

DESIGN RESEARCH IN THE FASHION SECTOR: DECISION-MAKING SUPPORT METHODS AND INSTRUMENTS IN DESIGN

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1. Introduction

by Chiara Colombi

This paper assumes the fashion sector as a privileged field for the observation of several research and product development processes that have noteworthy similarities and potentials of application in many other design oriented sectors. The fashion field has, in fact, elaborated research procedures and planning instruments over time, which are rather unique (such as trend research practices) that are also reaching out of this specific sector. In addition to elaborating and developing finished products, fashion companies, and other bodies, such as private agencies or associations, perfect intermediate outputs of the research and product development procedures, which they implement by using both distinctive languages that are, by now, codified and planning potential scenarios – planning trends – whose aim is not to supply homologous development instruments for collection development, but that of offering design opportunities meant to support the creativity of the companies, thereby offering multiple visual scenarios.

The design of these intermediate products highlights an area of strategic research for the development of decision-making support methods and instruments in design, thanks to which it is possible to shift from trend research practices and forecast analyses (probability) to the building of “possible futures” (likelihood), no longer having the objective of looking for trends but having the objective of “creating worlds”.

The production of these “research products” – trend books – represents a field of noteworthy interest, not only for the fashion market, but for many other design-oriented sectors that are progressively elaborating similar practices. In these, what takes on a greater value is the planning research project, instead of the finished product, since this becomes the instrument of the company’s strategy, whose potential effects do not regard a simple collection or family of products, but entire generations of products. The objective of this paper is to offer an overall view of these practices as well as to demonstrate the progressive convergence of sectors that are apparently very distant from one another, as for example, fashion and electronics, towards the said practices.

2 – Design as conceit of possible worlds

by Giuliano Simonelli

Future is the product of transformation that stems from all the elements that make up present and past and which are combined in a number of almost infinite possibilities.

In our representations of the social reality it is difficult to control the elements that may distort our judgment or be the cause of error. When changing from a common sense cognitive approach to a scientific cognitive approach it is necessary to rebuild in a rigorous way the features of any phenomenon of social importance and the circumstances in which manifests itself.

For this reason, it is necessary to carry out specific research with the aim of broadening the information available, taking into account the reality of the social and territorial environments in

which the phenomenon occurs. It is necessary to research, acquire and organise new data. The data must then be analysed and described objectively, and for a better understanding measurements or typologies of the analysed phenomenon can be proposed when necessary. Data must then be compared in order to find an explanation for the phenomena analysed and then interpretations can be put forward.

For this purpose, research activity has been coded as part of social sciences and economic sciences, shifting from a system of laws to a system that interprets reality, progressively moving from the objectivity of quantitative methods to a qualitative convergence of analysis and interpretation methods used by project disciplines such as design.

The need for alternative operating design methods arises when the concept of scientificity, which generates the need for a structured and shaped approach, is combined with the concept of complexity.

Often the term innovation is linked to white coats and labs full of unknown machinery; in other occasions one has the perception the innovation comes from the market, from listening to people for whom the products are made. However are there other forms of innovation, which go beyond the already well known “technology pull” and “marketing push” innovations?

Recently the definition of a new innovation concept, defined as “design driven” innovation, has developed and is being established. This innovation is not necessarily linked to technological innovation nor to sophisticated market analysis, but its driving force is given by the design capacity.

Design-driven innovation refers to reconfiguration processes of value creation that are the result of the generative (i.e. capable of giving birth to unexpected solutions) interface between technical potential (the “field of what is technically possible”) and social potential (the “field of what is socially possible”). In order to take place, this interface calls for a special ability to straddle the borderline between disciplinary, organisational and linguistic areas that are normally considered different and distant (technical, economic and managerial skills, on one hand, and socio-cultural, aesthetic and communications skills on the other). A kind of innovation that involves not only products but also, in a broader view, fields of services and communication whose importance today is evermore relevant, within the whole process: from the definition and anticipation of needs to the ways in which the product is launched nowadays as well as consumed (in a more aware way) by the users.

A good example of this kind of innovation can be seen in the Italian production system where the success of *Made in Italy* products is seldom related only to technology and where the real strength is given by the design of new qualities that often crosses all the above mentioned borderlines. This kind of innovation allows these Italian companies to acquire a competitive advantage over firms, in many cases bigger and better structured, involved in other national economic systems.

Within design praxis, metadesign is not simply an analysis instrument but a research practice for design solutions, which takes into account market anticipation needs.

It doesn't consider only creativity practical tools. As Christopher Alexander said, at the beginning of the '60, the number of information needed to solve a problem is large and grows so fast that the designer is not able to collect data neither to use them.

To design always means to manage information; to reach knowledge, from different disciplinarys, as a sort of cultural and experiential warehouse able to feed the creative process: from the memories of the past to films, from travels to music, from new frontiers in materials to new available technologies etc.

Today more than ever, in the *knowledge society*, in which knowledge has assumed a strategic role, even if there's also an excess of information, the ability to reach and quickly to manage relevant number of information and knowledge, from different sources and heterogenous documents, more than ever represents a crucial aspect for designers.

Design research is consequently concentrated on solutions and modalities through which it can be possible to build up meta-design warehouse and to permit the access, as a sort of structured knowledge available for those who work in creative system.

Specifically, working on instruments for knowledge management, whose origins are to be found in the field literature, means to reflect on methodologies and instruments able to allow the access to information and the management of knowledge with modalities coherent to the design nature, as, for example, the not-linearity and the dominance of visual documentation¹.

In fact, for instance, if enterprises of relevant dimensions are able to create a their own system of changes and trends, new technologies and new materials rilevation etc, for small and medium enterprises and free-lance designers this is not possible. For this reason it's important to realize more sophisticated research and design instruments to allow the access to real design knowledge "data banks".

Working on anticipation is an industrial must. Classic industrialism did not require forecasts as the market was not saturated and the functional and aesthetic ageing of a product was solved by orienting the product to a new target.

In the last thirty years, with the arrival of *just in time*, anticipation has become increasingly useful for the acquisition of a stock of materials and semi-finished materials as much as possible in line with a consumption trend which is increasing in quantitative terms.

Nowadays, there is crisis in anticipation for production purposes every time a consumer and his ego, increasingly educated to consume, seek justification for the obsolescence of goods through new stories that can be interpreted by the actors of the worldwide object system, in other words the brands.

Anticipation is returned through clear and usable processes that are aesthetically in tune with the sensitivity of the recipients; many try to anticipate but only a few are satisfied with the role of relating at best the anticipations of the forecasters for production use. Therefore, we can say that to anticipate it is sufficient to reproduce the existing cultural system for the purpose of production so that it can then develop and create its own conscious ability to translate this culture through goods. In a reality with different futures, to propose a future, i.e. anticipate, put forward (design) "possible worlds" means offering a possibility to decision makers.

¹ Cfr. Ciuccarelli P. e P. Innocenti (a cura di), *DesignNet. Knowledge e Information Management per il design*, Atti del seminario internazionale, Milano 8 febbraio 2002, Edizioni POLI.design, Milano 2002;

Starting from these observations, inside the Politecnico di Milano system, in which Design Faculty, INDACO Department and POLI.Design Consortium operate, was developed TR&NDs LAB – Trend Research & New Solutions Design Laboratory. A Laboratory for research and development of new trends, scenarios and design solutions starts from the needs of monitoring, understanding and interpreting the evolutionary tendencies of different productive fields of Made in Italy in order to characterize opportunities of knowledge transfer and integration and to activate coherent modalities of innovation management.

Trendlab is based on some main hypothesis:

- _Innovation is produced not only inside traditional research centers, but also in everyday life;
- _Innovation is the outcome not only of top-down processes but also of bottom up ones;
- _There isn't only technological innovation, but also social, organizational or design driven innovation;
- _The success of the made in Italy has been mainly the result of these last forms of innovations rather than of technological innovation.

The Laboratory takes advantage from multidisciplinary competences of researchers, professors and professionals who operate in the design system and takes benefit by the international partnerships in education, research and applied research level.

The approach, the methodology and the instruments are typical of the design culture and include social research instruments, innovation theories in technical-productive systems, user-centred design and use contexts centred design, aesthetic-sensorial-perceptive qualities of the artefacts design, interpretation of production territorial systems and productive row organization.

The Laboratory offers trends research products, as evolutionary scenarios and design solutions, and educational products to allow customers to deepen tendencies research.

Assomostre, Italian Association of the Exhibition Agencies, is the main partner. With its collaboration, a pilot program will be developed in order to characterize crossing development tendencies and innovative design concepts for exhibition system.

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3. Cultural models and prototypes: the project of possible futures

by Chiara Colombi

The fashion sector represents a field in which interaction with cultural contexts has gone beyond the “natural” immersion of designers into local culture, thus becoming more formalised and articulated. This sector often tends to be interpreted in an “artistic” way. In other words, as characterised by innovative processes guided by the designer’s creative genius and, therefore, not attributable to codified processes. However, it is precisely in this sector that the importance of certain implicit practices of observation and interaction with a cultural context were observed, the said importance having been made explicit and integrated into a formalised manner within the product development process.

The said knowledge was favoured by a series of phenomena featuring the 1980’s and 1990’s. During this period, increasing international competition and, above all, the widespread of a cultural phenomenon on a global level, made that unaware activity of interpretation, and the

“cultural prototype” that characterised the designer in this sector, ever more difficult ². The immersion into cultures became a consolidated and institutional standard procedure, carried out on a global level, and no longer on a local one:

“We get information from everything. We travel the world and always return with notes and impressions on things that impress us; along with books, magazines, and clothing”³.

“I travel often with designers; we go to some English flea markets or some *vintage* store in California. [...] They buy a pen, and I ask myself why they’ve bought it. [...] A few months later, I find out that the colour combination of that pen was the inspiration for the choice of colours of a fabric”⁴.

Social research, mediated by the sensibility of designers, and by their capacity of representation through cultural “prototyping” is, therefore, by now, an indispensable instrument in the creation phase of ideas throughout the fashion industry.

The fashion sector is an environment in which interception and interpretation of market consumption dynamics are the basis for continuous innovation. These elements translate an implicit knowledge into a consolidated professional procedure. Designers, as “users-innovators” immersed in a specific culture of use, have the expertise to interpret the values of a specific social community, identifying the signs of evolution before other sectors. The concept of a shared tacit consciousness and of “expert communities” capable of elaborating new cultural models represents therefore the key-concept in the analysis of research and development processes in the fashion sector.⁵

Direct contact with different cultures of use and consumption on a global level is a consolidated procedure in the research phase. Through the use of design and cultural systems, designers mediate social research and ethnographic observation in order to propose an original and useful formulation that does not produce product concepts but possible worlds to be interpreted in the development phase through the design of new products.

This practice is now so very consolidated that it is no longer carried out only within a company. Specialised firms, the so called *Trend Institutes*, carry out similar functions working as suppliers for the fashion firm, producing “cultural reports” that are the result of a structure research. The work groups are comprised of experts in social sciences, sociology, psychology, and

² This theme is deeply tied to the dynamics of the movements of adolescents that, from the start of the 1970’s, influenced the creation of languages and lifestyles. Up until the 1980’s, these movements were represented by very strong recognition and “localisation” and by a progressive diffusion on a global level: *teddy boys*, *punk*, *American gangs*. Contemporaneity is, instead, characterised by a plurality of cultures that is difficult to limit. It finds its main place of expression in urban centres, yet, it is hardly attributable to trends or homogenous cultural groups. On this theme Cfr. Gianicola A., *La moda nel consumo giovanile (fashion in adolescent use)* (edited by), Angeli, Milano, 1999; Miglietti A. F., *Identità mutanti (Mutatine identities)*, Costa & Nolan, Genova, 1997;

³ Flaccomio F., Extè. Un posizionamento di rottura, (a breaking positioning), in Gianicola A., 1999, op. cit., p. 158;

⁴ Marchiori M., *La comunicazione Diesel come dichiarazione di onestà nei confronti del consumatore, (Communication by Diesel as a declaration of honesty with regards to the consumer)*, in Gianicola A., 1999, op. cit., p. 194;

⁵ Bertola P., “La progettazione orientata all’utente: il caso del settore moda” in Tosi, Francesca, *Ergonomia e design*, Edizioni POLI.design, Milan 2004;

anthropology, but, above all, characterised by forms of participative research in which “user researchers” document their daily life.⁶The result of this work is collected in synthesis, through visual language, in tried and true “research products”, in which social communities, practices, and shared languages, as well as methods of relationships and communication are described⁷. These are documents that are no longer “descriptive”, but “interpretative”, which translate cultural models of use in “prototypes of possible futures, anticipating scenarios of life, products, and customs, i.e., creating a visual platform on which new collections can be conceived. “Trend books” are, in fact, the product of the translation of the planning research into “material reality”, a visible world, comprehensible for the company, and are, therefore, already the result of an activity of planning synthesis.

The figures who intervene in this process of planning elaboration range from “bureau de style”, agencies, and professional private offices, who periodically produce trend books, and often ad hoc research upon request of the companies, to trade fairs that tend to increasingly dedicate a section of their activities to the theme of trends, as well as to firms that often carry out their trend research activities on their own. The product trend books pass through the entire product line, including very broad ranges of categories: fabrics, knitwear, print&décor, men-women, infant, lingerie, sports + active wear + leisure, accessories, and beauty.

The research methods on which the production of these categories is founded are often a hybrid between methodologies of social research and the application of instruments of visual and artistic research. These are conducted by multi-disciplinary groups, co-ordinated by artistic directors, within codified and periodic processes⁸.

The products elaborated are scenario books, and what is relevant to these, on interesting themes for different seasons, spring/summer and fall/winter, according to the classic temporal scanning of the fashion system, with an anticipation of approximately 30 days, with respect to the introduction of the finished product on the market. The research proposed, therefore, is introduced as a reference for the entire production line, even before the yarn production sector, primary material that necessarily orients the finished product. However, these are articles that do not take on a “foreseeing” perspective, but a planning approach, that is, beginning with the observation and interception of practices, languages, and new methods of use, propose “possible futures”, or worlds planned as “qualitative possibilities” and not as “quantitative previsions”.

The great anticipation of the suggestion and its reflective character on transversal themes with respect to the interpretation of emerging practices lead to the fact that the products elaborated not only refer to the fashion sector, but more generally, to the entire world of products, also in light of the growing hybridisation among sectors such as, fashion, design, art, furnishings, communication, etc.

⁶ The Futur Concept Lab of Milano, directed by the known sociologist, Francesco Morace, has correspondents in all main capitals of the world. These are represented by people of a low age range, with training and education generally focalised on the humanities, on social disciplines or on architectural-artistic ones. These are young students or professionals who limit themselves to documenting or recounting their own personal experiences of life, the dynamics of relationships and communication, through images and documents of various nature.

⁷ Cahier de Style and Trend Books are diffuse instrument in Fashion System.

⁸ Recognized on a global level, Trend Union, bureau de style, with offices in Paris and New York, directed by Li Edelkoort, of Dutch nationality, director of the Design Academy of Eindhoven (Netherlands), consultant for Pitti Immagine and creator of four magazines, Interior View, Color View, Textile View e Bloom, at the cutting edge with regards to “trend research”.

The base product, referred to a season, can be further developed for a particular sector (fashion/furnishings/cosmetics) or for a precise category (male/female), by articulating the diverse themes in a detailed manner.

Trend research, or if we wish to use a term that is nowadays very diffuse, the planning of scenarios, does not, therefore, interest only the fashion product companies, but transversally, all the sectors oriented towards design, in which emerging practices of research and production of articles are very similar to those adopted in the fashion field.

4. Convergences among sectors and new methodological potentialities

by Giuliano Simonelli

The start of the new millennium brought with it new reasons for internal reflection that heavily invested the industrial economy. Complexities and uncertainties are nowadays elements that are typical of the dynamics of the elaboration of practices of interaction and of lifestyles, so that organisations tend to equip themselves with new research instruments to confront that market, the said instruments involving more and more planning proficiencies, and moving closer to the practices described in the previous paragraph.

In fact, besides the fashion sectors, there are some signals in other fields regarding the chance for this “methodology” to be applied in improving products according to social and cultural evolution, as well as some cases in which this has already happened.

The natural diffusion of this process seems to be more relevant to mature products related to everyday life and routines: furniture, appliances, objects and accessories, transportation and common tools. All these products are becoming not just functional instruments, but also a means to organise relational and social interaction, in the quest for pleasant sensations and cultural expression. Despite the still present scepticism regarding fashion phenomena as a way to create needs, there is a rising interest in the field as a context in which pluralism and differentiation are now the main issues according to social groups and cultures. Furthermore, it is not by chance that the same “research firms” which worked for fashion business now are extending their interest in topics, such as “home living cultures”, “work and technology”, “mobility habits”, and sell their “cultural prototypes” in other fields, as well – see the case of Future Concept Lab in Milan.

A really interesting context where “cultural prototyping” can find applications relating to high and new technology. The nature of new technologies is more and more disconnected from functions and uses, being instead introduced as a platform to be applied and combined in many different ways and with many different purposes. A “cultural prototype”, describing users’ cultural evolution and trends, can introduce new opportunities offered by technology where traditional “Research and Product Development” departments are no longer able to understand and explore. Many high technology businesses, including Siemens, Philips, Nokia and Motorola, are creating design research groups inside their organisations, disconnected from business processes, which seem to apply similar methodologies. These groups can function as consultancies for the company, but can also work for other businesses and often develop research projects not related to specific products nor technology, but similar to “cultural prototypes”.

The Philips design case is certainly interesting in that it started a process of planning research oriented towards producing planning scenarios capable of offering a strategic orientation for the company and producing effects on entire families of products.

At the end of the 1990s Philips Design, riding the wave of Stefano Marzano's vision⁹, realised the highest number of "visionary" projects for different design consumer sectors.

The creative, production and development process of Philips Design stems from the basic concept that there isn't any expert capable of knowing and guessing everything, but rather, there is a broad system for the collection of information and intuitions. With this way of working, Marzano has tried to institutionalise and formalise a codesign process partly developed by the users. In this way, the presentation and communication of products provide the company with information which can be used to imagine new scenarios: design experiences. Philips design represents the application of this approach and it pursues the materialisation and realisation of new visions to produce artefacts which can be valued in terms of categories different from the traditional nice/ugly, useful/useless, price, detail criteria. Designers at Philips Design gradually reach a design sensibility as regards the new social, cultural, technological and business attractors with the objective of obtaining a product system in line with the scenarios perceived by the company and the consumer.¹⁰

Even if this strategy supports knowledge exchange and is a source for creative vision it seems to be effective only when design processes are not completely "externalized". As in fashion companies, the part of design processes called "cultural prototyping" become effective only if the design competencies inside businesses transform and translate it into products, according to core competences and organizational knowledge. Cultural prototypes are creative sources not directly related to business purposes, but for this reason they need to be integrated with an internal design process.

The convergence between practices and design driven research adopted in different sectors, however, represents an important signal regarding the prospect of the improvement of planning figures, especially within the initial phases of definition of strategies relevant to the development of new products. The activity of planning research related to trend production and scenarios, is seen as an innovative instrument in a phase of great uncertainty, with respect to reading instruments for the dynamics of use and with applicative potentialities absolutely transversal to many industrial sectors.

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⁹ Stefano Marzano, architect, Managing Director at Philips Design since 2001;

¹⁰ Tolino U., "Web experience : l'ambiente informativo come neo luogo relazionale: The Philips experience", Degree thesis in Industrial Design, Polytechnic of Milan, Milan 2000.

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