distribution of "quality products" that, by modifying the type of service, imposes new constraints on the design project in terms of packaging and additional materials; costs, which must be increasingly competitive, being performance equal".

[4] G.Eminente, Il design industriale nelle strategie di mercato, Etaslibri, 1991.

PICTURE 1- DESIGN: DIFFERENT APPROACH TO THE TOPIC

AUTHOR	MAIN OBSERVATIONS
Maldonado	• Design is one mode of the working process concerning the planning of industrially manufactured objects, meaning made using machinery for mass production • Industrial design is different from handicraft and applied art (one-off articles) • This author's thinking is oriented to form: the designer's work only pertains to the appearance, with no reference to the nature of the process • Form and design-related choices are made based on their priority • Formulation of ideas and their implementation are totally distinct phases • Industrial design aims at a dialectical mediation between needs and objects, production and consumption
Dorfles	• Industrial design is a sector that spans all elements of our daily life • Industrial objects are different from handmade objects • Products are manufactured by using industrial and mechanical equipment • Priority is given to the product appearance, meaning the combination of expressive and aesthetic qualities • The utility quotient is not really indispensable
De Fusco	• This author maintains it is useless to give definitions that facts of the matter belie and that should however be contextualised • Design is always characterised by four factors: project, (industrial) production, sales and consumption • It is impossible to outline a single history because of the many product sectors concerned • The aesthetic form (taste) is not the same of philosophy of art or pure art • Industrial Design is different from architecture
Bonsiepe	• Four elements: 1. Functional usage, main the industrial designer's concern 2. Corporate policy, meaning investment purposes, market share, differentiation, distribution channels 3. Appearance 4. Environment friendliness • This author illustrates the guidelines to be used to carry out a competent job in this professional area • Design is an "interface project", addressing the relationship between users, goal and objects • An industrial designer invents functions by observing the needs of people living in a socially and historically contingent space
Munari	• The Artist produces masterpieces for a selected audience • The designer brings back the contact between art and people. It is an aesthetic developer who studies the shape of an object of everyday life
Synthesis	• In general, product design is normally referred to, except for De Fusco and Maldonado • The principle that all approaches share is based on industrialisation and mass-production • The pivotal question is: Does form follow function? • Design applies to a lot of sectors, each having its own history

Text personally drawn up based on original sources

It is worth explaining why design is referred to as the main innovation vehicle in the last item above. Innovation is the outcome of a number of activities the company promotes and that are perceived as being innovative by the *stakeholders* – consumers, in the first place. Design-generated innovation can concern the product or the whole supply system

(product, *visual identity*, distribution). The former – product innovation – is less complex than the latter, but it is also easier to imitate and also riskier. As a matter of fact, if a company brings product innovation to an excessive level, it can be forced to compete in increasingly limited niches.
In some sectors innovation is taken for granted and the focus is on the overall supply system, with particular reference to the commercial format. The basic tenet is that if a company controls the whole process after production, it can let consumers perceive the elements and values associated to what it proposes.
This distinction makes it possible to set out the areas where design can be used, meaning the design domain:

- The product system (products and services). In a nutshell, reference is made to the design of objects of everyday life that takes account of aspects relating to functionality, appearance, ergonomics, environment friendliness, ethics etc.
- *Retailing.* It relates to the areas where the supply system is presented to the market, localization, channel, assortment, communication in the Point Of Sale, service, arrangement of exhibition areas and shop windows, information offices…). Interior design, however, helps defining the visual identity of the company. The purposes of the retail design are: communicating the brand through the POS (strengthening of visual image); improving the service quality; influencing the purchase decisions; increasing the amount of time consumers spend inside the shop. In some cases, interior design plays the main role in shaping the image (e.g. Ikea). From this standpoint, POS are considered as communication tools, not simply as means to supply products (logistic and commercial terminal), which are also used to "stage" the brand strategy and dialogue with consumers;
- *Visual identity* (logo, letter paper, communication in a broad sense, including advertising, etc.)– or *corporate identity* in technical language. The *visual identity* boosts the company competitiveness by projecting a consistent image, by expressing the company "personality" to interlocutors both from inside and outside the company; by representing a visual differentiating element (differentiation according to the target); by stressing the change of strategies and supply; by strengthening the brand; by setting company goals and values; by trying to get the consumer's consent on the symbolic level.

Design-generated innovation fulfils a function that pertains to the company competitive strategy, be it targeted on costs or differentiation. We however believe, based on the analysis of several business cases, that those companies' competitiveness and, consequently, their design processes, depend upon:

- *Their capability to differentiate on several fronts*, by offering consumers products that are in line with their "experiential need", this being their only way to face international competitors;
- *The coordinated design of all elements of their supply system*, according to a "*Corporate Design*" logic that helps pursuing differentiation strategies and making the end consumers perceive its value.

These two topics will be analysed in detail through some case studies.

1.1 Multiple differentiation strategies: experiential design

Design can enhance the differentiation strategy by working on three fronts: performance, expression and experience.

- *Design and performance*. In this case, design aims at improving a product main performance or enhancing its functions.
- *Design and expression*. "Expression" refers to the meaning that the reference individual or group attributes to an object, in terms of identity, status, prestige and fashion. These objects do not sell because of their performance, but rather because of their symbolic value (from jewellery, to furniture accessories, to some cars and motorbikes). Working on expression becomes important in the case of products that have already reached a high functional level and it is therefore impossible to further differentiate them. In the mobile phone sector, companies like Nokia distinguished themselves by introducing models with basic functions and covers that could be changed depending on one's mood – it is not a coincidence that its slogan was "express yourself.[5]
- *Design and experience*. In this case, innovation is achieved by creating products that can make consumers feel pleasure when they purchase and use them, products that can elicit emotions and amazement. Alessi multi-sensorial products (from the kettle with a bird to the biscuit-shaped and scented Molly Biscuits barrel) and the ironical Dolce & Gabbana garments are good examples.[6]

Different companies belonging to the same industry may use design in different ways (e.g. Nokia, Motorola, Ericsson, for mobile phones; Alessi, Bialetti and Lagostina for household products); it may be just as possible that the same company creates its product lines –possibly using another brand – focussing on different aspects of competition (performance, expression, experience).

In the author's opinion, however, "experiential design" represents in many sectors the final phase of an evolutionary process that led the market to focus on performance, search for identity and, ultimately, for a kind of experience also characterised by playful elements.[7]

Quite a few companies successfully implemented a multiple differentiation strategy, offering products that are both excellent in functional terms and rich in expressive and experiential contents. When customers purchase a Prada sports product, they are interested in both its technical material and the world of exploration and sailing adventure that is associated with it and made visible through the famous red band. The same is true of Bang & Olufsen products, combining technology and the experience of opening the

[5] E.Corbellini - G.Lojacono, La gestione del design nel settore della telefonia cellulare, Area Strategia, SDA Bocconi, 2001.

[6] B.Schmitt – A. Simonson, Marketing Aesthetics, The Strategic management of brands, identity and image, Free Press, 1997; B.Schmitt, Experiential Marketing, How to get customers to sense, feel, think, act and relate to your company and brands, Free Press, 1999. To further probe Alessi design management, see G.Lojacono, The Alessi Case, Area Strategia, SDA Bocconi, 2000.

[7] This trend of the design world is confirmed in a recent interview to Philippe Starck: "also creative designers like we are must conceive objects that can relate to the end consumer, and no to themselves; this is one of our major contributions to companies, that must respect tight production and economic constraints. My philosophy is based on zoomorphism and irony on the man-product relationship".

CD holder just by clapping your hands; [8]; and with the Apple I-Mac, which nearly becomes a piece of furniture, due to the smart choice of material and colours reminding consumers of a basket of fruits; [9]; or with Swatch watches, combining Swiss precision with a sense of irony conveyed by the use of plastics shaped by the creativity of international designers.[10]

1.2 Design-based companies: from product design to corporate design

The distinctive features characterising companies using design as a differentiating element (“*design-intensive”*) lead to identify the following typologies:

- *Design-oriented companies*, that reckon exclusively upon product design (first a single product, then a family of products and, successively, a whole range of products), in line with a production and marketing logic.
- *Design-based companies,* that consider “*corporate design*”– that is to say design applied to the whole supply system – as their main differentiating principle. For those companies, design is not just a mere stylistic study, it actually rises to the status of design method that touches different components of business management. It therefore becomes an element of the genetic inheritance that characterises the company basic strategy. These companies normally make use of the multiple differentiation strategies dealt with in the previous section. The symbolic and experience-related contents of the product system require that firms modify their distribution and communication strategy to avoid wasting the value they have created due to inadequate presentation and sales methods. The specific features of *designed-based* companies do not lie in the *business* they chose to work in - design is a transversal concept crossing different industries, from jewellery, to fashion, to furniture, to household appliances- but rather in their competitive and economic goals and in the philosophy behind their management and organisation[11]. In particular, the organisation of those companies tends to privilege open and flexible structures and to set up inter-functional teams that follow specific projects – the so-called “archipelago” model.

Design fills an important role in the economy of some Countries, as some statistical indicators (e.g. GDP, exports), and the interests experts and operator show largely confirm. Studies on the prospects of companies that use design as their main competitive lever have highlighted a recurrent theory for some years: design cannot be considered as a formal “plus” making the product more desirable for consumers, and cannot be managed by exclusively relying on the entrepreneur’s or designer’s intuition. Moreover, experience shows that a lot of traditionally product design-oriented

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[8] To further analyse Bang & Olufsen approach to design, see D.Ravasi, Bang & Olufsen A/S (A), Area Strategia, SDA Bocconi, 2000.

[9] G.Lojacono, D.Ravasi, A Design-Based Model of Strategic Change, SDA Bocconi – Bocconi University School of Management, Research Division, Working Paper Series, May, 2001.

[10] To further analyse Swatch case study, see L.Carcano, “In principio fu la tecnologia”, Area Strategia, SDA Bocconi, 2001.

[11] V.Coda, L’orientamento strategico dell’impresa, Utet, 1988.

companies understood that it is necessary not to neglect the other design areas to avoid banalizing what they offer.
Their capability to protect their competitive positioning in the emerging competitive arenas and to develop new skills becomes the focus of attention.
This chapter makes use of the results of a survey carried out in the jewellery industry in Italy and Spain to expand on some strategy-related issues of those *design-based* companies manufacturing highly symbolic products in the emerging social and economic scenarios. It identifies some conditions that may help them to develop and some potential weaknesses they should work on.[12] The jewellery industry is particularly suitable for analysis because a lot of companies belong to it that always linked design to the product shape and overlooked other design areas. This chapter illustrates the concept of design management applied to the jewellery industry by analysing two cases of symbol intensive firms adopting a "Corporate Design Management" approach: DoDo Pomellato and Tous, which actually built their competitive advantage not only by designing a product – in this case a pendant – but also by managing design in a more global sense.
In this connection, some questions are to be answered: what are the specific features of those companies? What factors affect them? What variables did they work on to support their market positioning?
The study is divided into four sections. The following section describes the main characteristics of the jewellery industry and points out the critical aspects relating to design management. The third section includes a critical comparison between the two cases based on the models that were previously described. Information about the industry structure in the two Countries will be used throughout the chapter. The last section contains some observations on management.
It is worth highlighting straightaway that there exist some analogies and differences as regards the Italian and Spanish production structure. Just a few large manufacturers from both countries are present on the international market. Most companies are still craftsmen's firms focussing on the domestic market. Only a few brands are internationally renowned, although the percentage of exports with respect to the overall turnover is quite relevant in Italy– more than 70%. Moreover, as far as internationalisation strategies are concerned, companies are clearly oriented to merely export their products and large brokerage firms or importers manage their trade.
There are however some very famous brands on a national level in those countries, such as Damiani, Buccellati, Pasquale Bruni in Italy and Carrera Y Carrera, Ramon in Spain,

[12] Those companies can be defined as "Symbol intensive" businesses, that is to say firms manufacturing goods that consumers value for their aesthetic and symbolic meaning, and interpret when they use them. Corporate identity in symbol intensive firms is strongly related to the company visual identity, and renown is the outcome of an ongoing process of identity development and communication. Symbol intensive firms go beyond standard industry definitions and they are not defined by the characteristics of their business activities, but rather by the essence of their products, valued for their meaning or aesthetics rather than for their usefulness in solving practical problems. Symbol intensive firms can exist both in symbol intensive and in more traditional and mature industries. In the latter case a company may decide to compete focussing on symbol-intensive attributes (shapes, trendiness, image…) in order to differentiate its products from its competitors' on a more emotional dimension. In this sense, the recent trends in industries such as those of cars, soft drinks, even computer and cellular phones can be quoted, where the increasing success cannot be explained but by mentioning higher quality or excellent manufacturing. Cf G.Lojacono, S.Saviolo, 1999.

to name but a few. Yet, unbranded companies represent the predominant part of the system both in Italy (in the Valenza district) and in Spain (in Galicia).
A difference existing between the two countries pertains to the image their production system has abroad. In Italy, it is characterised by exclusive and aesthetically excellent products, while Spain entered international markets with good quality and low cost products (high volumes of low added value products). Italian wholesalers prefer buying low-range articles from Spanish manufacturers because their production costs are lower compared to those of Italian manufacturers of die-formed printed products, who are located in the Arezzo district.

2. DESIGN MANAGEMENT IN THE JEWELLERY INDUSTRY

Companies in the jewellery industry constantly market a large number of products showing new styles and combinations of different materials (e.g. gold and gems). Their capability to propose new products, which is based on the integration of creativity and handicraft skills, enabled them to achieve an important position in a national and international scenario. Some changes in the environment, demand becoming sophisticated and increasing competition, require that businesses concentrate on product development, design being but one phase of the whole process, on distribution and communication. On this basis, this section aims to provide theories and evidence that make it possible to better understand the specific features of jewellery companies with respect to product creation, distribution and communication.

In the jewellery industry as well as in many others, product innovation starts being taken for granted and it is necessary to work on the overall supply system, in particular on the commercial format. The basic tenet is that if a company controls the whole process after production, it succeeds in having consumers perceive all elements and values associated to the product it proposes.

2.1 PRODUCT DEVELOPMENT PROCESS: GOALS, ACTIVITIES AND KEY FIGURES

Each jewellery company has a more or less wide product portfolio, which may include many types of pieces of jewellery: earrings, rings, chokers, bracelets, and pendants. Those articles may be made to order (one-off articles) or in small or large quantities. The product portfolio is also divided into lines including a single type of object that is made in different shapes and material, it can also be made using different combinations of materials.
Companies could keep the same product portfolio for a long period of time in the past, maybe slightly changing something. They currently try to constantly market new models to encourage consumers to always purchase more updated products.
The shortened product lifecycle, due to the growing competition, the progressively segmented and sophisticated demand, the influence that the fashion system exerts also on jewellery and the technological progress, enhances the importance of the endeavour companies make to implement product development processes and, in particular, design

activities. Product portfolios must often be updated quickly to effectively pre-empt competitors moves and meet market demand in a timely manner.

Jewellery companies tend to update their collections usually by proposing just a few new products and some reviews and/or expansions of existing ones, once, maximum twice a year. New collections are presented during trade shows, which represent the ideal “showcase” for new products and, at the same time, impose some time limits on design.

Based on the type of strategy that is adopted, some typical roles of the industry emerge:

- *The innovator* who introduces a new element in the competitive system, taking on costs and risks that the “first move” brings about. For instance, the new product may not be immediately successful on the market because it is too much ahead of times or it was marketed when it was not fully developed, or it lacked any communication or distribution strategy able to convey the innovative contents of the idea. In Italy, Zen & Key by Silmar, Pomellato, Pasquale Bruni can be used as examples;
- *The follower* who favours the spread of innovations – by further developing them – and encourages innovators in their research. All Valenza and Vicenza located small firms can be included in this category;
- *The imitator* who usurps others’ values, by slavishly copying all new products and offering them at lower prices, for cost benefits (relating to production and raw materials) and lack of investments in R&D. A growing number of companies, especially in the Far East, prove to be particularly clever in combining aggressive prices and capability to reproduce successful Italian products in short time and with excellent results. Marketing those products at prices that are lower compared to the original products does nothing but increasing confusion on the market. [13]

Based on how innovative the idea is, radical innovations (the company proposes a totally new product) and incremental innovations (the company does not offer a completely new product, it modifies existing products, for instance, in terms of colours and types of stone) can be distinguished.

In fact, only few marketed products are really innovative because they often originate from strategies aiming at aligning demand to the strategies of innovating companies.

Product innovation basically develops following some guidelines:

- *Developing new concepts* relating to the evolution of life styles and cultural models. Bracelets to be worn around ankles or hair accessories made of precious material can be mentioned as examples. A recent one is “Fiammifero” (match) by Pasquale Bruni, a brooch representing an object whose symbol can be recognised worldwide.
- *Developing new values* consumers can identify themselves with, such as nature or new topics (e.g. revival of the 70s proposed by Nouvelle Vague),
- *Using innovative material* for the sector, thus broadening the semantic power of products, for instance, cobblestone, leather and ebony.
- Adopting new production processes, such as electroforming for industrial production.

[13] Lower prices can be applied because of lower research and design costs and, often, lower quality of material and finishes.

A detailed analysis of the product creation and development process follows. It includes different tasks requiring the integration of creativity and management and the support of inter-functional skills. The main activities are illustrated below:

- *Analysing and selecting a concept* (analysis of company situation and social cultural context). It consists of an initial assessment of the company strengths and weaknesses, of the environment-related opportunities and threats, with particular attention to the impact of the product portfolio on the overall competitive strategy.
- *Briefing.* A short description of the job is drawn up in this phase, it includes the following elements: company history, product portfolio, project goals (e.g. reaching new consumer segments, making the most of available resources, completing product portfolio), the target market, the product typology (e.g. rings, bracelets, necklaces, earrings), the basic features of the piece of jewellery (e.g. material, price range), expected outcomes, etc.… [14]

  This document is fundamental if people from outside the company work on the project and need a “work programme” and clear guidelines. When drawing up the brief, it is necessary not to write excessively general or detailed plans; carry out an incorrect analysis of the competitor’s scene; underestimate the necessary investment; turn the brief into a “book of dreams”, by setting unattainable goals.
- *Formulating and selecting creative projects* (spontaneous or briefed). Companies and designers take their inspiration from the most varied sources, from demand (points of sales and end customers), to opportunities that technology offers, to designers’ creativity. The selection phase, on the opposite, requires a clear-sighted vision of those people who assess the project. The first rule to take into account is the consistency between the projects and the brief, although experience shows that new products do not always originate from company plans. In particular, in the case of leading companies, designers often spontaneously send their projects hoping that they could be selected.
- *Developing the project* and the prototype. The product acquires some substance only when the first prototype is made, which makes it possible to actually decide whether it is feasible in productive and economic terms. At this stage, a fusion takes place between the culture coming from outside the company, represented by the designer, and the company know-how, developed by two key figures: the creative designer and the technical expert. Sometimes the sales network (key agents and retailers) may also assess the prototype.

Numerous figures and skills may fill a significant role in developing the product. The two figures that are mostly involved in creating the piece of jewellery are analysed in detail below, the designer and the prototype maker.[15]

With reference to the phases previously described, the designer invents the project, while the prototype maker takes care of some activities relating to the project development.

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[14] The goals that encourage companies to innovate their product portfolio include: reaching new consumer segments, strengthening or modifying their strategic positioning, making the most of available resources, completing their supply in terms of functions, styles or price ranges, etc.

[15] Obviously other figures may take part to the jewel design, such as marketing or sales directors, production managers or some key-clients.

The designer

A designer operating in the jewellery industry cannot be considered like an industrial designer as described in specialist literature, that is to say as somebody having a technical background, able to set material, structure and mechanism, shape, surface finishing of products that are mass produced through industrial processes. On the other hand, those who design jewellery – and can however be called designers – cannot be compared to artists, meaning those who produce one-off items, sometimes making works that are an end in themselves.[16]

The jewellery designer usually works and formulates the product development process, focussing on formal aspects based on his or her personal style. [17] S/he normally makes a handmade sketch of the initial idea on a piece of paper, and this offers a first view of the finished object in terms of shape, volume and material. At this stage, the work of the prototype maker becomes indispensable to control the "technical" aspects of the development process. S/he usually starts his/her work in that phase of the prototype making that, according to the most traditional methods, requires that a model is made of metal or wax and that the necessary equipment is arranged to produce copies.[18]

Although they are two distinct figures,[19] since they have specific roles, the designer's and prototype maker's work influence each other, thus leading to a final result that may be considerably different from the initial idea. In particular, it is likely that the prototype maker's work, although he follows the designer's precise instructions, suggests to change the form or to adopt particular methods or finishes. Finally, designer and prototype maker can also be the same person.

Design is developed inside most of both Spanish and Italian companies and usually the entrepreneur or a company creative team works on new ideas. In this latter case, Spanish companies prove to be more reluctant to accept foreign designers and prefer working with national professionals. Company design teams are more frequently used in Italy, this is due to the size of the domestic market and to the minimum production volumes that may make setting up research and design departments cost effective.

The internal organization of design activities in the different types of company will be thoroughly analysed. For instance, in high jewellery, where one-off items or small quantities of products are produced, an "illustration" draft is drawn up within the company, based on the buyer's needs or on some ideas to be developed. It is the case of

[16] B. Munari (1971) clearly distinguished industrial designer and artist. In particular, he compares the artist and the designer based on a number of elements, such as society, personal style, imagination and creativity, object symbolic contents.

[17] Experience however shows that the designer tries to propose an idea that is not only particularly original but also feasible from an economic standpoint: production costs must be covered by a price that the end consumer may consider as fair, based on the processing quality, design and used materials. Functional features cannot be overlooked as well: earrings, for instance, must have a shape and weight appropriate to enable people to wear them.

[18] A lot of companies now use the laser prototype making technique, which demands high investments in equipment and is therefore outsourced.

[19] L. Lenti and D.Liscia Bemporad (1996) however point out that these two roles coexisted in the craftsmen working in the Valenza –located workshops until the 60s – the craftsman could make a model thanks to his creative and manual skills, he was able to turn a gold or silver plate into a precious object showing his personal style.

Gianmaria Buccellati. In jewellers' ateliers, artisans with a strong artistic personality create the new idea; they directly work on the piece of jewellery, by hand, with no need of any preliminary sketch.[20]

Small-sized companies do not have any design department, and no specific corporate function is dedicated to design. The entrepreneur invents and designs new jewels, aided by a young designer working in his/her company, who both defines the style of the products and chooses the raw materials to be used. Large companies have a creative department that, by means of teamwork, manages the development and design of new ideas. The team is coordinated by a "creative director" who is responsible for making the design processes meet the company requirements (in terms of economic, productive and commercial feasibility) and making sure that the company style is respected. The creative director, as the *design manager* does in other industries, provides his designers with the input for creating the new collections and suggests how to modify the sketches to take account of the technical and production constraints.[21]

The designer or the creative director also welcomes and develops ideas proposed by people who are not formally designers (so called "*silent designers*"), provided that those ideas are consistent with the corporate policy in terms of style and processing techniques.[22]

Experience also shows that the jewellery designer does not show any general feature because this figure can be associated to several profiles: Pasquale Bruni, for instance, is a "multi-faceted" designer, very innovative for concept and style.

Jewellery was traditionally designed only within the company, usually by a particularly talented member of the family or by a technical expert with a long experience. It was always somebody with no specific background. Entrepreneurs still design their products, this being a strategic task, but a new trend is growing to use qualified designers - the << jewellery designers>>.

Focussing on the outsourcing of creative tasks, the reasons leading a company to use an *external designer* can be summarised as follows:

- Avoiding investing in technologies to support design;
- Obtaining design and model making skills rapidly;
- Being able to present always new collections, although in line with the company style;
- Having the chance not to work only with a designer, but to choose every time the suitable one for a specific project.

[20] The "illustration" draft, be it a sketch or a coloured design, does not contain any technical information, but just the formal characteristics, colours and materials.

[21] Suggestions to designers concern the type of product, price range, target market, style to be respected, raw materials to be used (gold and gems).

[22] It is advisable to mention also the case when the client suggests the idea to make the piece of jewellery. This type of production "to specification" characterises the work of artisanal workshops and some jewellers' shops.

When a company uses designers from outside, drawing up the brief becomes even more crucial.[23] The work of external designers can end as they sell the projects to the company that ordered them or it can touch all the design phases, from the draft to the processing of the graphic layout and digital photographs, to the making of a prototype. It all depends on the skills of both the designer and the company and on possible capacity-related constraints existing in the company.

In short, different organization models and working methods can be identified relating to the design and development activities. Choosing a *make or buy* method with regards to the product creation depends on the company characteristics and needs and it brings different benefits and drawbacks (picture 2)

PICTURE 2 – MODELS TO MANAGE THE CREATION PROCESS: PLUSES AND MINUSES

	PLUSES	**MINUSES**
INTERNAL DESIGNERS	- no royalties - accessible and easily coordinated with other corporate functions - total control over the process - they know the company in depth - a single designing style is kept over time	- no creativity/new ideas - contact with outside evolution is lost
EXTERNAL DESIGNERS	- new inspiration - access to specialists' experience - reduced internal workload - renown is strengthened if famous designers are used - risk sharing (royalty agreement)	- lack of understanding of company specific features - problems of availability - problems of coordination - problem to mass produce a design that was developed outside the company - problems of credibility if design is too different from the company language - spreading of product imitations

Source: Von Stamm, 1998

In the case a company uses an internal designer, s/he can have access to all information relating to the company life and this is undoubtedly an advantage. Creative designers and other employees can have a constant dialogue, exchange ideas and share a common language and product culture. An external designer could obtain the same advantage provided that s/he would spend a considerable part of his/her time in the company, always remaining an independent professional.
The benefits deriving from outsourcing can be mainly referred to the new ideas the professional brings into the company, which originate from his being in contact with very different companies, industries and social milieus. The production system bestows the designer with the role of "external promoter of expressive research"; s/he is expected to pass on her/his perception of social evolution and updated information about innovations achieved also in other industries to the company.[24] A further advantage of outsourcing consists in having state-of-the-art design skills and techniques

[23] Reference is made to entrusting independent designers or design firms from outside the company with the invention of new products.
[24] Reference is A.Branzi, 1999, op.cit.

available (such as CAD/CAM design systems), so that the company can curb its fixed costs and, consequently, its structure rigidity.
Spreading of copies is one of the main drawbacks of using external designers: they may decide to sell their project to several companies in the same industry, slightly modifying the one they had previously made for another company. Buying companies try to take some precautions by having the designer sign a contract where s/he declares and guarantees that her/his idea is unique and exclusive.

Some mixed solutions can be found in jewellery: designers working in the company integrate their work with external designers. A company may decide to use external designers only for some product lines and to design the others on its own. This is the case of Damiani, that set up its research lab some years ago, where 8 full time designers and two freelancers work. However, when famous *designer's brands* decide to commission the design of a new product to third parties – who often do not belong to the jewellery industry- they try to keep consistent with their stylistic identity by setting up an internal team of designers that can become a valuable reference point for the external designers.

The prototype maker

The transition from design to prototype making takes place when the sketched project becomes a prototype. The main figure in this working phase is the prototype maker who starts from the design and creates the prototype that will be used to make the mould, identifies the elements of the piece of jewellery (e.g. the mount, the bezels, the joints, fastenings and links), defines the working phases, chooses the most suitable production techniques and supervises the work of the artisans who produce the individual parts of the jewel or carry out some specific working phases.[25] Prototype makers are normally specialised in making some products (e.g. bracelets) or in processing some particular material (e.g. platinum).
The prototype maker sometimes directly produces the piece of jewellery without previously making any prototype because of her/his technical skills and craft.
Prototype making, just like design, can be carried out within the company or outside it. As experience shows, there seems to be a correlation between the company size and the prototype making inside the company (which cannot be identified in the case of design), it is highly likely that a large company has its own prototype makers. In this case, the prototype maker belongs to the creative team - if any – or works in harness with the designer.

[25] From a technical viewpoint, once the prototype is made, it is divided in the parts it is made of to produce a mould. The individual section of the jewel is covered with rubber and vulcanised: due to a chemical and physical treatment, heat and sulphur turn rubber into an elastic material that takes the shape of the object it contains. At this stage, the metal model it taken off of the mould and wax melt at high temperature is poured into it. Once it has got cold, it exactly reproduces the metal prototype. There exist however different methods to make prototypes, based on the production technique that was chosen to mass-produce the jewels. This choice is mainly based on the number of items to be produced. If the number is very small, it is more cost-effective to opt for a type of production requiring more labour; a large number needs more mechanized processing that makes it possible to produce a lot of items in a short time. There exist also some very expensive techniques, such as die forming, that can be used only when large volumes are produced.

Small-sized companies, on the opposite, use external prototype makers (or independent design firms), and choose every time the one they consider as being “the best ones” to develop a particular piece of jewellery. Independent prototype makers normally do not work exclusively for one company, but rather for several ones at the same time. The individual company therefore does not use one single prototype maker, but more of them simultaneously because, as already stated, those professionals are specialised in some processing techniques or types of product. Some companies in the industry, before starting business relations, test the prototype makers by asking them to make very complex models of jewel that they have never been able to produce on their own.

2.2 IMPORTANCE OF DISTRIBUTION IN THE JEWELLERY INDUSTRY

The physical product features are passed on retailers and consumers by means of communication and sales. In this connection, critical elements are product display, setting, matching with the other objects and structural elements that can be found in the place where the products are purchased (e.g. lighting, arrangement of counters and checkout counters, etc.).

Perception may be affected by incidental factors connected to consumers (e.g. short time to purchase) and to the point of sale (e.g. crowded store, sales clerks’ attitude).

When purchasing a precious object, opposite to other products, aesthetic requirements – meaning subjective assessment based on taste and also occasion of usage – become absolutely more important than functional, technical and physical ones, such as price (at least for jewels), size, delivery time and modes.
The high symbolic and emotional value of purchasing a piece of jewellery stresses how important product distribution is, which is dealt with in this section. Retailers’ role is important also because these products have a high unit value, and customers are not able to assess the quality of their design and material (in particular of precious stones). Consumers’ incertitude generates anxiety and favours developing trusting relationship between customer and shopkeeper.

In general, a precious object can reach the end consumer by a short or a long channel. The long channel is characterised by several intermediaries (distributors, dealers, wholesalers and collectors); the short channel, on the opposite, is characterised by few intermediaries, even direct relation between production and retail outlets.

With reference to the type of outlet the manufacturer may choose, it is possible to distinguish between direct distribution – own brand outlets or franchising networks – and indirect distribution – through independent stores. When a company opts for direct distribution in its own brand outlets, it must also provide for store and visual design as well as sales clerks training.
The *short channel* is utilized by companies that can make substantial investments to set up a sales network. The short channel usually includes own brand or *franchising* outlets, at least at the end of its evolutionary path. Direct distribution, which means using own brand outlets or stores run based on tying contracts, can be chosen by companies offering:

- *Wide and thorough product portfolios* (possibly including products not strictly connected to the jewellery world) and/or high brand renown (e.g. Bulgari, Cartier, Damiani, Pomellato);
- *Niche products*, destined to a client target ready to spend a lot of money to purchase a unique and very high quality product in terms of raw material used and/or processes adopted (e.g. Gianmaria Buccellati).

The *long channel* predominates in the Italian and Spanish jewellery industry due to the following reasons:

- *The numerous manufacturers* cannot directly go downstream – because of their product portfolio width, financial resources, company size and skills. The highly fragmented distribution system also favours using specialised intermediaries;
- *Intermediaries* have become the financial backers of production over time, by conceding deferments of payment or buying raw material. Wholesalers, in particular, enable companies to keep limited stocks thus avoiding expensive fixed assets.

Using the long channel, however, brings about some drawbacks:

- *Poor control over the final market,* manufacturers cannot obtain reliable and timely information about consumers and competitors' strategies (e.g. pricing policies, new collections). This information is essential for innovating products and planning suitable pricing and communication strategies;
- *No control over promotion policies and brand image,* because the retailer puts the product on the market with his sign and he autonomously decides how to present and sell jewellery products.

Independent retailers represent in both countries the predominating element of the distribution system and their relationship with customers is mainly based on confidence. The "family jeweller" 's competitive strategy is founded on the reassurance during purchase and on the interpersonal relations that allowed him or her to gain considerable renown in the area s/he serves. The sign of a lot of outlets in Italy and Spain has become a real brand that is as important as the famous production brands.

It is however necessary to distinguish three groups among the most important independent outlets: stores with long tradition, whose renown originated from investments and efforts that have been made over time; stores set up more recently and run by highly aggressive and innovative managers; "shopkeepers" who managed to survive thanks to favourable market conditions, poorly transparent operations and a family business management that made it possible to curb operating costs. The first two groups of traders aim to thoroughly understand the product and succeed in passing this knowledge on to their end customers, thus motivating them to purchase it and justifying its price. This is the reason why those traders are very demanding with manufacturers and agents. The goal of those jewellers is to promote their brand, pushing manufacturer's brand to the background, also due to the reduced margins that the latter allows for.

In terms of services, no particular innovations can be observed, although they are offered based on different quality standards. Retailers maintain they build their competitiveness on their exclusive assortment, sign prestige, capability to customize products on customers' demand, fast execution, salespeople's capability in receiving and assist customers.[26]

Some of those services ("basic" services), such as reception, are now being taken for granted; some others, such as assortment and salespeople's competence are critical to satisfy customers, although they may prove very expensive to develop and maintain over time.

The jewellery distribution is witnessing a gradual growth of the scope of strategic challenges (e.g. generation turnover, reducing and changing consumption, shortening distribution channels, increasing number of brands) that may undermine its long-term development if no practical answers are found.[27] The evolution of the distribution scene must be framed and analysed in this context. Based on this preliminary assumption, the following observations refer to the change of roles in the distribution scenario and to the evolution of distribution models.

In particular, product selling and displaying modes are being modified since they prove not to fit the end customers' buying and using attitudes. The ongoing experiments aim at reducing consumers' anxiety as they purchase the product and eliminating all hurdles that today characterise most of traditional outlets.

The major changes made to the distribution system include the evolution of the sector typical roles, which reduced the relevance of the collector and increased the tasks wholesalers carry out. These latter seem now to be a point of reference for the other figures of the sector, like famous brands, since they set up distribution networks or provide retailers with private label assortments that are original (also in terms of packaging and displaying modes) and can be highly customized.

Evolution of the wholesaler's role

Wholesalers face a number of problems deriving from the drop in consumption, the changing buying behaviours and production attitudes (production being oriented to better control retailing and consumption). They can be guarantee their qualified presence in the long run if they will evolve in two ways:

1. as for retailers and manufacturers, wholesalers should tend to establish stable and trusting relationship with a limited number of interlocutors. This transition started when wholesalers began to offer additional services to retailers, such as repairing, payment on sale, innovation of the portfolio structure – including private label - display quality and upstream supply of information about the end market. They can also sign agreements with manufacturers so that wholesalers supply information about the market trends to manufacturers, while manufacturers make use of this information to develop technology and products, although wholesalers reserve the right to select the products they want to add to their portfolios.

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[26] This information was obtained by directly interviewing twenty shop-owners in different parts of Italy and experts of this industry, especially in Italy.

[27] As far as consumption is concerned, demand is increasingly oriented to lower unit value products or branded products that can reassure consumers about their quality, since customers cannot fully assess their contents. This trend negatively affects less competent retailers who are not willing to change.

2. a second option that was already implemented consists of wholesalers taking on production or retail distribution activities, sometimes starting up distribution chains. Upstream integration, resulting in the creation of *private labels*, is actually an alternative that is beyond wholesalers' competence, since it requires design and production skills. Downstream integration, on the opposite, appears to be easier to carry out, by starting up own brand outlets or franchising stores, because it is based on the capability to combine branded and unbranded products. In this case, wholesalers become distributors for qualified manufacturers who still lack the suitable trading means to address qualified retailers and end consumers.

In this connection, the evolution of the wholesaler's figure is more advanced in Italy than in Spain, where wholesalers are still unable to modify their role to react to the changing competitive arena. In Italy there are wholesalers like Faro who created their own collection (branded Lalla & Rossana) and two chains of distribution (Splendori and Vendoro)

Evolution of distribution channels

As happened in other industries, interesting signals can be spotted indicating that traditional retailing is evolving and new commercial formats are emerging. The spreading of outlets managed by large prestige brands is a very interesting trend.

Three main trends can be observed with reference to traditional outlets, they are based on:

1. *different forms of coordination* between production and distribution, aiming at setting up partnerships that may benefit all parts taking part to them in terms of exchange of information, professional competence and support to displaying and selling modes;
2. the store arrangement based on *product typology*, heading for an increased specialisation;
3. the choice to *cooperate with some renowned brands*, to the detriment of unbranded products.[28]

In general, retailers who carefully observe the ongoing evolution of consumers' behaviours and taste, try to adopt more modern management models and to propose more "appealing" solutions for exhibition and shop windows.

Besides traditional retailing, other innovative formulas are increasing, they are characterised by wide and complete portfolios, larger exhibition areas, use of visual sales and lack of architectural features barring access to customers. [29] Most of the new formats address a young target, who wants a highly fashionable and undemanding product (also in terms of price).

[28] Mixing *unbranded* and *branded* products has become an increasingly important choice when developing product portfolios. This decision affects the building of traffic in the point of sale, investments in products and display, warehouse stocks and mark-ups the trade can apply (brands usually have a fixed price that limits retailers' mark-up).

[29] Cf. E.Sabbadin, "Il posizionamento delle forme distributive al dettaglio", in *Il settore orafo: strategie di prodotto, di marketing e di area*, by Cattaneo C., Sabbadin E., Virtuani R., Giuffré, 1993.

The new sales formulas can be ranked by using two parameters: management model and localisation.

- ***Management model.*** Based on this parameter, a distinction can be made between outlets belonging to franchising networks (e.g. Bluepoint) or to own brand chains (e.g. Cielo Aperto by Worldgem).
- ***Localisation.*** In this case *stand alone* (meaning "on the road") outlets can be distinguished between stores located in shopping centres and in large sales areas. The areas in shopping centres (stand alone or belonging to chains) typically adopt visual sales techniques (that is to say that all products are on display) and customers have free access to them. Those outlets have a medium-low market position. Their products have reasonable prices to meet the needs and purchasing behaviours of the shopping centre target. Large sales areas, on the opposite, have corners mainly dedicated to jewellery. Those specialised jewellery areas are often characterised by a reference brand, for instance Pomellato (in the upper market), and Worldgem (for Miluna and Kiara brands). It is important to rank the dedicated areas that can be found in:
    - *Qualified department stores* such as Rinascente or Coin in Italy and El Corte Ingles in Spain, which are characterised by elegant environment, qualified staff assistance, branded products and high quality, quality at medium-high cost.
    - *Hypermarkets* (e.g. Carrefour) and *medium-low range department stores* (e.g. Upim and Mercatone Uno), addressing a mass market and offering basic models, at reasonable price, in a poorly sophisticated environment.

As far as famous brands managing upper market distribution are concerned, prestige companies such as Cartier, Bulgari and Tiffany, together with famous brands such as Pomellato and Casa Damiani decided to totally or partially use a one-brand distribution model a long ago. Specifically, those companies set up outlets (own brand or franchising) replacing or supporting distribution through traditional retailers (e.g. Bulgari, Casa Damiani, Cartier, Tiffany). In the first case, the presence of direct outlets produces positive effects on the image of the company and all the points of sale that it serves.[30]
The reasons leading to choose this type of distribution are mainly related to controlling selling modes and management logics, enhancing the corporate image and obtaining precise and timely information about taste and market trends evolution.
Some of those companies started from jewellery to initiate a process of diversification in non-correlated fields, from bags to perfumes to presents, that led to create real "umbrella brands". The brand extension benefits from synergies existing on the distribution level, that is to say from those direct outlets selling all product categories marketed with the same brand.

[30] In the case of Damiani, for instance, distribution includes some flagship stores (e.g. in Via Condotti, Rome and in Via Montenapoleone, Milan) and about 2.500 independent outlets. Pomellato distribution network is definitively more selective with twenty one-brand outlets, five in Milan, and 200 authorised dealers worldwide. The company shops in shop should also be taken into account, that are located in Goodman, New York and Saks Fifth Avenue, Los Angeles.

Direct management usually requires that product display, services and assortments are the same in all points of sale so that the brand is presented homogeneously and consistently on an international level. Some elements may be exceptionally adjusted to local needs and consumers' purchasing habits and to particular occasions (e.g. opening of a new outlet, promotional sales, special occasion).
Those distribution strategies cannot be implemented by all manufacturers. The basic requirements to start up direct outlets are a strong brand, favouring access to the market, and very wide product range, justifying a one-brand store and allowing the business undertaking to survive.

2.3 VISUAL IDENTITY AND COMMUNICATION

Design communication, in a broad sense, shows some specific features connected to the type of product. As happens in all highly symbolic sectors, it is necessary to succeed in conveying to the reference *audience* the intangible values relating to a reference world and a life style.
Communication semantic aspects become a priority in this case since using the wrong language or having an insufficient knowledge of the sign system that is predominant in the reference context prevents the message from being transmitted and causes product communication to fail.
In particular, communication must be in line with the sector sign system that enables the recipients to understand the message and identify themselves with it, and the company to gain credit among the trade and the end consumers.

If the signs the product contains are not self-explanatory, the company must necessarily use communication to create a context that can dignify the product and segment the reference target. In case the product is a sign per se, it becomes the focus of the communication and the company priority is to transfer its expressive contents.
The product communication message should exploit the capability of jewels to express emotions and feelings. A famous example is "Medaglietta dell'amore" or love medal, by UnoAErre that sold 18 million items – making it the jewel of the century – which had the famous quotation of E. Rostand engraved on it, the same that the Duke of Windsor wanted engraved on a Cartier pendant he gave to his beloved Wallis "*more than yesterday, less than tomorrow*", or the De Beers slogan "A diamond is forever", which is so strongly associated to diamond jewellery.
The jewellery industry is still at the onset of a design communication strategy based on a global approach, that is to say not only relating to advertising. It is important for companies to manage all signs the product expresses in the different communication channels and tools: points of sale, events, personalities, so that they succeed in conveying the company philosophy and cultural values to those who sell their products and those who purchase them.
It is important that the language used – the system of signs – for all company communications, both inside and outside it, is the same so that the product image gets enhanced and the investments made are not wasted.
Another observation concerns the relation between communication and reference target. Communication means are not yet used in imaginative ways and the poor knowledge of

end consumers leads to make use of target segmenting criteria that are quite comprehensive, ranging from the classic traditional customer – still linked to a concept of jewel that lasts forever – to the young one who tends to buy product by himself and often considers a piece of jewellery as a fashion accessory. In many cases, therefore, companies privilege creativity as an end in itself for their communication, without clearly and strategically defining their product expressive codes. They do not create a corporate identity, they change advertising campaign every season or create atmospheres that are totally different from the company history and experience, and from the type of product as well.

In this general scenario, the famous prestige brands, such as Cartier and Bulgari, are examples of effective monitoring of the whole communication process: every element is the outcome of a thorough and planned work. The positioning and the reference values of each new product are defined when it is still on the drawing table.

Medium-small-sized jewellery-focussed companies are oriented to enhance their product expressive contents, if it is characterised by clearly identifying signs, or to create a reference context where their jewel can be legitimised, by imitating the famous brands and yet not having the necessary critical profundity that would make them emerge. Companies like Pasquale Bruni (use of coloured stones), Pianegonda (silver) and Monile (platinum) are examples of companies that focussed their communication on their product distinctive elements.

The jewellery companies always dialogued with the trade, which is considered to be the vehicle to transmit the product values to the end consumer. From a global communication standpoint, it is necessary to distinguish between information about the product technical features – which must be diffused through the trade –and communication of the sign system that addresses the consumer as final recipient and that must be diffused through advertising but also through the visual merchandising, catalogues, newsletter and so on and so forth.

Companies in the jewellery industry have to constantly cope with limited communication budgets and they therefore need to find a balance between communication needs and available resources. Pasquale Bruni is an interesting example: he changed the communication models of this industry by stressing the artisanal nature of processing techniques by showing the image of the entrepreneur’s hands displaying the jewels that they created. Communication then evolved towards a more pictorial and expressive image of an artistic and creative world. The hand is real, “living” with the sign and trace of time: the hand of an artist who creates jewellery.

Investments in advertising represent the most important item of the communication budget for jewellery companies, while they totally neglect the other channels. As a matter of fact, Public Relations are considered to be mainly contacts with the press during the most important trade shows, and events are intended especially for the trade, no one addresses the general public. Visual communication is also overlooked in outlets (display stands, packaging, type of shop-fitting), as for the careful selection of product portfolio, the customer care, the competence of the salesclerks. The use of Internet is also poorly exploited. The case is different for jewellery companies that are investing to create a brand and are therefore particularly committed in making the most of every aspect of communication.

Communication strategies in the jewellery industry are not very effective also because both skills and a global project vision are missing. All the operations that are implemented are impromptu and not connected. Most jewellery companies rely on advertising agencies for their communication, which sometimes cooperate with public relations agencies and the company press office. The entrepreneur often works on that because no dedicated function exists. The large international advertising agencies that companies often hire, communicate the idea of a piece of jewellery as a basic commodity, thus flattening all companies communication downwards.

3. DESIGN MANAGEMENT IN DODO AND TOUS: ANALOGIES AND DIFFERENCES

The jewellery industry is particularly suitable to analyse design management models because companies operating in it traditionally linked the design concept to the jewel appearance, style and shape, privileging product innovation but overlooking the other design areas. Processing techniques in this sector are very ancient – investment casting was used as early as in the Etruscan era – and mainly made by hand. The artisanal element has always been a strength and product innovation is rarely radical due to the constraints imposed by the precious raw materials used and the results that can be obtained by using alloys.
Companies that were able to enhance their supply system, by using corporate design as their major differentiating and brand-creating element, succeeded in reaching predominant positions on the national and international scene.

Tous and DoDo by Pomellato represent two meaningful examples; these two companies developed their competitive edge – above all in their respective domestic markets –by managing design through the rich supply system they had created. They both turned a low added-value product – a pendant – into a symbol expressing a way of being and creating a world of reference.

DoDo by Pomellato is named after a funny animal, that became extinct because it could not fly and used to live on Mauritius Island and, quoting the division manager, "DoDo mission is to create a reference world where the product is a small jewel just by accident". The company goal actually is to touch emotions, the most childish part of each person, the cheerful communication by concentrating on the symbolic value. DoDo aims to become an object suitable for any occasion, with no link with fashion trends, but rather the way to express how one is and feels.
Moreover, one of the major inspiration sources for the DoDo world is linked to environment protection, for this reason every object is characterised by a strong environment-friendly component; for instance, all materials used are natural, rope and rice paper for the packaging.

The Tous bear was created in 1985 – taking inspiration from an Italian manufacturer's collection- and soon became the symbol of the company itself and it is still its best selling article in every version, with pendants and brilliants, in gold and silver.

Both companies traditionally felt the need to differentiate their supply to meet their customers' requirements. Both Tous and Pomellato started with distribution and lately integrated with production.

Pomellato historical roots date back to 1948, when Pino Rabolini's father used to wholesale Signori-Bondolini products and had his own company. When his son started working for the company, he also started dreaming of introducing the concept of prêt-a-porter in jewellery. In 1967 the first collection was presented having not only the State mark stamped on it, but also the trademark of the future company, the head of a thoroughbred horse, which has since then represented the distinctive mark of any Pomellato product. Rabolini went on proposing its collections and Pomellato ones together, yet the latter strong characterisation led to starting up a separate company in 1971: the birth date of Pomellato company.

The Milan-based company appeared strongly innovative compared to the tradition of the sector since the very beginning. It covered a market share between Italian jewellers' handicraft and modern industrial production. The company considerably grew throughout the 90s thanks to a new line of products it had launched: in 1994 the first DoDo collection was presented, and this was another break with the industry tradition. Pomellato was particularly clever in turning a quite common product – a low unit value pendant – into an object with its symbolic value, totally crossing occasions of use and reference target.

When Salvador Tous – the present owner's father – and Teresa Ponsa set up a small watch repairer's shop in Manresa in 1920, they certainly did not know they were starting a strong family tradition in that sector, which has now reach the third generation, and developed over time to become a well-known and important brand in Spain.
The breakthrough in the company history took place in the 70s when Salvador Tous and Rosa Oriol joined the company: two dynamic and determined people who start an ambitious project that will make design the company core business. Rosa's creativity soon leads to set up a workshop where she can realise her ideas: that is how Tous was born. It has always tried to imbue its product design with a life style. Constant care for the consumer, analysis of new trends combined with intuition, experience, creativity and sensitivity brought the company to propose jewellery with strong emotional contents to its public.

Because of their direct contact with the market and their knowledge of the end customers – their expectations and purchasing behaviours – Tous and Pomellato could develop and grow in a different way compared to traditional jewellery companies, and similarly to the important international players that eventually turned to the world of luxury, such as Cartier, Tiffany and Bulgari.

Both companies are family businesses: while the Tous family still plays an active role in running their company, Rabolini family decided to change the management structure in the late 90s, though remaining the majority stockholder. Managers were assigned with key positions and they pursue their founder's business idea: creating prêt-a-porter jewellery worldwide. The last phase of this structural and cultural changeover took place in 1999 when the new managing director, Francesco Minoli, was appointed. Pino Rabolini still fills a very important role in the company by orienting the major corporate decisions.

> *Founders Salvador Tous and Rosa Oriol work with daughters Marta, Laura, Alba and Rosa, together with more than 400 people, including employees, workers, and sales personnel. The company turnover amounts to 40 million euros, 15% deriving from foreign markets.*
>
> *"Behind the company success there is a family with an extraordinary passion for design, innovation in all its forms and quality of work".*[31]

> *Pomellato is now an international company, with nearly 200 employees and a turnover exceeding 51 million euros, 30% deriving from foreign markets. It is peculiar because it is a family business run using managerial methods. Rabolini family strengthened its presence in the company in early 2000, reaching 73% of capital share, which effectively suggests that they want to keep control of the company. The first generation turnover took place when Alessandro joined his father and founder Pino Rabolini.*
>
> *Pomellato decided to change its structure on January 2001: the two collections were made more independent by setting up two divisions – DoDo and Pomellato – that can autonomously plan distribution and communication, while design and production are still common activities.*

The different organization and management is also reflected in the way products are created and developed. As for Tous, Rosa Oriol is the designer, the entrepreneur, who is also responsible for coordinating all tasks connected to developing, distributing and communicating the product, that is to say the design manager. Rosa is a strong and charismatic woman, who preserved the stylistic identity of collections over time, but the risk for the future is that everything may excessively depend on her.

[31] Source: Tous press office material.

Pomellato has a creative committee made of the managing director, the creative manager, the three people responsible for developing the product (DoDo, Pomellato, watches), a purchasing manager and an image manager. Setting up a team of people responsible for product development and for image represents an innovation and a break with the habits of the industry.

> *Mrs Rosa Oriol personally carries out the creative activity by drawing the new collections. The company is planning to set up a team of designers and have the owner work as a coordinator. It is a complex process to carry on because it is difficult to find designers who can empathize with the corporate and product philosophy. As Mrs Oriol points out, "most of them show me a lot of interesting projects, which are not Tous products. Moreover, the external designer has often grand and new ideas that are not practical. S/he creates pieces of jewellery that are beautiful to look at, but that cannot be worn or mass produced".*
>
> *"A piece of jewellery evokes sensations, places, memories. It is an integrating part of our culture, stays with us every day. We entrust it with an emotional heritage that goes beyond its intrinsic value".[32] Pomellato adopts this philosophy and develops its products (DoDo, Pomellato, watches) based on a study that goes through cultural paths to get back to the original idea of an object and transforms it into a symbol.*
> *The creative committee fills a central role in the creative process: its main function is to follow up the product development from the very creating phase, thus making sure products are consistent with the story they tell and that they are in line with the style criteria and their positioning is coherent.*
> *The product managers formulate new proposals for collections based on the suggestions the creative committee gave them – referring to ongoing style trends. The creative committee then assesses the new proposals and makes the final decision about the ideas that will be developed.*
> *Craftsmen make prototypes following the approved design and using non-noble materials. In this phase industrialization process parameters, programme schedule, finish features, metal colour and types of stone are defined. The prototype is then tested and adapted to find the best solutions in terms of wearability, comfort and production quality. Any Pomellato piece of jewellery, be it Pomellato or DoDo, starts being produced only when this process has been completed.*

The different system of constraints that the two companies have to cope with, which also affects their design management model, is particular evident when analysing the different production technologies they have chosen.
Tous reached its position by skilfully and cleverly using electroforming, which makes it possible to produce hollow objects, thus using a lower quantity of precious metal. DoDo By Pomellato, on the opposite, is still produced using an artisanal technique, called

[32] Source: Pomellato press office and advertising brochure.

investment casting. The production choice requires a different minimum production lot, which in fact affects distribution and product portfolio strategies.

The great intuition Tous had was to exploit a technological innovation to create a new concept of "innovating and amusing" product, thus offering something different from its competitors. Using this production process makes it possible to obtain shapes and models that can be made exclusively by die forming, their quality may be lower but it would be anyway unconceivable to make them by casting. The higher initial investments are therefore offset by the possibility to produce high quality, weldless objects with a special polishing.

The two companies have also chosen to control the downstream process in a different manner, sharing the common goal to have consumers perceive the elements and values associated to the products they propose. They therefore made very different choices as far as retail design is concerned. Tous opted for a thorough presence all over Spain, consistently with higher production volumes, through a chain of franchising outlets and corners in "El Cortes Ingles" department stores. Pomellato has focussed on an exclusive distribution policy so far, also for DoDo line, through flagship stores and brand authorised dealers although the company plans to open DoDo corners in large department stores, in line with the different management logics required for lower value added product characterised by a stronger rotation with respect to Pomellato line.

Tous areas in Spain have become a meeting point for a growing number of people - from very young girls to modern women – who are not seduced only by bears, but also by poppies, flowers and other symbols. Tous is present on the domestic market with both a chain of franchising outlets and customized corners in El Cortes Ingles, an important department store that is thoroughly diffused all over the Spanish territory (including Madrid, Barcelona, Bilbao, Valencia, Las Palmas, Majorca.).
Based of the franchising system, Tous owns the goods and gives them to the outlet on a sale or return basis. The sale price is settled and the revenues are distributed on a daily basis considering the goods sold. Moreover, when a new collection is presented, a check on sales and stocks is carried out in every outlet, and consequently assortments may be transferred among the different outlets. This method represents a good solution for both parties because it enables Tous to constantly rotate its stock (its purpose it to rotate its stock four times a year) and it also frees the retailer from the financial burden deriving from stocks building up in case of unsold products and incorrect sales forecasts.
Direct distribution control requires that the company takes directly care of the product portfolio and display, salesclerks' training and packaging.

Pomellato, in line with its corporate philosophy, invested in setting up and developing a – direct and selected – distribution structure to better meet its customers' differentiated needs. There are currently twenty one-brand outlets and two hundred brand authorised dealers all over the world, and *some other prestigious solutions must be mentioned, such as the shop-in-shop, in N.Y. Bergdorf Goodman, in the fifth avenue, and Saks Fifth Avenue in Los Angeles.*[33]

One-brand outlets introduce consumers into the Pomellato world thus making it easier for the company to have a direct contact with the market, perceive how taste and trends change, communicate the corporate philosophy and present the product. One-brand outlets are designed and realised based on a precise visual retailing philosophy, consistent with the company positioning and style; the aim is to bring the jewel to life inside the point of sale, therefore the area is designed around the jewel, lines are essential and clean so that they enhance the object shape and colour, just like furniture - in mahogany – was conceived to better display it.

Authorised dealers are carefully selected after analysing the point of sale territory and requirements, together with the brands they represent. Pomellato has made a partnership with its distributors, both sharing the purpose to satisfy the end consumers. The Milan-based company guarantees to its retailers the offer of traffic builders – self-describing products – that can attract the client and it asks them in return to provide an adequate presentation and setting for those products. Pomellato image at the dealer's is carefully studied, the philosophy of display is flexible and can adapt to the different situations and the packaging also expresses the brand identity.

DoDo products are distributed in Italy through a network of Pomellato dealers and other channels that are new for the industry, like the points of sale in Rinascente or Fiorucci chains. The goal of this division marketing and distribution strategy is to broaden the channels and include department stores, shopping centres and other areas where people gather.

As for dealers, outlets are selected mainly based on the retailers' desire to convey DoDo world (not the jewel per se), opting for a relational type of sale. Dodo image is supported by corners showing a particular visual identity and salesclerks are trained to best manage their relationship with customers.

Management logics are different with dealers, based on a product characterised by a low unit value and high rotation. Those logics, like sales statistics (reckoned using codes and not number of items) or the relevance of the stock rotation speed (to efficiently manage it) can be easily identified in shopping centres, while they require major organization efforts in traditional distribution.

Both Tous and DoDo by Pomelllato are well-know companies on domestic markets but not so much on an international level. Their common goal is to consolidate their

[33] Five in Italy (Milan, Florence, Rome, Capri and Venice), nine in Europe (Paris; Cannes, Montecarlo, Madrid, Barcelona, Lisbon, Antwerp and Moscow) and six in the Far East (Taipei, Osaka, Tokyo, Singapore, Dubai).

international position and become known worldwide, which is something nearly unavoidable if they want to fulfil their dream to "create an international luxury brand" (Tous) and the "prêt-a-porter jewellery in the world" (Pomellato).

Tous distributes its products abroad through corners in large *department store* while Pomellato uses own brand outlets and brand dealers.

DoDo division growth strategy, on the opposite, is based on one side on the capability to try and make agreements with distribution channels that are unusual in the industry; on the other one, on its communication ability that can address a large and varied public using a simple and universal language. In this connection, a meaningful event took place in June 2001, when the first DoDo corner was inaugurated in the New York-located Fiorucci megastore, where other Italian design companies are represented but DoDo is the only one from the jewellery industry.

Tous is present abroad (export accounts for 15% on total sales) with personalized corners managed by hired staff, in more than fifty points of sale worldwide, including Japan. The company opening to foreign countries does not only concern sales but also production. Some products of the collection are manufactured in Asian countries, particularly Hong Kong, where quality is acceptable and labour costs are lower than in Spain. The partnership agreement – no company-owned factory is planned– sets out that Oriental partners manufacture models created in Spain according to trading conditions defined in advance in terms of schedule and costs.

Pomellato is a well-known company in Italy but it is not just as famous abroad; currently 30% of Pomellato turnover derives from foreign markets (Europe 19%, Japan 8%, USA 3%) and only 10% of that amount is represented by DoDo products. One of the company goals is to become increasingly international by accurately assessing the potential of the different markets and catchment areas.

Pomellato is directly present in the most prestigious European cities: Paris (since 1987), Montecarlo, Barcelona, Madrid, Marbella, Lisbon and Antwerp. In Asia, outlets can be found in Singapore, Tokyo (since 1989), Osaka and Taipei, in the USA (since 1996) in New York's 5th Avenue, at Bergdorf Goodman and, lately, thanks to the cooperation with Sacks, in nine other prestigious US locations. New collections are presented in the most important European and international cities. For instance, show rooms were fitted out in Madrid, Paris and New York in 2001. The development plan for foreign markets includes opening a Pomellato and DoDo sole distributor in the USA and increasing the dealer network in Europe and on the American market.

The two companies made different choices as regard their product portfolio, in line with their corporate strategies: Tous offers a wide range of products through a *brand extension* policy in the world of accessories while Pomellato is still focussed on the jewellery core business, only partially diversifying in the correlated watch sector.
The collections they offer are made of a different number of products: several 300-item collections every year by Tous, including different versions and accessories, while Pomellato presents a single 60-item collection yearly. The Spanish company aims to constantly create occasions for repeated purchasing for its customers. The choice to diversify its production touching also industries that are not connected to jewellery is part of the strategy to create the Tous brand, trying to find higher value added products that would enable the company to grow without jeopardizing the position it has acquired. The major and immediate challenge for Tous is related to its need to grow – to consolidate the brand international orientation – by increasing the quantity of produced items with no prejudice to the quality level it attained in terms of product and service to customers. As Mr Tous points out, it is often a matter of "*compromise between the entrepreneur who would like to get an improved object in quality terms, produced quantities being equal, and the production department that has to find out how to improve the product quality without increasing costs*".

The Italian company relies on the creation of *traffic builders*, with a precise connotation – as in the case of the new DoDo animals, made precious with brilliants.

> *Tous extended its creative philosophy to new accessory lines as well: bags, small leather items, gloves, umbrellas, watches, perfumes, pens, tableware, including a line of children accessories such as spoons, pacifiers, rattles. The lines of all those products recall the jewellery models and they show the symbol of the bear. Accessories are sold in the same jewellery outlets, although they have reserved and separate areas to respect the different purchasing habits – people normally sit when the buy a piece of jewellery while they stand when buying a bag– with one only exception, the perfume is distributed in parallel in perfumeries.*
> *Accessories are generally produced outside the company: dishes, for instance, are manufactured in Portugal, while spectacles are manufactured by Italian De Rigo that signed a licensing agreement enabling it to manufacture and wholesale Tous spectacles in Spain and other countries in the world, paying a royalty on sales to the Spanish company. Leather products represent an exception, they are manufactured in a dedicated factory because they are still made using some artisanal techniques. In addition to this, Spain has a long tradition in leather production and Tous had no problems in finding skilled craftmen and talented designers.*
> *The constant creative tension and the direct contact with customers brings Tous to present several collections every year, each made of 3000 new items, including the different versions of the same product. In general, collections are officially presented in special occasions and new products are also proposed for Christmas, when shop-windows are completely re-fitted.*

Pomellato presents a single new collection a year – made of about 60 items covering the whole product portfolio (DoDo, Pomellato, watches) – in its Milan-located showroom. The company has tried to rationalize its product portfolio over the last years – by reducing the number of items in the collection – to make procurement and production programming easier but also to further characterise its jewellery, by optimising communication investments and improving customer care. In particular, DoDo line is yearly added with small gold animals, to be worn individually, in couple or in group, so that customers can freely express themselves and compose their jewellery.

The different goals for design are mirrored in the different choices of visual identity; Tous uses design management as a tool to strengthen its brand image while Pomellato mainly considers it as a marketing lever. It is important to highlight that neither Tous nor Pomellato, consistently with the general model of design-based companies, entrust their marketing function with their visual design. This function analyses the market trends and competitors, it processes suggestions and support data that the creative committee uses together with other parameters to select the items to be added to the collection.
In Tous company, the design manager with his/her team cares about the visual identity while Pomellato set up a corporate identity function for both divisions, operating across the company to guarantee that all forms of expressions, internal and external, are consistent.

Communication is another important element of Tous brand and design strategy, and all its aspects are accurately studied. An agency is responsible for Tous advertising image, its cooperation with Tous being well consolidated; for instance this year advertising campaign included a cinema ad where their endorser – daughter of Alba duchess – is shown riding a horse on the sea-shore.

Visual merchandising is developed within the company by Tous family; it is actually a team that Mrs Oriol coordinates and that invents packaging solutions – currently in green colour – shop-window outfitting and product displaying modes.

Pomellato has made strong investments on brand and product communication from the very beginning. Image and positioning are critical and important elements for the company, that led it to set up a corporate identity function operating across the company and guaranteeing that all expression forms are consistent. This team aims to make sure that all actions taken in all occasions – inside and outside the company –are consistent with the positioning and image the company wants to convey. Based on this logic, this function approves packaging, shop-window arrangement, outlet layout, catalogues and advertisements. The *communication style and the conveyed message are therefore the same all over the world; the philosophy Pomellato promotes is about feeling good with oneself.*

Advertising campaigns are characterised and stand out for their being original and provocative: for instance, the idea of black and white photographs of jewels or the campaigns made by famous international photographers where jewels are portrayed in poses and settings that are always new and extravagant. A good example is the communication campaign by Tyler Brule, who used some glass prisms to make the jewel more visible on the model's body so that it could better attract readers' attention. Quoting the author: "at first we thought it was important to find the right woman who could represent Pomellato spirit, than we realised that the real star of the campaign had to be the jewel".

Pomellato also sponsors some cultural events - such as the exhibition "L'età dei Visconti e degli Sforza"(the age of Visconti and Sforza families) mounted in Spazio Oberdan, Milan – or charities, such as the show at Milan-based Strehler theatre to fund the building of a hospital in Sierra Leone.
Communication to authorised dealers is carefully made by using institutional and sales support material such as leaflets, catalogues and brochures, supporting them in fitting out shop-windows and doing local advertising, which is carried out by organising events in cooperation with dealers.

4. OBSERVATIONS FOR THE MANAGEMENT

European design-based companies have to face new challenges: the changeover from the society of needs to the society of pleasure; the growing consumers' care about an environmentally compatible development; the capability to combine an increasingly global culture with local roots; the spreading of the industry activities on an international level.
In such a scenario, companies that are now turning from being *design-oriented* to being *design-based* must cope with some problems: controlling markets; developing a balanced product portfolio (for instance, in terms of corporate image enhancing, turnover, corporate profitability, development of technology and market key competence); selecting and managing designers from outside their company, with obvious consequences in terms of relationship between brand image and designer's renown; balancing "creative transgression" and the desire to propose a kind of design "for the large public"; defining *pricing* policies that would not make products inaccessible, as happened in the 50s; managing succession, in particular when the entrepreneur is the creative designer (which is quite common in many jewellery companies); mapping and developing competences different from the original know-how, for example in the financial and commercial sectors.

Design will lead companies to win new challenges if it would make the most of the crafts deriving from artisanal tradition and develop a systematic method to manage supply system design process, by coordinating design activities on every company level and between the company and external actors; allocate resources to design; assess the outcomes of design and enrich/evolve “design philosophy” over time.

The two case studies that were analysed in detail highlighted the peculiar features of the companies that succeeded in implementing a Corporate Design approach. The comparison between the two companies, Tous and DoDo by Pomellato, also shows that different economic and competitive goals can lead to adopt different design management strategies, although original and innovative solutions were found in both cases. Intuition and capability to go beyond the mere product innovation and concentrate on the global supply system enabled the two companies to build up a sustainable competitive edge in their respective domestic markets, by using partially different paths.

BIBLIOGRAPHY

Airoldi G., Brunetti G., Coda V., *Lezioni di economia aziendale*, Il Mulino, 1994

Associazione Industriali della Provincia di Vicenza, "*Dal prodotto al mercato: una sfida per le aziende orafe*", 1992, Vicenza

Bonini E., "Design e Modelli, nuova protezione", *L'orafo Italiano*, giugno 2001

Bonsiepe G., *Teoria e pratica del disegno industriale*, Feltrinelli, 1975

Brandigi M., "*Le nuove frontiere dell'industria orafa italiana*" in "Federorafi Flash", 2001, Vicenza

Branzi A., *Introduzione al design italiano*, Baldini&Castoldi, 1999

Bruce M., Morris B, "Approach to design management in the product development process", *Product development, meeting the challenge of the design-managemnt interface*, John Wiley & Son, 1995

Cappetta R., P.Cillo, A.Ponti, "L'innovazione nel Pret a Porter", in *Economia & Management*, volume 3, 2001

Castaldo S., Verona G., *Lo sviluppo di nuovi prodotti. Teoria e analisi empiriche in una prospettiva cognitiva*, Egea, 1998

Catalani A., "Il design di prodotto: verso il connubio tra antichi "mestieri" e managerialità", in *Economia & Management*, settembre-ottobre, 2001

Cattaneo C., Sabbadin E., Virtuani R., *Il settore orafo*, Giuffré editore, 1993

Ciappei C., "*Assetti imprenditoriali e manageriali nelle imprese orafe italiane*",Cedam, 1998, Padova

Cilia L., "*Il grossista allargato*" in "L'Orafo Italiano", luglio-agosto 2000, Milano

Clark K.B., Fujimoto T., *Product Development Performance*, Harvard Business School Press, 1991

Clark K.B. – Wheelwright S.C., *The Product Development Challenge. Competing through Speed, Quality and Creativity*, Harvard Business Review Book, 1995

Comboni G., F.Molteni, "Prodotto moda e isola stilistica", *Economia & Management*, volume 2, 19

Cooper R., Press M. *The design agenda, a guide to successful design management* John Wiley & Son (1995)

Corbellini E., "La comunicazione nel settore orafo come leva strategica per l'affermazione dell'identià di marca"., in Carcano L., Corbellini E., Lojacono G., Varacca P., *Il sistema gioiello tra tradizione e innovazione*, in corso di pubblicazione, Etas, 2002

Corbetta G., "*Strategia delle piccole e medie imprese*",Cusl, 2000, Milano

D'Aveni R.A., *Hypercompetition. Managing the Dynamics of Strategic Maneuvring*, The Free Press1994

Danieli I., "*The power of branding*" in "Vogue Gioiello", gennaio 2001, Milano

De Fusco, Storia del design, Editori La Terza, 2000, IX edizione

Dematté C., "L'innovazione come arma competitiva", in *Economia & Management*, 4, 1996

Dorfles, *Introduzione al design industriale*, Piccola biblioteca Einaudi, 1972

Dumas A. Mintzberg H. "Managing the form, fucntion and fit of design", in *Design Management Journal*, 1991

Eminente G., *Teoria e pratica del disegno industriale*, Fabbri editori, 1991

Fairhead J. *Design for corporate culture: how to build a design innovation culture*, National Economic Development Office (1988)
Gaibisso A.M., *L'industria orafa italiana*, Franco Angeli, 1995
Guatri S., Vicari S., Fiocca R., *Marketing*, McGraw Hill, 1991
Lenti L., Liscia Bemporad D., *Gioielli in Italia, temi e problemi del gioiello italiano dal XIX secolo al XX secolo*, Marsilio Editori, 1996
Lojacono G., "La criticità e l'importanza della distribuzione nel settore orafo", in Carcano L., Corbellini E., Lojacono G., Varacca P., *Il sistema gioiello tra tradizione e innovazione*, in corso di pubblicazione, Etas, 2002
Lojacono G., "La gestione delle imprese design-based", in *Economia & Management*, settembre-ottobre, 2001
Lojacono G., Saviolo S., *Building an identity in symbol intensive organizations: two italian cases*, International Conference on Corporate Reputation, Copenhagen, maggio, 2000
Lojacono G., Varacca P., "La creazione di prodotto", in Carcano L., Corbellini E., Lojacono G., Varacca P., *Il sistema gioiello tra tradizione e innovazione*, in corso di pubblicazione, Etas, 2002
Maldonado T., *Design industriale: un riesame*, Feltrinelli, 2001
Munari B., *Artista e Designer*, Editori Laterza, Roma, 1971
Oakley M., "Policies, objectives and standards", *Design Management, a handbook of issues and methods* Blackwell, 1990
Pilditch J., W*inning ways*, Mercury Business Books, 1989
Pisano G., *The Development Factory. Unlocking the Potential Process Innovation*, Harvard Business School Press, 1994
Porter M.E., *The Competitive Advantage*, The Free Press, 1985
Roy R., Potter S., "Managing design projects in small and medium sized firms", in *Technology Analysis and Strategic Management*, 1990
Sabbadin E., "Il posizionamento delle forme distributive al dettaglio", in *Il settore orafo: strategie di prodotto, di marketing e di area*, a cura di Cattaneo C., Sabbadin E., Virtuani R., Giuffré, 1993.
Sabbadin E., "Rapporti industria-distribuzione e struttura della rete di vendita nel settore", in *Il settore orafo: strategie di prodotto, di marketing e di area*, a cura di Cattaneo C., Sabbadin E., Virtuani R., Giuffré, 1993.
Sciuccati F., Paola Varacca Capello, "La gestione della varietà nel Sistema Moda", *Economia &Management*, vol.5, 1999
Unesco/ICSID, 1967, "Industrial Design, An International Survey", tratto da Bonsiepe G., Teoria e pratica del disegno industriale, p.3, Feltrinelli Editore, 1975
Urban G., Hauser J.,. *Design e marketing dei nuovi prodotti*, ed. italiana a cura di Guerini C., Utet, 1997
Verona G., *Innovazione continua*, EGEA, 2000,
Von Stamm B., "Whose design is it? The use of external designers", *The Design Journal*, 1998
Walsh V., Bruce M., Potter S., *Winning by Design* Blackwell, 1992
Wheelwright S.C., Clark K.B. *Leading product development, a senior manager's guide to creating and shaping the enterprise*, The Free Press, 1995.