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National College of Art and Design
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**ITALIAN DESIGN:
THE INFLUENCES OF ART, INDUSTRY AND
SOCIETY ON THE DEVELOPMENT OF AN ITALIAN
VISUAL LANGUAGE,
PAST, PRESENT AND FUTURE**

BY

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INTRODUCTION

Since the introduction of mass production, and mechanisation, in the early 1900s, Italian designers have been involved in a constant tug-of-war situation against the forces of mass production and technical development. This struggle took form in the objects designed; communicated through the use of particular visual languages. The languages developed have gone through a number of stages, changing and developing in accordance with Italy's social, cultural and political situation at the time. These languages always were fundamentally based, in the development of Industry and Technology.

In Italian society objects became the main channels through which information to others about values, class and gender were communicated. The possession and use of objects essentially means an exchange of cultural and social meanings. Society uses objects to communicate important social meanings, treating them as signs of values to be communicated to everybody, in a visible and intelligible way. The language used in Italian designs, gives us today a better understanding of the political, social, and cultural movements occurring at the time of the design.

This study will examine the key factors in the development of the languages that emerged, the culture that supported them and the social change that surrounded them. It will examine to what extent the languages used had an effect on Italian culture and society. It will assess what the current visual language is, if one exists,

and whether the languages that emerged in the past have had any tangible effect on the designs of the present. The Salone del Mobile, held in Milan every April will be used as a case study to assess this. The very fact that I was in Milan for the fair was both useful in formulating an opinion on this matter and of getting a clear indication of what the future of Italian design might be. This study will conclude with the future of Italy's design language, what appears to be creating it, and how society and culture are aiding it.

One of the most important factors in my research into Italian design and the study of Italian design languages, was a period of time I spent in the Faculty of Architecture and Industrial Design in the Politecnico di Milano, Italy. The courses I undertook while there, gave me a better understanding of the education of designers in Italy. This education puts a greater emphasis on styling rather than ergonomic considerations and on drawings and cardboard models to communicate final concepts rather than final working models. Professional designers and manufacturers have a constant input in the education of Italian design students, reinforcing ties between existing industry and newly emerging designers. The very fact that we were to work under the supervision of established designers such as Richard Sapper (b.1932), Perry King (b.1938), and Andrea Branzi (b.1938), was both exciting and extremely informative, in terms of seeing how these designers work and how they formulate their ideas. My time spent in the Politecnico, the number of exhibits and showrooms I visited and the information I read in magazines and books on Italian design, are all the factors which have aided me in

formulating a study on the Italian use of visual languages.

The literature available on the various design languages that emerged throughout Italy's industrial past and their impact on design and theories is relatively scant.

However, there are many works, which gave basic information on various aspects explored throughout this study. Prof. Penny Sparke's Italian Design (1988), was extremely useful in gaining an understanding of the history of Italian design, as was Italian design (1983) by Nina Bornsen-Holtman. Semantic Visions in Design, by the University of Industrial Arts Helsinki, 1990, was useful on gaining information and techniques on visual languages used in product design. Design journals and magazines, such as Domus, and Ottagono, proved useful in finding out about the Salone, reactions to designs of the present day and those of the past, and styles and influences on Italian design since its infant days. This thesis has been formulated from information gained from first hand experience, and that gained from reading the various books and articles I have mentioned.

The purpose of this thesis is not to analyse all design movements, which have occurred in Italy, but to examine the roots of the visual languages that emerged after the onset of mechanisation. It will look at their development and their presence in current design, (if their presence exists at all). It will look at why these languages emerged and what fuelled their existence. This study will examine the influence of art and craft on the languages used and developed in product design in Italy, and will ask why art was taken as the dominant influence in the development

of languages opposed to Industry. It will determine and assess the differences between the languages formulated in agreement with Industry and those formulated in disagreement, and will compare their theoretical background. This study will assess the impact of Italy's historical past in the formation of the various languages, and will assess the influence of social, cultural, and political movements, on the development of the various languages.

This Thesis will, assess the impact that the languages of the past have had on present day design. It will assess what the dominant languages are in present day Italian design, the factors that influenced their emergence and the effect of their presence. The Salone di Mobile 1997, will be used to assess its presence and its future, and will be used to analyse if the premise and theory of the first languages developed due to Industrialisation are still the guiding force behind the creation of all new languages. Finally this thesis will, look at the effect increasing technological development has had on Italian society, and what the future for design languages appears to be. In order to analyse these points in detail, the thesis has been divided into four chapters:

The beginnings of Italian visual languages developed between the two separate worlds of 'craft' and 'industry' are examined. It gives the background to the social, cultural and historical reasons for the development of these languages, and it answers the question of, why there was a need for these new languages to develop? What effect the war years had on reinforcing this newly developing aesthetic, and

why sculpture and Pop Art were its dominant influences? It answers why the good design movement was so strongly opposed in Italy, and assesses the reaction to it. It also assesses the repercussions of this reaction, and uncovers the first clues of the dominant visual language of Italian design.

The notion of a specific Italian visual language, its aims, its pioneers and its meanings is assessed. It assesses whether the pioneers of the search for a visual language achieved what they set out to do, and whether their conclusions have had any long lasting effect on Italian design? Is the development of a visual language directly related to the culture and society which design must penetrate? Why is there a need for a specific Italian visual language, and why do these designers feel the need to educate the visual awareness of consumers? In answering these questions a basic understanding of the idea of semiotics and its history in product design, needed to be established.

The next stage in the exploration of visual languages involves looking at Current day design. Using the Salone del Mobile as a guide, a number of questions must be asked to determine the current Italian visual language. It asks, if there are any visible evidence of the influence of previous developments on current design? Is there a need for this language, in present design, if yes or no, why? Are the products of today, purely expressions in styling or is function and usability considered? What are the products of today, and what are their dominant themes and influences? What is the impact of industry and technological development on

Italian products of the present day? Is there a new visual language developing, or are Italian designers relying on languages created in the past?

The final chapter looks at the use of visual languages in Italian society and indeed in all societies, in this time of internationalisation. It questions what is the future of Italian design? What attempts are being taken to change the course that industry and technology has created, if any at all? Has society and culture become dominated by technology? What appears to be the design language of the future? Have the fears of the anti-industrialists become realities?

Chapter 1: DESIGN AS A MEANS OF COMMUNICATION

The use of a visual language is not a new development in communicating meanings. In fact it can be traced back to Neolithic times, when cave paintings were used to communicate the lifestyle and beliefs of the people of the time. The cave paintings and engravings that can be seen in the Catacombs scattered throughout Italy stand testament to the religious beliefs of the people of the time (fig.1).

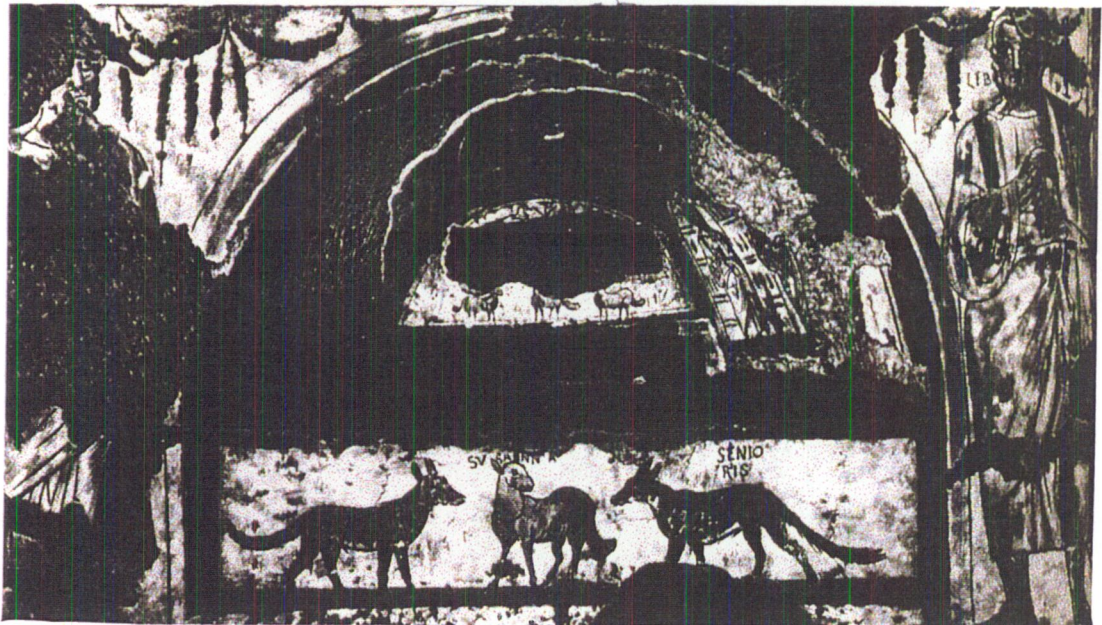


Fig.1 This drawing depicts a story from the old testament, the story of Susanna, wife of Joachim. It depicts Susanna as a lamb being persecuted by her elders, figured as wolves. This type of metaphor is typically used in the religious illustrations seen throughout the catacombs of Italy. These drawings use visual communication to express their ideas and aspirations for the early Christian religion.

Not only did this non-verbal communication transmit an idea or concept from one

person of these times to another, but they also stood to communicate to us today.

The image was once a powerful tool for evoking memory, for providing models of conduct, and for uniting communities in shared beliefs. In oral cultures there was no means of documenting information for recall, so that images had to serve as mnemonic devices, evoking memories of feelings and acts (Margolin, 1989, p.22).

While the use of a visual language or semiotics is not a new discipline, its significance has increased with the worldwide developments in technology, mass consumption, and mass production, and with the wide spread influence of the media. Designers are now trying to convey a new politics and new philosophy of design to suit the changing society, which design must concern itself with. The Italians used a particular language in their designs, most commonly a visual one. They began to realise the need to develop a particular Italian “visual language”, both to produce a distinctive Italian style and to communicate messages to society. The language they used was a visual alphabet of line, colour, shape, form and texture. These desires first began to take form in the designs of the early 1900s.

The development of Industry

In the early 1900s Italy, was experiencing economic disarray, due mainly to the Risorgimento, and to the fact that the Italian economy relied mainly on agriculture as a means of survival. A new source of income was needed, and World War I provided Italy with the opportunity to develop its first industrial industries, a development not welcomed by the traditional craft based industries. A debate from both sides began, and where design was concerned an enormous gulf developed between the artisans who produced traditional craft based goods and the new

engineering-based industries that produced mass-produced items.

The language used by those opposed to the mass production industry ran in direct contrast to the newly developing industrial style. The craft based industries used a style and language based on tradition, ornament, and the concept of 'applied art', believing art and craft based products to be the most at risk of degradation and ultimately ruin, if left in the hands of those welcoming mass production. They began to rely on art based design more heavily than before, seeing it as a clear way of defining the worlds of craft and mass production. The theories developed by Italian craftsmen were no different to those developed in 1800s Great Britain, by William Morris, and John Ruskin.

Those who advocated the mechanisation of industry embraced a new, simplified, 'machine aesthetic'. This new style developed as a result of economic and technical restraints rather than an established language. The rapid development of Italy's steel industry after the First World War made the material one of the most influential and widely used materials in Design in Italy at this time. This developing style and language was closely linked to International Modernism, which determined an object's beauty according to its function and material. This new style brought with it a new language. The language communicated showed the designers interest in the future, evident from their use of new materials, and their desire to appear modern, expressed in the clean, smooth lines used in their designs.



Fig.2 The lira armchair designed by Piero Bottoni in 1934 for Zanotta, consists of a tubular steel frame and pre-stressed wire. The use of tubular steel became an important constructional element in post-war Italy, and communicated the aesthetic of a technological machine age.

The language expressed in the Lira chair was visual and the message communicated was one of modernity (fig.2). The language expressed Italy's desire to produce international design, thus penetrating the foreign export market, resulting in a growing economy. Through the development of design, Italy was able to communicate the level of its technological expertise and its commitment to progress and modernity to other nations. Designs, which used the developing 'machine aesthetic' were the primary tools used to promote Italian goods, both in the home and foreign markets.

The War years: 1914-1945

The influence of the art based Futurist movement, encouraged an alignment of the previously separate worlds of art and industry. Their visionary designs, which were more in tune with fantasy than reality and their avocation of 'romantic nationalism', led directly into Fascism. Fascism was the dominant political movement after the First World War. This became one of the strongest influences on the manufacturing industry. The lack of trade with other European countries affected Italian design and industry, twofold. On the one hand, the absence of International competition meant that the previous driving force behind the development of a new Italian style, (i.e. Italy's desire to compete with other European countries), resulted in many products designed and produced being largely unsophisticated and traditional in appearance. This style was due mainly to the lack of competition previously gained from imported goods. This development within the new fascist state, while devastating to the development of the new Italian style, enabled the Italian industries to become very powerful and build up a large work force, due to the huge state subsidies they received. Fiat, for instance had only six thousand workers pre-war compared to 30,000 in 1919.

Where design was concerned, the inter-war period was characterised by a varied approach to design and differing levels of production. In these years Fiat, Olivetti and other large-scale companies began to use the principle of standardisation, defined along Fordist lines. These new technologically progressive industries

embraced modern design, which followed closely along the lines of the American styling language of streamlining (fig.3). This aesthetic symbolised the energy of Modern design, through the sleek, curvaceous forms used. Mass produced products styled in this way became increasingly evident in these years. In direct contrast to this, the smaller traditional industries clung firmly to their traditions in fear of losing existing customers or offending potential ones.



Fig. 3 The Vespa Scooter designed by Corradina d'Ascanio in 1946 for Piaggio, used the American language of streamlining, which expressed optimism through the use of its curvaceous, friendly forms. It became a symbol of prosperity in post-war Italy, by providing a cheap, reliable and independent means of transport for the masses.

In the 1920s and 1930s, two new visual languages arose, very much in opposition to each other. Once again a language borrowed from the world of art began to develop. The Novecento or Art Nouveau style drew its inspiration from the decorative arts of France and Austria rather than from the “machine style” of Germany and the USA. This became the style adopted by the craft based industries, while, those in favour of mass production, sought their inspiration from the language expressed by the Rationalists, influenced by the clean crisp designs of Walter Gropius in Germany and Le Corbusier in France. By the mid-1930s, both groups were vying for the position of being made the official “Modern Style” of Italy. But Mussolini had other ideas. He preferred the neo-classical style, which he believed combined Italy’s glorious and imperialistic past with its authoritative present and future. The language communicated by the buildings and products designed at this time, express power, domination and superiority.

Effects of World War II on Design and Industry in Italy

The style used in designs after the war, expressed a very different language to that which Mussolini advocated. Following the war Italy was devastated and moral was very low. Italian designers realised that a new optimism for the future was required, and they believed their designs were the correct medium to express this sentiment. This optimism ran hand in hand with the restoration of Italy, economically, socially and culturally, to its pre-war status. This was achieved through the use of design. “After the disaster of the war, the basic idea of design

seemed to be that of a force directed toward the economic and cultural reconstruction of Italian Society” (Ambasz, 1972, p. 358). Italian designers now had a vital role in providing a style for the new, democratic, Italian lifestyle. They began to collaborate design and manufacture, in an attempt to bring Italian society up-to-date and to acquire competition with the International market. ‘Hand-in-hand with manufacturing industry, the designers succeeded in turning a dream of the future into a reality’ (Sparke, 1988, p. 76). The products they produced were well designed, and began to filter into the international market, selling well both at home and Europe. This export boom transformed Italy into a nation that was on a par with other huge industrial nations, such as Germany, France and Great Britain. The manufacturing industries came to realise the importance of design, both to increase their sales at home and abroad, and create a stylish attractive image of Italian Design. The reconstruction of Italy meant that there was a boom in the construction industry, resulting in the need for furniture to furnish these new buildings. This period saw the rise of many of the most influential furniture manufacturers in Italy today; Kartell in 1949, Arflex in 1950, and Zanotta in 1954. This period of huge expansion among furniture manufacturers, meant that they were to become the main dominating design industry, in Italy. Through the influence of the media, Italian furniture eventually gained such high merit that it was allocated an exhibition devoted entirely to furniture, it is called “The Salone del Mobile”, and is held in Milan in April every year.

It was due to the industrial expansion in Italy, that the Industrial Designer in Italy

became one of the most important figures in the collaboration between design and manufacturing. The Industrial Designer became the sole person involved in giving a face and form to Italian culture at this time. They believed their designs were capable of modifying the behaviour of society, and creating identification between Italian society and design. This new style encapsulated the hopes, dreams and aspirations of the new Italian democratic society, rapidly emerging from the defeat of fascism and the destruction of the war. The change in the political situation in Italy was closely mirrored in the changing attitudes in design ideology. The prevailing style adopted in Italy in these years was that of anti-rationalism. The pre-war Rationalist style was looked upon with suspicion, due to Italy's defeat in the war, and a style based on the role of the fine arts was believed to be the relevant style for the post-war years. This new style took sculpture rather than architecture, and the American style of streamlining as its reigning influence and source of inspiration. This original visual style came to be known as "the Italian line".

CHAPTER 2: THE DEVELOPING ITALIAN VISUAL LANGUAGE

The newly developing “Italian line”, marked the development of a new visual language. Previous languages, which were dominated by war and its repercussions, generally expressed a sentiment of despair, disapproval, rigidity, power and pessimism. The new language was one of optimism, humour, flexibility and sensuality. This newly evolving optimistic language ran hand in hand with the now developing anti-industrial language. The world of art was once again used as inspiration for designs, designs that were to characterize the clarity elegance and distinctive nature of the “Italian line. The work of many sculptural artists of the time provided the necessary inspiration for designers, to design under the “Italian line”.

The Influence of Sculpture

Artists such as Max Bill, Ben Nicholson and Henry Moore (fig.4), provided the main stimulus for the designs produced in these years. Designs based on organic rather than geometric styles became increasingly evident (fig.5). All design magazines produced in Italy in the late 1940s, from Domus to Casebella, showed illustrations of organic, modern sculpture. In exhibitions and trade fairs of the time, such as the Triennale in Milan, product forms showed strong influences from the sculptural world. Italian design, which had previously been based on both functional and artistic lines, now was based purely on artistic lines. “The pendulum

between the “artistic” and the “useful” had swung firmly in the direction of the former” (Sparke, 1988, p. 88). In fact exhibitions of the time were no longer called “exhibitions of design”, as one particular exhibition on product design demonstrates, it was called “The Production of Art”.

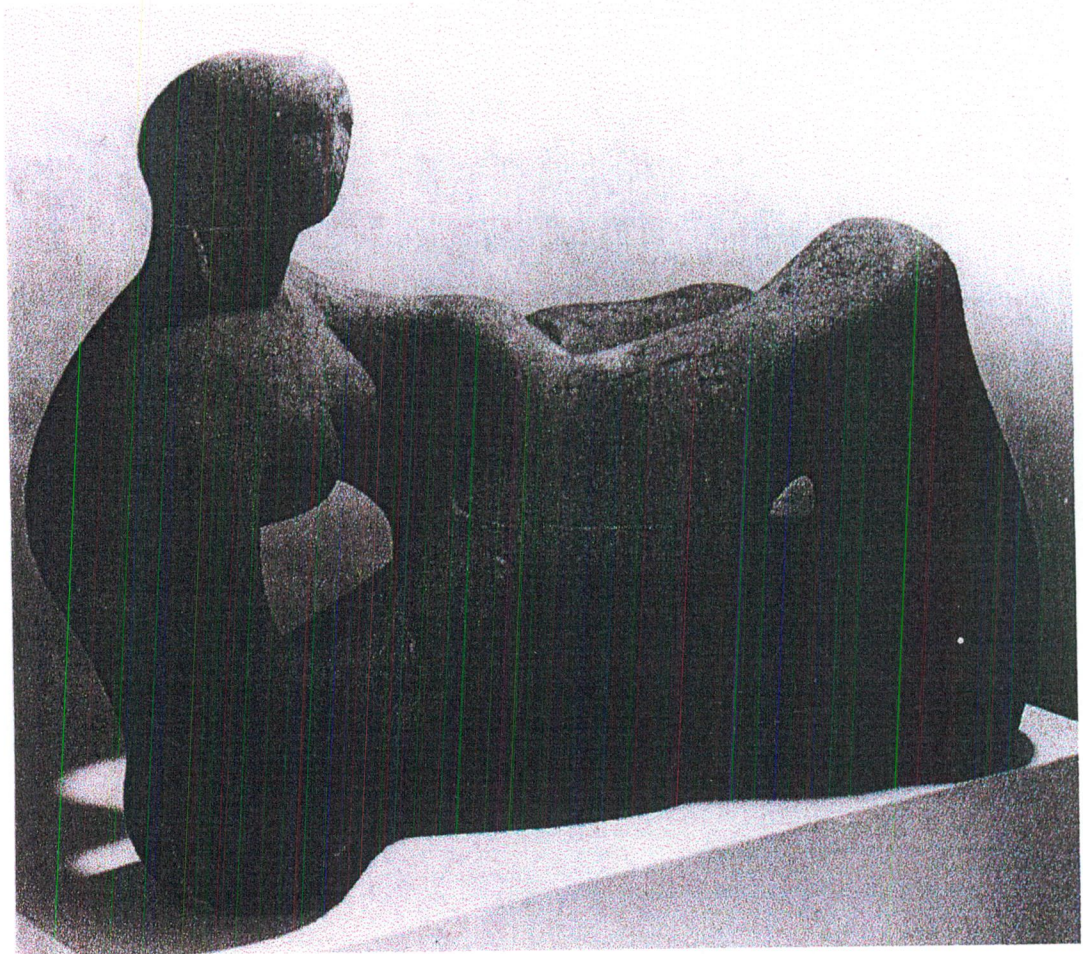


Fig.4 Sculptures such as this sculpture by Henry Moore, provided the main stimulus and inspiration for organic designs of this time.

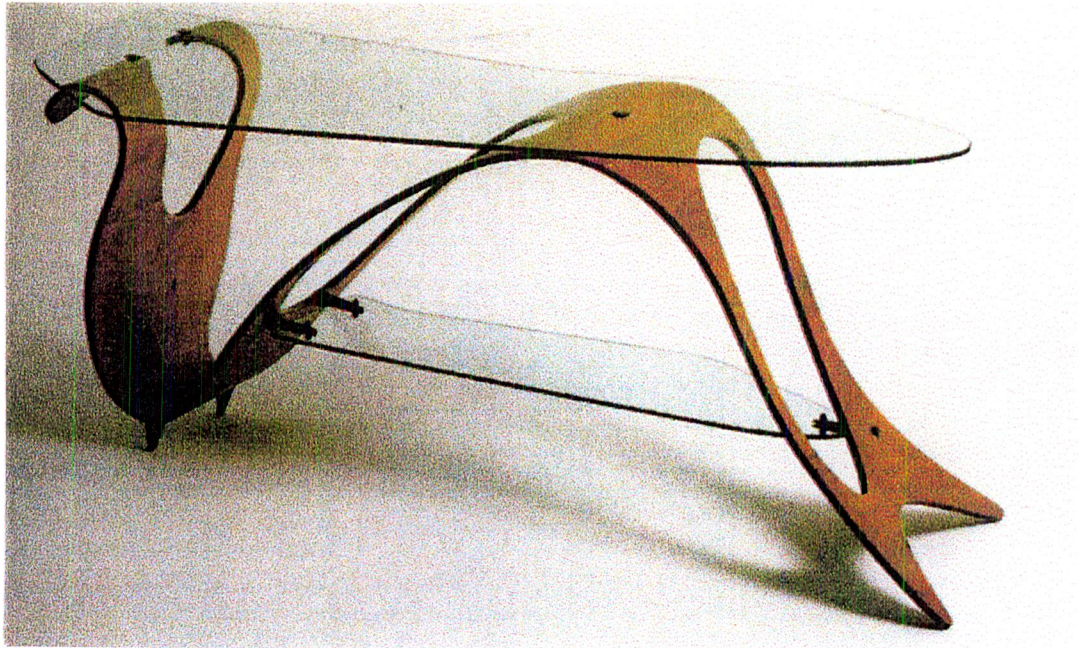


Fig. 5 This table of glass and wood was designed in 1945 by Turin architect Carlo Molino. He used sculpture as one of his main influences when designing.

This new-found style was to be the dominant influence on all Italian designs after the 1950's. It was admired by other nations, for its tastefulness, commitment to modernity and use of colour and form. This appeal to other nations is considered to have been the guiding force behind keeping the Italian economy afloat in the 1960s and 1970s, when Italy experienced a severe economic recession. "Rather than acting as the icing on the cake, as it had in the years of plenty, design became instead an essential means of survival, as it had been in the early post-war years of reconstruction" (Sparke, 1988, p. 162).

The Plastic Aesthetic

Since the 1920s, plastics were used in manufacture, but it had the image of a poor material, only used as a surrogate for more precious materials; such as wood and metal. It was not until the 1960s that the plastic aesthetic was embraced fully and finally respected as a “proper” material. The Italians were one of the first countries to find a truly modern use for plastics, the furniture industry been one of the main contenders. In an attempt to create a new market and develop the newly forming image of Italian design, many manufacturers began to use plastic, to produce innovative designs by using innovative manufacturing processes. This material was to become one of the main elements in the development of the new language of Italian design. An example of the varied and unusual forms that could now be achieved with plastics can be seen in fig. 6.

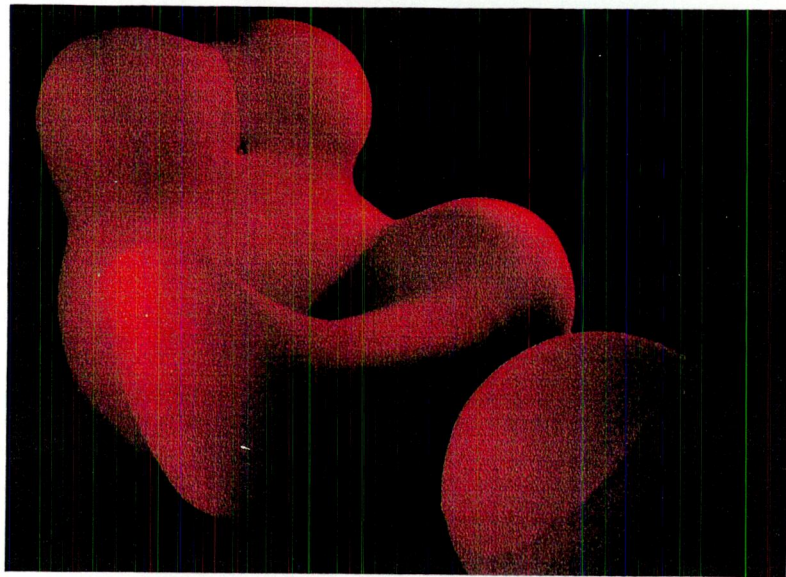


Fig.6 This chair, Up 5 – Donna, was one of a collection designed by Gaetano Pesce, in 1969 for C&B, Italy. These chairs were compressed and vacuum-wrapped, and when opened they spring into their correct form. This piece shows the developments Italian furniture manufacturers were making in the field of plastics.

Plastics were the perfect materials for achieving organic shapes and forms, produced by using manufacturing techniques such as injection moulding. The versatility of plastics was fully embraced by many of the Italian furniture manufacturers, allowing them to produce shiny, curved surfaces and forms that were to become synonymous with the growing Italian style and language of the time. Zanotta, Kartell, and Cassina were but a few of the companies that embraced the plastic aesthetic, and used it enthusiastically until the oil crisis in 1973. They used plastic to produce furniture that would previously not have been possible using wood or metal. Many of these designs were pure expressions in art, showing the influence of art movements, such as Pop Art in their forms.

Many of these designs showed little regard for function, ergonomics, and usability. Such designs as the “Sacco” seat (1969) (fig. 7), designed by Paolini, Gatti and Teodoro and the “Blow” armchair (fig. 8) by Lomazzi, D’Urbino and De Pas, show little regard for the physical needs of the user, fulfilling what the designers call the emotional needs of the user instead. Ultimately, these designers were producing a work of Art rather than a product of Industrial Design. These chairs are not only pieces of Art, but are statements of opposition to the “good design” movement which emerged after the war.

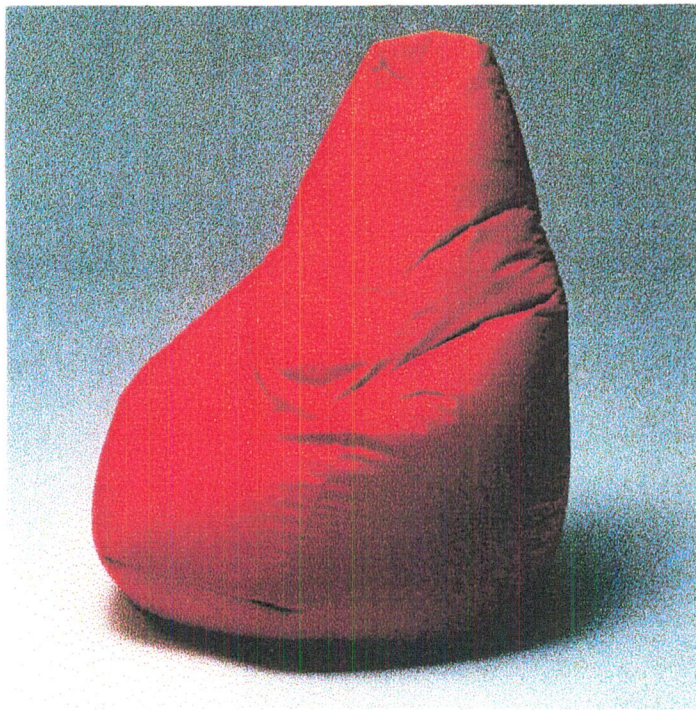


Fig.7

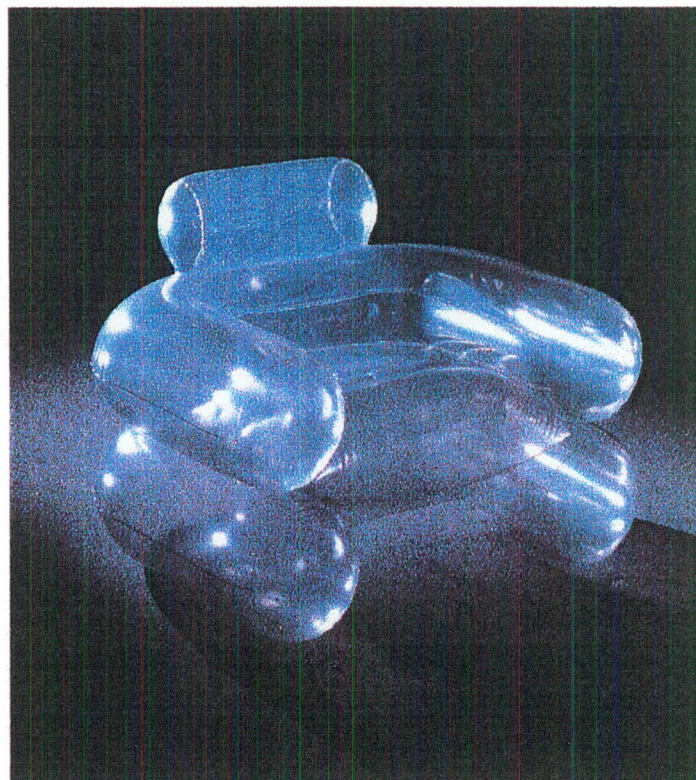


Fig.8

Both the Sacco seat and the Blow chair, expressed the attitudes beginning to develop among Italian designers in the 1960s. These chairs were to become icons of the 1960s among the affluent, optimistic youth of Italy.

The 'Good Design' movement, and reaction to it:

The "good design" movement emerged in Northern European countries and America during the period immediately following World War II. The advocates of "good design" based their concept of "good design" on Functionalist methods. These Pioneers believed that the function of an object is its sole reason for existence, they rejected decoration, popular taste and, as many critics felt, the needs of human desires. The exacting nature of the 'good design' movement, and the tight links created between manufacturing and consumerism and a desire to break out of a system that exploited them and limited their creativity, caused Italian designers to revolt. This revolt became more commonly known as the 'anti-design' movement.

Many "anti-design" groups were formed, in the years between 1960 and 1980. They wanted to become mediators between Italian culture and industry, using art as their model. The designers used a new visual language as a means of attacking the media, consumerism, society and all social hierarchies, thus becoming sheer linguistic violence. Many of the designs of the "anti-design" groups drew heavily on the art world with the likes of Pop Artists Andy Warhol and Roy Lichtenstein being their main influence. The pop art movement was created, like that of the anti-design movement, as a critical approach to Western consumerist society. Some such groups formed were; Superstudio, Archizoom, and Gruppo 9999 formed in Florence, Gruppo Strum, UFO group and Gruppo 65 in Turin, and Alchemia in Milan.

This crisis in design in Italy also reflected the social, economic and cultural crisis that dominated Italian society in everyday life. Previous aesthetics, such as Rationalism and Modernism began to crumble in the 1960s, fuelled by student revolts around the world and by the emergence of a 'counterculture' in various countries. Stemming from the economic crisis of the 1960s the anti-design groups began to use design as a means of communicating their dissatisfaction with the Italian system. This was a system in which there was a policy of low wages, overcrowding in Universities and Schools, inadequate teaching staff, and the opportunity of finding work was next to impossible. Design was to become a method of communicating to the world, the designer's ideology and philosophy. These Groups used design as a tool for communicating their view of the perfect world. They took it upon themselves to design for the human psyche, for the education of the emotions and senses and to bring people in touch with their feelings, as opposed to designing purely for function.

The massive economic recession of 1973 brought to a close many of these design groups, resulting in Italy consolidated her position with a return to classic design, a move best expressed in the work of Mario Bellini and Vico Magistretti for such companies as Olivetti and Cassina. It was in response to this direction that Ettore Sottsass and a group of friends started the Memphis Group. It was based on the same principles as the anti- design before them used. Designers such as Andrea Branzi, Michele de Lucchi, Paola Navone, Matteo Thun and of course Ettore

Sottsass, were all members of the Memphis group. Through the language they used in their designs, they tried to show their dissatisfaction with society and culture of the time, in an attempt to achieve solutions, they considered were necessary if society was to stay independent, freethinking and objective. These designers became one of the main contenders in the use of semiotics to try to influence and change industry, society, and their perceptions.

Anti-design

Memphis became the most widely known Italian group of designers to extensively use semiotics while designing, but Memphis were not the first Italian designers to do so. Even before the war, Bruno Munari (b.1907) began work in the field of 'visual design'. First and foremost he was a self-taught painter and sculptor, whose early work was strongly influenced by the Futurist movement, but in the 1930's he began to move away from this movement, mainly because he became disillusioned with its lack of impact on Italian design and industry. Munari decided to take a more active part in the transformation of society and its values, he began to use design as his tool, designing objects for people, rather than objects for consumers. This in effect was the basic belief of Memphis, they believed that designing was not about designing things, but about designing things for people – so that in effect they are designing events, experiences, and relationships.

The main objective of Memphis designs, was to express the designers

dissatisfaction with society and culture of the time. They achieved this by implanting meanings in their designs, through the use of semantics. "The study of semantics is the study of meanings in language", (Giard, 1983, p.61) and in this case, in the visual language and study of meanings in products. The term 'visual semantics' is very elusive, comprising of a highly structured and systematic discipline which, sets out to decode the systems of signs which surrounds us by treating the material environment like a language. It can be viewed as a theoretical discipline, or (as many Italian designers of this period decided to view it) simply a 'common-sense concept concerned with how users can relate to the increasingly complex products which surround them in their daily lives' (Sparke, Nov. 1991, p.66).

Every piece designed by Memphis conveys a message, a question, and a way of life. "The Memphis designers see their work not only as mere objects but as political statements, existential metaphors, what you might call visible poetry, and a challenge to received notions of design - all rolled together" (Black, 1986, p.22). Memphis designers wanted their objects to not only be a source of pleasure to users but also change people's consciousness and the conditions in which they live.

For me, design does not mean that I am commissioned by a more or less interesting industrial firm to bestow a form upon a more or less stupid product, said Ettore Sottsass. For me, design should be a discussion of life, society, politics, food, and the design itself" (Radice, 1985, p.173).

Memphis' critical opposition to social hierarchies and the power structures, on which those hierarchies rely, became one of the essential components in creating the particular Memphis language. They believed that social hierarchies developed as a result of consumerism, mass-production, and the wealth and poverty that these two components created. In a desire to do away with hierarchies (fortunate/unfortunate, better/worse, etc.) Memphis mixed materials in their designs that they believed were directly related to high-class and low-class elements. The most commonly seen material in many of their designs, was plastic laminates. They knew how people "read" marble as a sign of power and wealth, how they "read" plastic laminates and garish colours as signs of the supposedly tacky masses. As Italian journalist Barbara Radice notes, prior to Memphis, plastic laminates "the symbol of suburbia", suggested not wealth or social status but "vulgarity, poverty, and bad taste" (Radice, 1985, p.35). In their desire to wreck hierarchies in design (and in society), Memphis chose to bring "bad taste", in the guise of plastic laminates, into the living room and dining room. Memphis used the visual language widely associated with plastic laminates and changed its cultural and social meaning by placing it on furniture of all sorts. Sottsass' bookcase 'Carlton' (1981) shows exactly how plastic laminates were used to decorate furniture.

Memphis' use of garish colours was also done in an attempt to wreck social hierarchies. The colours used in many of their pieces look cheap and artificial, in this way they make fun of the austere, muted tones of "Good Design", most of which lacked such high colour. "Memphis colour is hard, disjointed, shrill, totally

toneless and free of chromatic laxity. It is flat, literal, without suggestions" (Sparke, 1988, p.195).

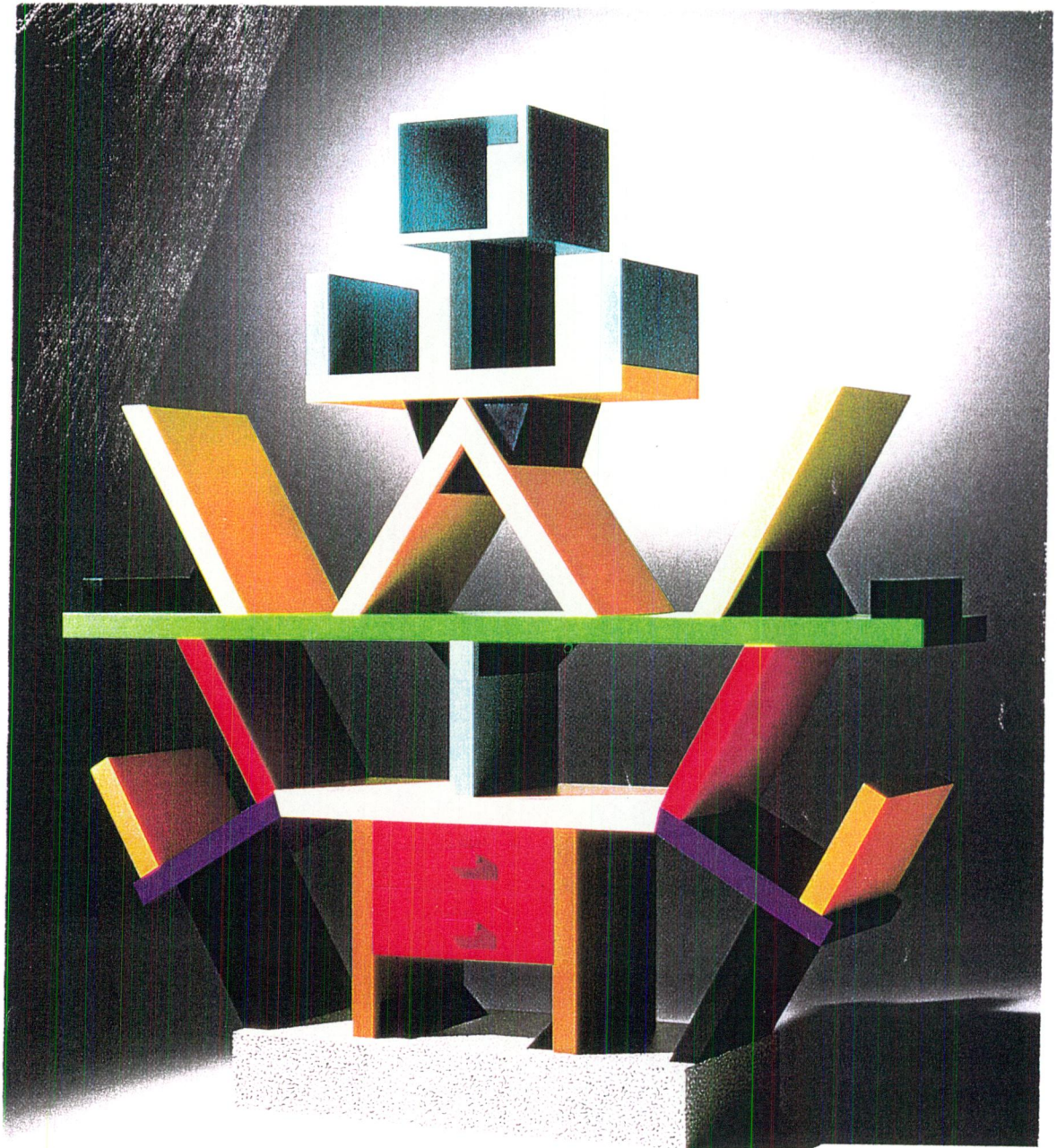


Fig. 9 The Carlton Bookcase designed by Ettore Sottsass in 1981

Memphis designers wanted their designs to question society and they wanted society to question themselves. The “Carlton” storage unit looks as if it could hold about a third as much as a far cheaper piece of equal size. Sottsass’ reason for designing this piece is to encourage Italian society to examine their attitudes toward possessions. He wanted society to ask themselves why they own as much as they do and whether they really need all that they have. This desire came directly from Memphis’ critical opposition to mass consumerism.

Memphis challenges us to question the way we live. Michele de Lucchi’s chair “First” was designed to create one big question mark (fig.10).

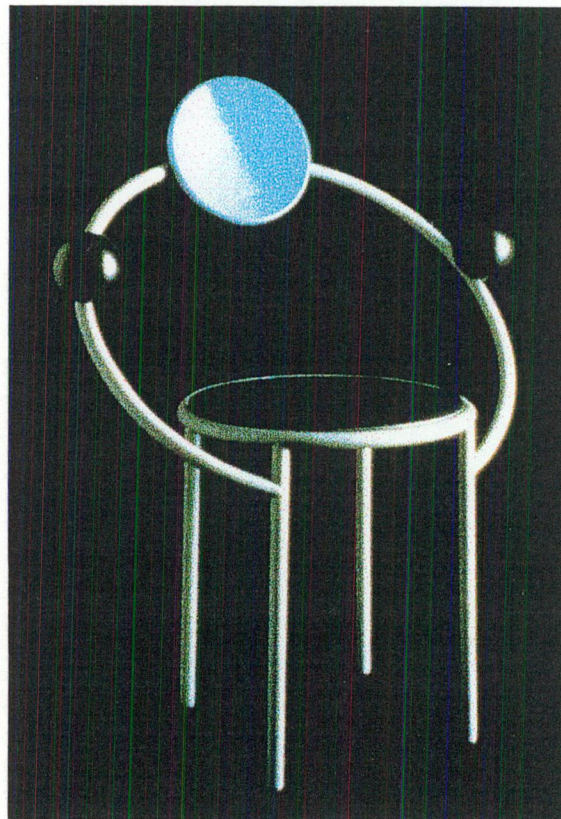


Fig.10 Michele de Luchi’s chair ‘First’, designed in 1983

De Lucchi designed this chair caring little for ergonomics, concentrating instead on the chair's appearance. Rather than tackling ergonomic problems the Memphis designers tackled what they saw as social problems. Indeed, to sit on a Memphis chair is to sit on a question mark. Sitting and being comfortable are the least of it. This design is thus interested in putting together a different domestic culture, in recovering a system of ties and functions that cannot be explained in purely ergonomic or functional terms, "that involve man in his relationship with his domestic landscape from a wider cultural and expressive point of view" (Bornsen-Holtmann, 1983, p.36). The Memphis objects turned the 20th century's categorical imperative for design of 'form follows function', upside down. The Memphis designers are more interested by far in finding and redefining meanings than in obtaining optimum performance from the object.

The effects of the anti-design theories

This radical new approach to design filtered from these "anti-design" groups and designers, into the various furniture manufacturing companies based throughout Italy. Zannotta's "Sacco" seat (1970), became one of the icons of the anti-design movement. Its complete flexibility and formlessness made it the perfect antidote to the static formalism of mainstream Italian furniture of the period. It was one of the few anti-design experiments to be put into production. The "Blow" chair and the "Joe Sofa" were all inspired by the same anti-formalism that was evident of the radical design movement. This introduction of an anti-commercial philosophy into

a commercial setting left the radical movement open for attack by critics.

Not surprisingly the movement was short lived, due to many factors. The movement onto the market place of many products designed under the “anti-design” theories caused great dissatisfaction among many of the designers involved. They believed that designing for the market place under the guise of “anti-design” compromised the objectives of the “anti-design” movement. The strain the massive economic recession of 1973 had on some of the anti-design groups, caused them to end experimentation and development. Many of these groups became disillusioned by their inability either to destroy or short-circuit the cycle of mass production and consumption. Many simply disintegrated or, worse still, they fell to the level that they despised and began to design products for mass consumption.

Language of the past

The early designers such as Munari and the Memphis group, were so preoccupied with the need to fulfil the emotional needs of humanity, that they paid little, and in some cases no attention to function and usability in their designs. Some of their designs went so far, that they many would describe them as being objects of art rather than objects for industry. Enzo Mari an Italian designer who currently holds the same philosophies as Memphis did in the 1980s, describes his designs under the category of ‘objects d’art’, and himself as an artist. “Someone said that I am the

conscience of design, but I am an artist and I work as an artist” (Capella, March 1997, p.60).

Today, Ettore Sottsass, at the age of 79, is still not content. His tireless desire to produce meanings and experiment with new ‘visual’ languages continues. His latest collection of ceramic objects, were inspired by the Chinese city of Xi’an, where there is a museum called the Forest of Stones. There he is said to have walked through hundred of carved black pillars arranged like trees and covered with ancient pictograms scratched into the surface long before the thought of writing had ever occurred. Sottsass said in reaction to these designs that;

I don’t understand Chinese, but I look at these signs without knowing about their meanings, and was moved by their mysterious existence, signs came before language. The early ones were not yet representation, but more like breathing – like poetry – an expression that cannot be held back (Pearlmam, March/April 1997, p.69).

From that experience Sottsass produced a series of 19 ceramic pieces (fig.11).

While many critics argue that this collection should be called art rather than design, Sottsass objects to calling them works of art. Each has an opening that could be used to hold flowers, so strictly defined, the pieces can be considered functional.

Sottsass, like all of his earlier designs still takes joy in subverting the conventional definition of functionality.

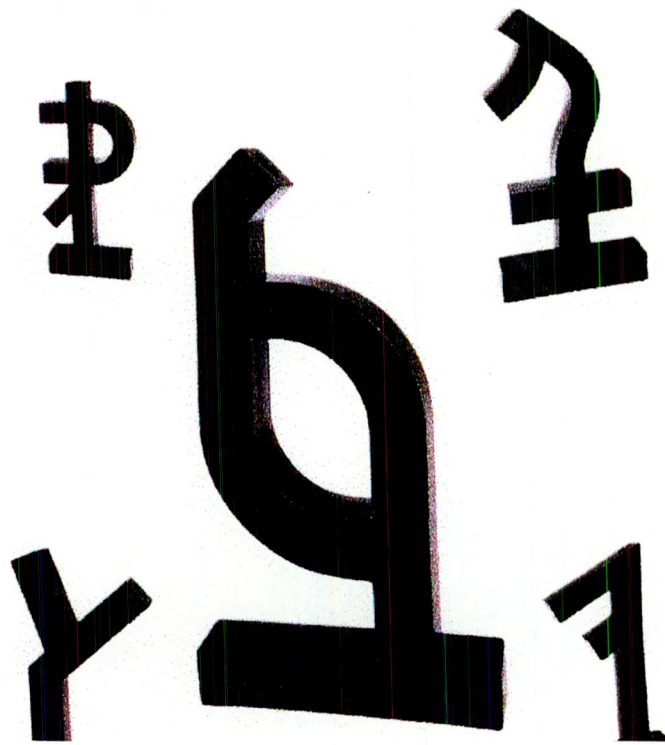


Fig.11 Sottsass' Ceramic pieces stand nearly three feet high, the monumental "signs" have no literal meaning. They are not characters from the Chinese language, but rather an alphabet invented by Sottsass.

However, while many of the avant-gard designers are still searching for a suitable language to communicate what they perceive as the needs of society, the movements long-term effect were not futile, as evidence of their impression can still be noted in present day Italian design. The advocates of this movement managed to begin and continue a debate on Italian design, a debate on form, style, art, design, the emotions, the senses, the visual, the tactile and the psychological impact of a designed product. This language began due to the development of mass production and the craft based producer's opposition to it. Memphis and the other anti-design groups followed in the same path laid down by the first opponents but they produced very different results. The language expressed was very much influenced by the art world, the desire of the designers to consider the emotional and psychological needs of society were paramount and the refusal to accept

industry, were all evident in the language expressed in designs up to the 1990s.

The following chapter will analyse whether this path is still being used, by examining some of the products on display in the Salone of 1997, or have Italian designers of the present day began to look elsewhere for their inspiration, style and most important language.

Chapter 3: The Salone del Mobile of 1997

The best way to examine whether Italian designers today, are still reacting against industry, by producing objects that can be classified more as art objects than pieces of industrial design, is by taking the pieces exhibited in Milan's largest furniture fair The Salone Del Mobile, of 1997. The week of the Milan fair is the most significant in the furniture designer's calendar. In a vast and sprawling show-ground housing more than twenty saloni, furniture companies, agents, designers and architects from all over the world exhibit and buy innovative concepts in modern design. This fair is one of the most widely known and talked about fairs in the world, and I was lucky enough to get to see it.

Throughout one week in April thousands of enthusiast's crowd through the Fiera di Milano show-grounds gates, eager to discover what new trends the year has brought forth. Peoples interest in the latest trends, their desires to sit on some of the most famous chairs in the world, and their general interest in Italian design, have all lead them to attend the fair. The very fact that these thousands of people have travelled to Milan to 'look' at the exhibits- says a lot in how highly regarded Italian design is world-wide.

The bustle and excitement evident within the show-grounds, also penetrates the city itself, where many designers choose to have alternative shows. Furniture fashion in Milan, especially its colour and form, is an indication of what may filter down to

1912

1. The first part of the paper is devoted to a general

discussion of the problem and the methods used.

2. The second part is devoted to a detailed

description of the experimental apparatus.

3. The third part contains the results of the

experiments and a comparison with the theoretical

predictions.

4. The fourth part is devoted to a discussion of the

conclusions and the prospects of further work.

5. The fifth part contains the references.

6. The sixth part is devoted to a summary of the

main results of the paper.

7. The seventh part contains the conclusions.

8. The eighth part is devoted to a discussion of the

results and the prospects of further work.

9. The ninth part contains the references.

10. The tenth part is devoted to a summary of the

main results of the paper.

11. The eleventh part contains the conclusions.

12. The twelfth part is devoted to a discussion of the

results and the prospects of further work.

13. The thirteenth part contains the references.

14. The fourteenth part is devoted to a summary of the

main results of the paper.

high street stores within a couple of years: it is to furniture what Paris is to fashion. This year the continuation of several directions observed in the past few years of the Salone have been carried along, and the emergence of several other directions for the future can also be seen. This year plastics, mainly in bright colours, have continued their ascent to claiming a dignified place in living rooms and showrooms, this ascent being pioneered by the Italians since the 1960s. Upholstered furniture, was displayed in abundance, with little changes in style and form from previous years. The one striking difference was the return of colour to all soft furnishings. Bright, sharp colours were used in harmonious and in some cases clashing combinations. The use of intelligent materials, along with newly developing technologies have caused a challenge to what currently exists on the market, while also giving an indication of the wide possibilities for their use in the future.

The Salone is the most-extravagant event held in Italy to promote Italian design since the first furniture show in 1961. It is essentially a furniture fair, but consistent with the Italian style, a furniture fair with a difference. The Salone of the present day has been termed an 'art' exhibition, in which Italy's leading designers display their latest creations of 'furniture art'. In its early years it was essentially a trade fair, but over the years, it became transformed more into an 'art', rather than a 'design' exhibition. This development is hardly surprising considering the ambivalence that existed towards the mass production industry, and products of 'industrial design'. The style of the Salone of the past based purely on artistic models, has begun to develop and change into a Salone based on crowd

pleasing and ever engulfing consumer based design. There is simply not a place for 'art' objects within the current climate of furniture and Industrial design in Italy and Europe. There is of course still a large share of companies producing what appeared to be 'art' objects. But the striking feeling is that the aim of these design groups is more to do with, cashing in on the stereotype of Italian design, than actually wanting to produce design of the sort Memphis and other 'anti-design' groups advocated.

The 1997 fair, the 36th edition shows clearly the shifting from Italian design companies reliance on art based display and products, to something of more substance, based instead on the needs of the consumer rather than the desires of the designer. This change has begun because Italian designers and manufacturers have begun to notice the shifting from Italy as the design centre of the world. Now, no longer can Italian designers rely on the age-old premise of 'if its Italian, its good design'. Consumers have begun to question Italian design, where previously they would have accepted it. They have begun to look further than Italy for well designed products, and some might agree that they have even begun to look further than Europe. Companies such as Ikea and Habitat have begun to bite into what previously had been the exclusive market share belonging to Italian companies. This change within consumer society has caused Italian designers and manufacturers to innovate where they never had to before. They now realise they must make the product functional as well as desirable. If the Salone of this year is anything to go by, they are making better and better products, and beginning to

gain footsteps in new markets. The first fair held in 1961, showed products that had little or no links with an international market, and export trade was virtually non-existent. The main reason for the staging of the show was done in an attempt to gain international recognition for Italian design and as a means for Italian companies to measure themselves against the international markets. This was the aim of the companies of the 1960s, whereas the companies of the 1990s have a new agenda, one of consumer penetration and satisfaction.

While over 2000 manufacturers and designers exhibit their products in the Fiera show grounds, an increasing number of designers are beginning to focus their attention on the energy of the city-centre, hiring premises for the duration of the Salone, using it as a showroom. There are many different reasons for these companies to be outside the official show-grounds. Some participants cannot afford the price of a stand. Others are not happy with the area assigned to them and prefer to stay outside rather than occupy a pavilion or site that does not match their products. Other firms such as Cassina, Cappellini and Driade, don't need to be at the official show as they have splendid premises of their own in the city centre. This has become the night-time events for the visiting designers and buyers, and has become almost as important in terms of sales as exhibiting in the Fiera. At these exclusive exhibitions, visitors are welcomed as a privileged guest. Between aperitifs and canapés in the showroom it is easier to do business, arrange an interview, and demonstrate the new products alongside the entire collection displayed in a perfectly controlled environment.

The designs, their influences, and their meanings

As is expected from Italian furniture, from chairs, tables, cupboards, to bookcases, the use of sinuous curves and forms is strikingly evident in the designs displayed in this year's show. In this Fair, possibly more so than any other, the use of curves and organic shapes is strikingly evident. The shapes and forms created, appear to be synonymous with the style of the avant-guard designers and artists. One such company who displayed designs of this nature was Driade, their main designer being Ross Lovegrove.

Ross Lovegrove, a British designer, begun designing for Driade in 1997. His first pieces for Driade appear to echo the style of the anti-design movement, but are in fact unique in their styling. The forms he achieves are organic in nature, resulting in his need for sophisticated technology to help him achieve his characteristic forms. His designs are highly communicative and quickly likeable, achieved by his use of tactile materials and subtle resemblance's to natural forms, the human body and sculpture. As Vanni Pasca has written, "his (Lovegrove's) work has the capacity to combine the organic sensuality of forms, the sobriety of form, and the freedom and efficiency of performance" (Pasca, July/August 1997, p.78).

Lovegrove's 'magic chair', particularly interested me (fig.12). Perhaps the name says it all, as the chair does appear to be quite magic.



Fig. 12 In the design of the Magic Chair, Lovegrove appears to be playing with allusions, and making us question the chairs stability, purpose, and not unlike that of Michele de Lucchi's chair "First", its meaning.

In this design, he is playing with allusions, and making us question the chairs, stability, purpose, and not unlike that of Michele de Lucchi's chair "First", its meaning. His use of soft curves, and almost sculptural form, makes the chair to appear more of an art object than that of a product of industrial design. But, surprise, surprise, this chair is actually one of the most comfortable, stable chairs I sat on during the whole of the Salone. Thus proving that Italian companies, (while not forgetting the strides their predecessors took in the establishment of a dominant Italian style) are now considering the whole person – the psychological and physical needs of humanity, and are therefore producing designs accordingly. Now the old premise of function following form is not altogether clear, in this design is function following form, or is it quite the opposite, is form following function?

Moroso a company that is synonymous for their use of colour and large curvaceous forms has this year produced a range of furniture that echoes the avant-guard. Their styling and colours, show the direct influence that the avant-guard movement had on them, and their desire to keep the Italian 'art' style alive and well. Their

desire to do this is to the detriment of the beliefs on manufacture the avant-guard designers held so dear. Like most other furniture companies in Italy, the influence of industry and the strong consumer market, has led these companies to use only parts of the Italian avant-guard aesthetic. This year Moroso held an exhibit entitled 'Entering a Comic' (fig. 13).



Fig.13 This exhibition involved entering the comic strip of a hotel lounge, where there is a collection of chairs and sofas that have robbed the scene of their entire colour. The designs shown, and the influences visible in the exhibition design, show that the designers are very much preoccupied with past styles, such as Anti-Design, and Pop Art.

Moroso, or more specifically Javier Mariscal, has created a furniture range, which is mainly sculptural, and conceptual in nature. This line of furniture seems to be designed with art movements from the past being the dominant factor in deciding the design of this line. It is very obviously derived from comic-strip art, the ingenuity of pop art and surrealist aggression. The borrowing of styles and influences from past movements has become increasingly common in many Italian designs of the present day. This is another language evident in many of the designs in this show, a language based on the past. The very fact that Italian designers are looking to the past for their inspiration, almost blatantly copying designs and judiciously recycling old ideas, leads me to wonder if the well known Italian ingenuity and style has burned itself out.

One such group, whose designs are obviously influenced by the past, is Zerodesigno. Its most famous designers are De Pas, D'Urbino, Lomazzi, advocates of the past avant-guard style, so not surprisingly these designers would rather see design firmly rooted in the past aesthetic, than embracing a new one. The design of their chair 'Jessica' (Fig. 14), is very obviously influenced by Michele di Luchi's chair 'First'. The rounded backrest and seat give the impression that these designs are in fact designs of the Memphis age designed by none other than Michele di Luchi.



Fig. 14 “Jessica”, designed by De Pas, D’Urbino, Lomazzi, Zerodesigno, 1997

Another chair which caught my attention, in terms of past influences, is the chair named 'Volare' (fig.15), which is strikingly similar to designs by Harry Bertoia, Diamond-lattice chair (1952) (fig.16), being one of them.

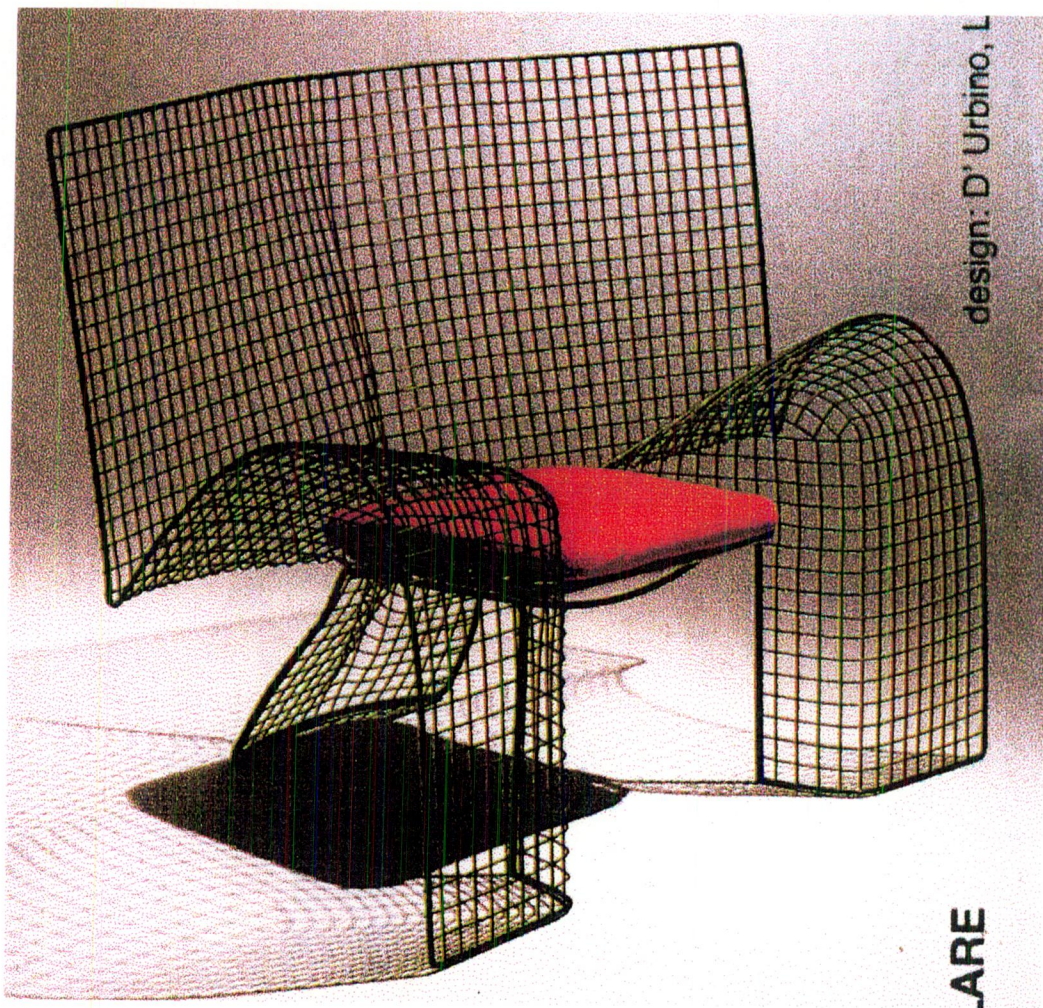


Fig.15 “Volare”, De Pas, D’Urbino, Lomazzi, Zerodesigno, 1997

'Volare' appears to in fact be a sculptural piece, like that of Bertoia's, showing this designers reliance on tried and tested formula's and languages, rather than the establishment of a new language or style. This sculptural piece echoing the aesthetic of the 1950's consists of air rather than solid material, leaves a lot to be desired in terms of function and current consumer needs.

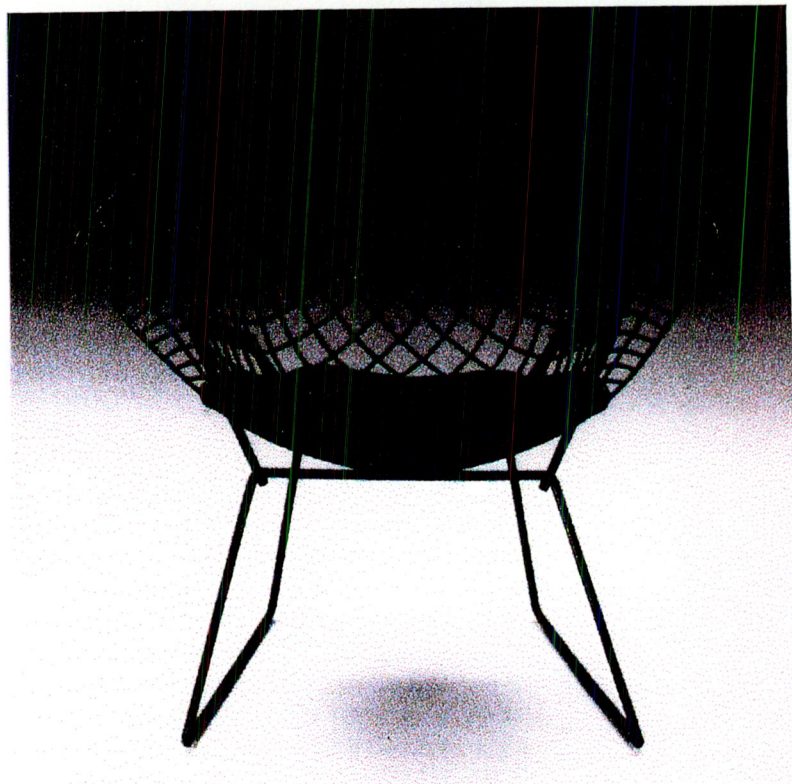


Fig.16 Harry Bertoia's Diamond-Lattice chair, 1952

One thing to note in looking at the supposedly 'new Italian style' and language developing, is that a lot of what is being designed, is designed by designers from outside Italy. Designers such as Ross Lovegrove, a British designer and Javier Mariscal, a Spanish designer are just two example of designers that are currently designing for Italian firms. This highlights a growing trend among Italian furniture

manufacturers. These companies are increasingly looking abroad for new talents to continue the philosophy of 'Italian' design thinking that Italian designers had become synonymous for. This philosophy used art as its inspiration, and the emotions as its guiding force. Why must these Italian companies look abroad for designers to continue the 'Italian style'? Are the new generation of designers lacking the quintessential flair, ingenuity, innovation and distinctive style synonymous with designers of the past? I don't believe this is the reason, but I do believe that this may be the cause. Previously, Italian designers, produced designs that were pure essays in styling, with their main emphasis being placed on the form of the object, mainly based on artistic models and organic styles. Their consideration for the function of the product, was practically non-existent, and to me, this appears to be the reason for the decline in the number of Italian designers actually producing Italian designs. Italian companies, while wanting their designs to echo the distinctive 'Italian style', have also come to realise the importance of function, and its selling factor in the overly saturated international market. The equal emphasis on styling and function has existed in the design schools throughout Britain, Germany and many other European schools since the 1900s. The situation in Italian education has been strikingly different, with the formation of an Industrial design course only being set up in the 1980s. Previously, any designers which emerged in Italy had either architectural or art based education. Previously taught as a subject under the architecture course, it has now been given a status of its own, realising the need to train designers fully, rather than as a complement to the study of architecture.

While this educational grounding in Industrial Design, studied through architecture did lead to the formation of the distinctive Italian style, it has left a lot to be desired in the current social and cultural situation. The future generations of designers, currently being trained throughout Italy, are being trained to consider the social, cultural and functional aspects of designing for the new millennium.

The problems of the 1990s

A growing concern for designers in the years approaching the millennium, is the ever-decreasing size of living space, and the developing nomadic nature of society. This change in society has created a need for furniture that is light, inconspicuous and mobile. This need has been translated into a language that epitomises and uses forms and materials to convey space and freedom. Italian designers have recognised the growing need to accommodate people in the smaller spaces in our post-modern urban habitats. Italian designers have approached this problem from many different perspectives.

The development in the use of inflatable furniture has caused resurgence in the inflatable aesthetic born in the 1960s, while still addressing the problem of space, mobility and freedom. The Blow armchair by De Pas, D'Urbino and Lomazzi has accustomed us to thinking of inflatable furniture as something from a bygone age, but this furniture, address the concerns of space and mobility of the 1990s. The

language expressed by this furniture has the power to summarise a free idea of living, based on weightless, mobile, ephemeral things. Currently experiments and research is taking place within Italian companies such as MCA and partners (fig. 17), but as of yet few Italian companies have produced any inflatable products, since their use in the 1960s.



Fig.17 MCA & Partners designed this baby holder which can be used in water as a support and float for the baby. This innovative design gives an indication of the wide possibilities available for the expanding inflatable market.

Two companies that has taken the lead in the production of numerous pieces of inflatable furniture is the very aptly named company 'Inflate', and the other British company Euro lounge. While these companies are not Italian firms, they both were exhibiting in two of the many showrooms scattered throughout Milan during the week of the Salone. The four designers involved in the Inflate company began their experiments in 1994, their aim being to dispel the frame surrounding plastic and inflatable goods as ones of no value, giving them a tangible value in terms of mobility, versatility and lightness. These designers want to apply their philosophy of inflatables to the ever-increasing market sector, of consumer's who are living in small spaces and the emerging nomads of contemporary life. Their products are highly versatile, evident in the display of their products in their showrooms. Tom Dixon's 'Jack', is a "multi-purpose artefact, a lamp-cum-article of furniture conspicuous for its originality" (Capella, July/August, 1997, p.79) (fig.18).

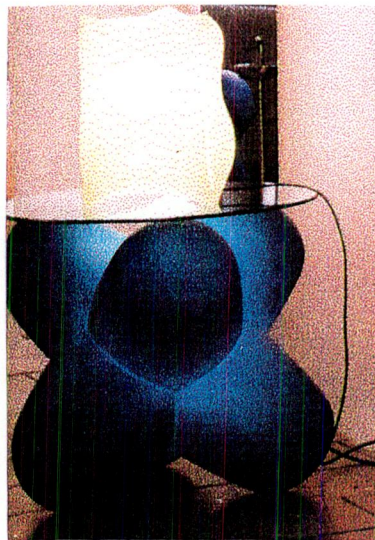


Fig.18 The multi-purpose "Jack", used as a table

The 'Jack' appears to be quite fragile, but closer examination dispels this idea, proving that the object is actually quite solid, due to the use of the material pigmented polyethylene. The rigidity of the product, allows it to be highly versatile, allowing it to be used as a chair or, with the added use of a sheet of glass, to transform it into a coffee, or bedside table. The designers christened the product 'Jack', mimicking the concept of the children's game Jack-in-the-box, where a clown pops out of a box when opened. This is used, as a metaphor for Dixon's ideas of design, believing it is time for design to rediscover its innocent playful side.

The use of PVA and other polyethylene based materials, highlights a growing trend among designers to use materials that are not only light, but also materials that also have the appearance of being low in weight (Fig. 19). This approach while not tackling the problem of storage considers the problems of space and mobility. While still producing products of substantial size, designers are playing more on the psychological associations between transparency, resulting in the allusion of apparently extra space. This use of transparent material is used as a means of



Fig.19 Products designed by Inflate, which express lightness and mobility, two problems facing society of the 1990s.

tackling the problem of space in our decreasing living environment giving the allusion of products that are sensed but not revealed. This language is near in certain respects, to the language of minimalism, where objects are rarefied in their absolute essentiality and the materials play the leading role.

The need for convertible furniture has arisen due to the small size of living space, resulting in the need for rooms to be multifunctional. The revised version of the chaise lounge, very much in vogue in the first two decades of this century, is transformed by Vico Magistretti's approach to its design. The piece is in fact light and folding, ideally suited to emergency, travel or temporary conditions. His chaise lounge, named 'Charlotte' (fig.20), is a combined bed and chaise-lounge,

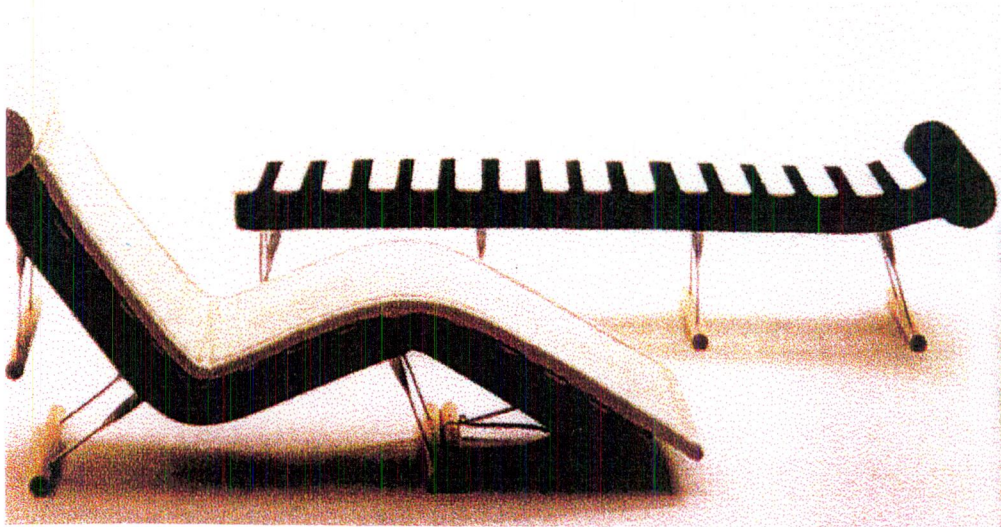


Fig.20 This chaise lounge, while an old concept, has been brought into the 1990s, addressing the problems of society today, a society whose concerns are with foldable, stackable, multi-functional and space-saving furniture.

The forms Magistretti concerns himself with in this design, are synonymous with all his designs since he began designing in the 1940s. His style is simple, using clean, crisp lines to bestow elegance on all his creations. Vico Magistretti was one of the designers who while not welcoming the introduction of mass production, used its language in his designs. While other designers revolted against the rational style of the machine age, Magistretti embraced it, mainly because it was in tune with his own philosophy of design, that of simplicity, and as he says himself, "For me poetry is never in the decoration" (Romanelli, January 1995, p. 85). The very fact that Magistretti used a form and design created first in the 1900s stresses his will for historical continuity in newly developing furniture design.

One of the design projects I did while in the Politecnico, was the design of a piece of mobile furniture. So it was with little surprise that I noticed the amount of furniture with an emphasis on mobility and storage. The 'Umbrellachair' (fig.21), designed by Gaetano Pesce, is very obviously a piece of mobile furniture, even its name describes its function. This design is a very innovative, quirky, way of tackling the problem of mobile furniture. This piece is strongly playful, in keeping with the style developed by many of Zerodesigns Italian predecessors, such as Alessi presently, and the work of Memphis and Alchemia, previously. This chair has been included in an exhibition held in Copenhagen, over the last few months. It is exhibited along with many other designs under the auspicious title of "Tool Toys". This exhibition has been based on a concept and definition brainstormed by a Canadian designer by the name of Alexander Manu. Manu, believed that a new



Fig.21 The 'Umbrellachair' is not a chair for use as an everyday seat, but rather a chair that can be easily stored, and carried, for use when no other seating is available. It is an interesting and innovative way of tackling the problem of the ever decreasing living environment.

style of designing was emerging in which products are a cross between a work tool and a game, the world of education and that of entertainment, not unlike the products currently being design for Alessi under the 'Officina' label.

The age-old stackable chair, showed many new variations on the old theme. The use of the stackable chair is particularly applicable, in the current living environment of small spaces. The use of bright, transparent materials coupled with tubular steel were the most commonly used materials in the majority of stackable chairs on show. The importance of the stackable chair was emphasised this year,

by the sculptural instillation of stackable chairs, commissioned by the magazine Domus, and on view in via Manzoni. The magazine ran a competition among some of the best known designers in Italy, choosing the project submitted by Ron Arad, for an instillation which was artistic but closely related to industry. They called this instillation the Domus Totem (fig.22).

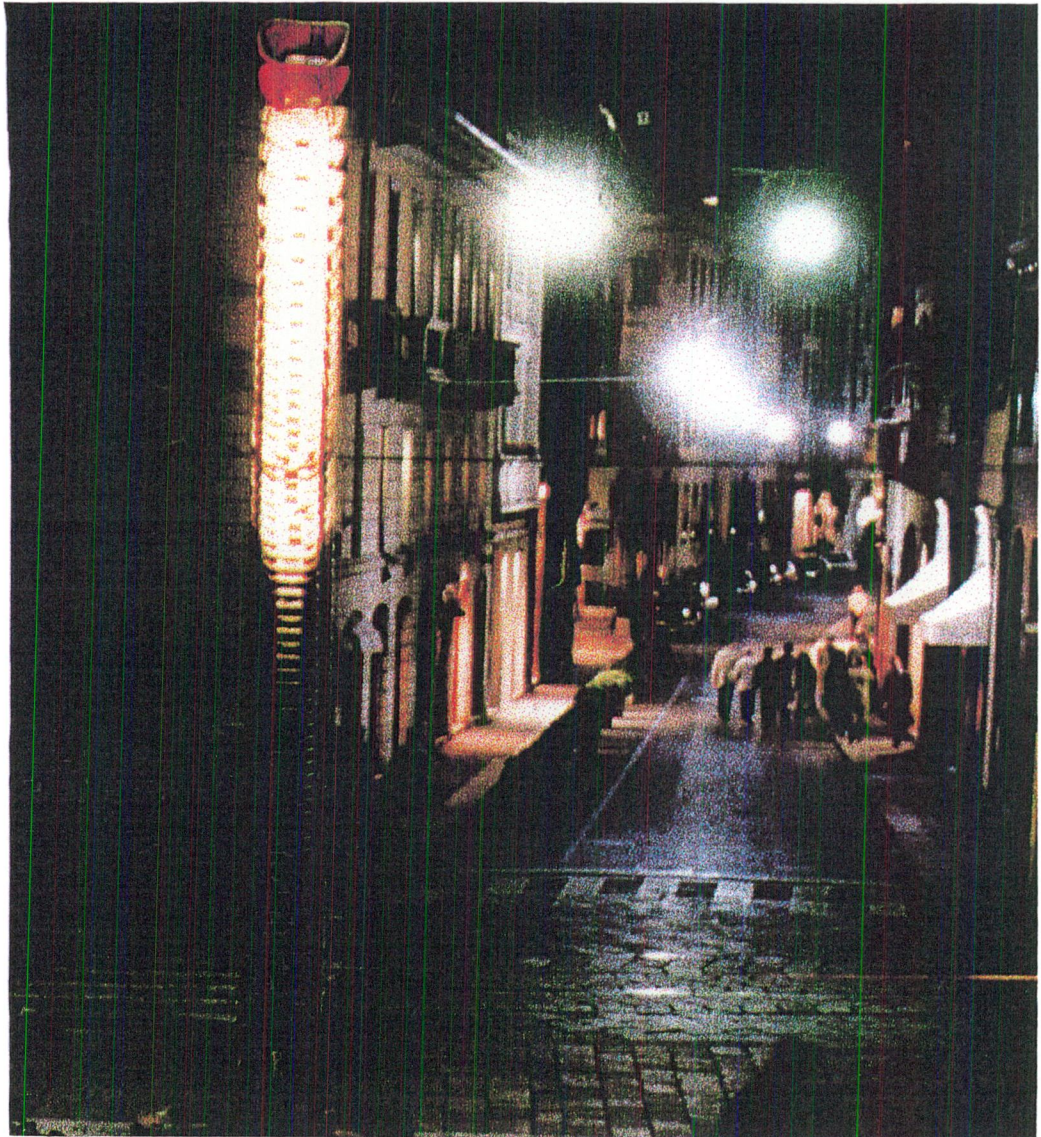


Fig.22 The Domus Totem 1997: a modern alliance between the worlds of Art and Industry

This sculpture was used both as an information and advertisement tower for the magazine Domus, while also proving how innovative and technically aware many of Italy's current designers are. The structure was about 9 metres high, consisting solely of stackable chairs, welded on top of each other. The chair used in the instillation was as Arad said, 'A discovery, not a design' (fig.23). All development for the chair was done on a computer, later developing into the correct shape with the use of scale models. The chair is made from sheet aluminium, which Arad treats using a process originated in the aerospace industry, achieving great strength and lightness. This manufacturing process starts "with a 3mm sheet of aluminium, measuring 1m x 1m. This is suction cast to provide the desired volume and rigidity" (Krizia, July/August 1997, p.87).

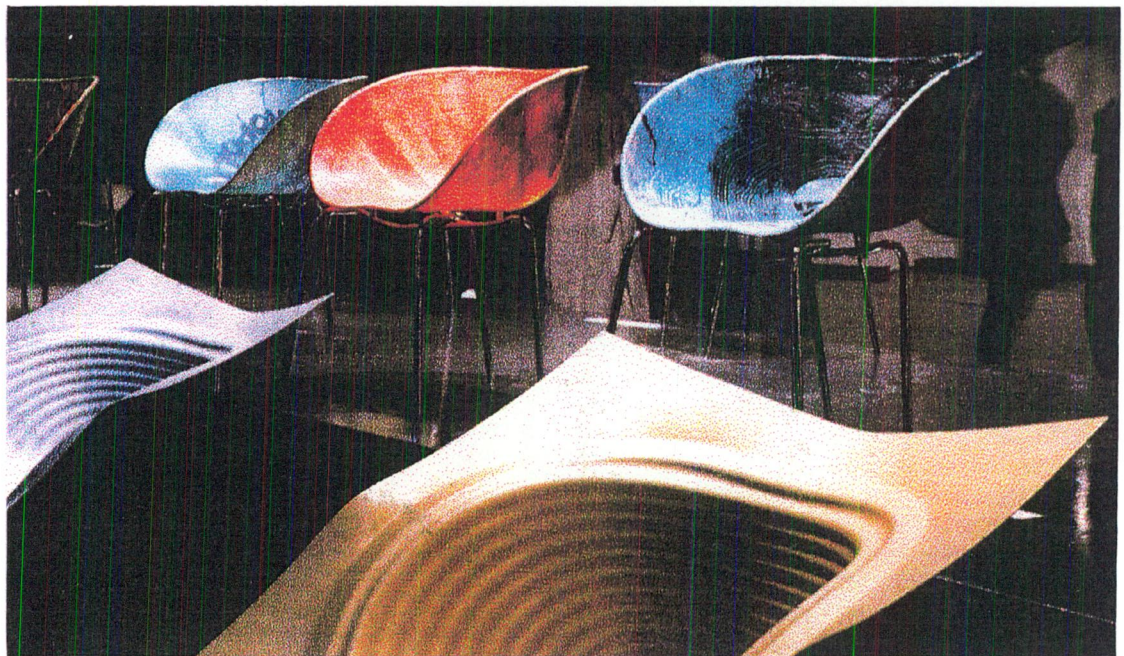
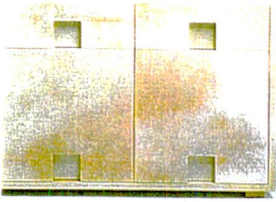


Fig.23 Ron Arads winning entry in the stackable chair competition run by Domus. His innovative use of materials and manufacturing techniques, gives us an indication of what type of production is to come in the future.

The general trend among Italian designers today, is to solve problems such as space and mobility, rather than following the plight adopted by their predecessors; that of emphasising problems in society. However, there are still some designers who think that emphasising social problems in design is more important than solving them. One such designer is Marcel Wanders, a Dutch designer who designed the 'Knotted Chair' for Cappellini (fig.24). The Knotted chair, while appearing to address the problem of space by using materials with little substance, was not the motive this designer used when designing the knotted chair. Instead, he wanted to highlight his growing concern over societies longing for newness, and hatred of age. He questions the concept of youth associated with beauty and age associated with ugliness. This chair has been designed to look the same in ten years time, as the day it was bought. He feels that many designers do not consider what their products will look like after use and general ageing, preferring to see them only in the light of youth, sparkling with newness on the shop shelves. Considering we are living in the age of cosmetic surgery and genetic cloning, where ugliness is prohibited, and all irregularities are smoothed away, the concerns highlighted by Wanders are very real, and frighteningly true. The resulting conclusion for this disregard of age and pursuit of beauty, is the ultimate tyranny of the average, a universal cultural levelling. According to Wanders, "Our culture only has eyes for the new. Things aren't permitted to get old, or they must age prettily. Simply ageing is no longer good enough. This is pure disrespect for age"(Wanders, July/August 1997, pg.99). In his 'knotted chair', he applies old macramé technique using high-tech fibre's. This results in giving the chair a comfortably familiar look.



ipellini: mobile Pergamena, design Mauro Mori.

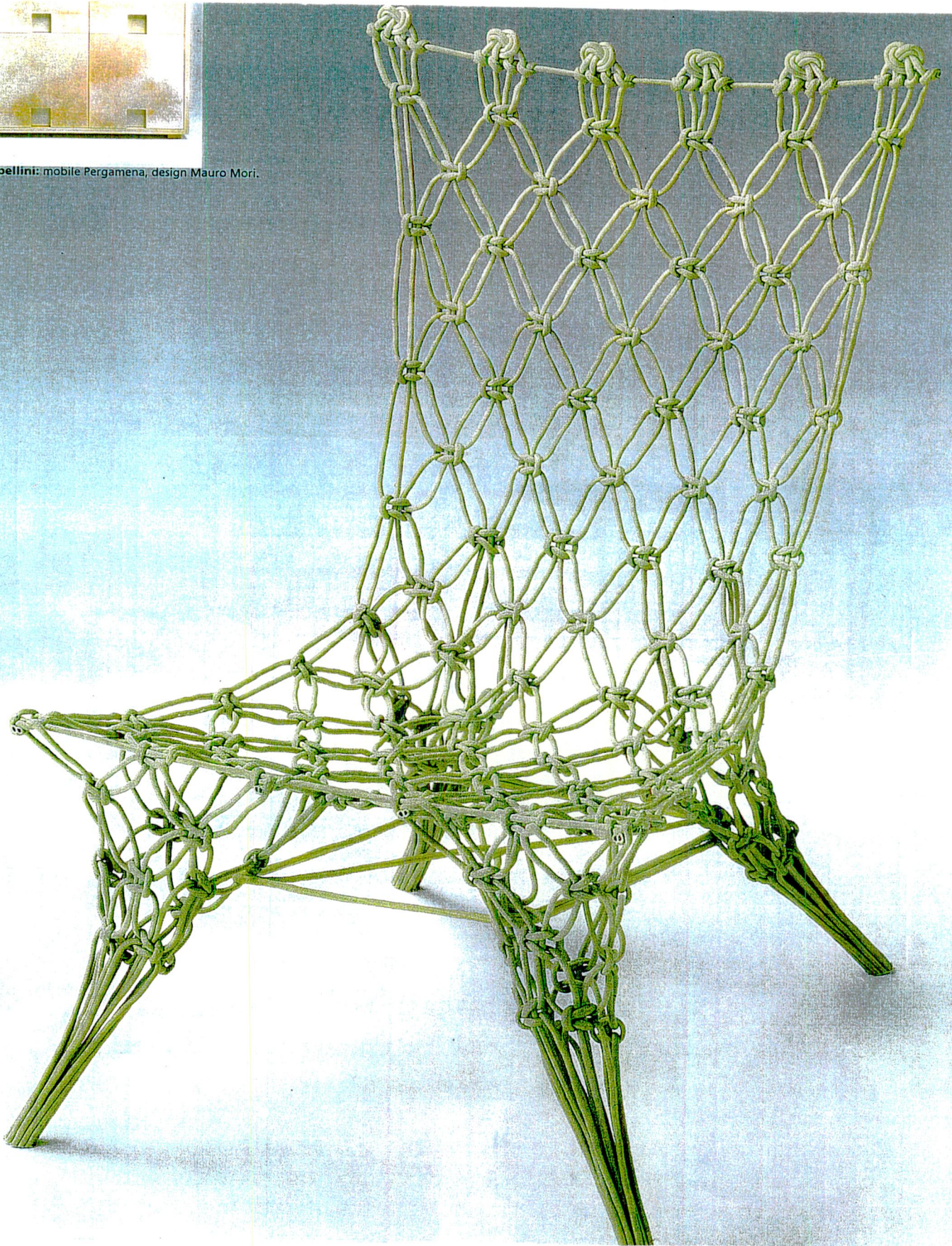


Fig.24 Wander adds metaphors of age to his chair, attempting to question the accepted concept of beauty.

The future Italian language?

The language of Italian design has been mainly visual, evident in designs from the 1900s to designs exhibited in the present day. The languages used, while varied in their own way, all relied on sight to give them their meaning and communicate messages from one person to another. Approaching the Millennium, a need to consider the whole person, all the senses, has become increasingly important in this technological era. The increase in technology has caused a break down in human interaction, relying instead on E-mail, the Internet, fax machines and even the telephone. Some designers are beginning to realise the importance of human interaction, and while they cannot change the course of technology, many have begun to attempt to make people feel less alienated from their surroundings. They have tried to achieve this by designing products that interact with all the senses of the person; products that fulfil peoples emotional, psychological, and physiological needs.

Hal, a piece of furniture exhibited in this years Salone, gives evidence of the type of products that are being designed to cope with the lack of interaction between people, and the saturation of the living environment by technology. This 'chair' (fig.25) is very obviously looking to the future, using science fiction films as its influence. The name of this product is the same as the computer which dominated the action in the film, '2001, a Space Odyssey'. Marc Sadler, designing for Cassina, says, "Hal is a machine modelled on man, he adapts to people's attitudes,

he moves as they move. Hal lives with people, becoming part of their daily environment and helps them to live better” (Saddler, July/August 1997, p.88).

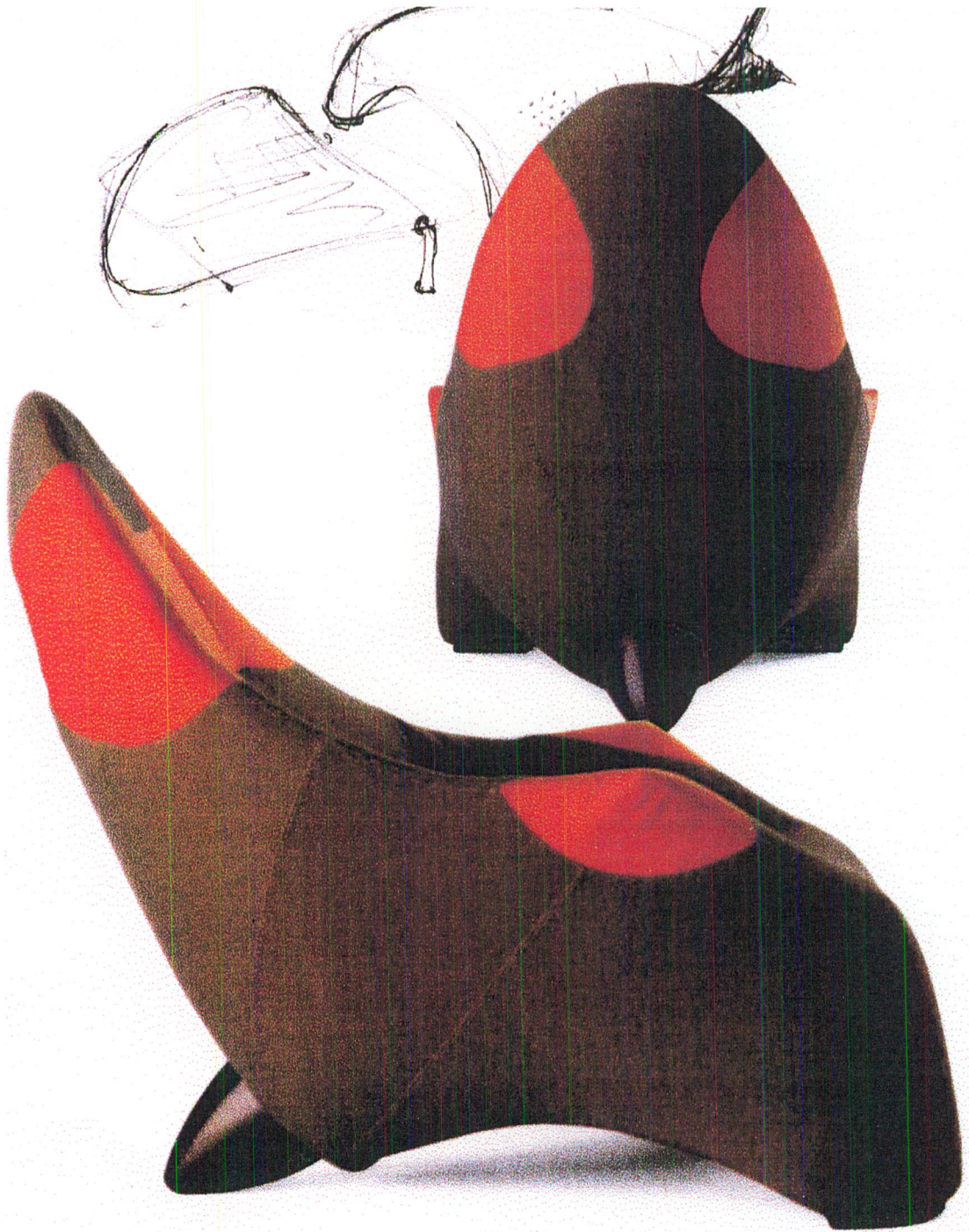


Fig.25 Hal, the machine modelled on man?

This new trend in product design and the fact that the designer believes that an inanimate object can make a person's life 'better', is increasingly disturbing, reminding us of the destruction we are creating within our very lives. The destruction of interaction, relationships, society and ultimately culture as we know it. This chair is expressing a language very different from anything Italian designers have ever done before. The one aspect this chair has succeeded to highlight, is the extent to which technology, (much to the despair of the early designers opposed to industry and technology) has slowly begun to invade our living environment and become our personal companion. This draws the conclusion that humans no longer need to interact with each other, in order to be psychologically and emotionally fulfilled. Hal may be one of the first attempts to make the person completely self-reliant, thus introducing a new phase in social and cultural development. Hal, while technologically innovative, also is innovative in terms of its form, expressing a daring cross between hybrid, organic and almost brutal form, giving evidence of the future of a possible new epoch in furniture design and evolution.

CHAPTER 4: Humanising our environment.

The development of technology and the dehumanising of the living environment has caused many designers to be concerned over the development of society and culture. The idiom of the home office, first created in the 1950s, has managed to be the driving force in this dehumanisation. The designers who first introduce the concept of the home office, were met with much ambivalence initially. The main reason for this was that products such as typewriters reflected the work environment, looking like work machines rather than items to be placed in the home. This was the first aspect that design companies such as Olivetti changed in an attempt to integrate the office into the home. The results were slim, single casings around the actual components, finishing the outer skin in light colours instead of the customary black of office machines. This development paved the way for all forms of technology to invade the home environment, an environment that initially was a place of peace, rest and interaction, and is now a breeding ground for isolation, detachment and the inevitable dehumanisation of society. Designers throughout the world have seen this development and are designing products to try and bring the person more in touch with their senses, in an attempt to satisfy the innate needs of all humans, that of interaction, touch, smell and sight.

The welfare of humans has always been a concern for Italian designers since the beginning of mechanization. As we have seen in the previous chapters many of these design groups burned themselves out, but only one Italian design group has

developed and changed with the changing social and cultural situations arising since the 1900s. That design group is Alessi, begun in the early 1900s, continues right up to the present day. The fact that Alessi developed with society and its changes, is the very reason for its survival. Alessi holds the same philosophy, that of 'bring poetry to life', as the other design groups developed in opposition to mass production, the only difference being Alessi survived and they did not. They refused to move with society, expecting society to follow their lead, this being a rather egotistical approach to solving the problem, with the unsurprising consequences of their disintegration.

Alessi

The language of Alessi, while trying to communicate the same message to society as the avant-guard groups, used a very different and distinct language of their own. The language of Alessi products is one of fun, optimism, happiness and creativity. The development of this language began in the 1930s and has been constantly developed since that time. The language used transforms even the most mundane object into an instrument of play. The designs which emerge from the Alessi 'design factory', all tell a particular story, and creates an imaginary world which endears us to recognize the human aspect of the product. Alessi recognizes that society is surrounded by a world of anonymous objects, and this in turn lends a helping hand to the alienation of society. The lack of alienation experienced from Alessi products, makes our acceptance of the product easy, and in turn allows the product to become part of our lives. While this aspect does not help in alleviating

the problem of human segregation, it does help in satisfying the emotional and psychological needs of humans, the need for someone to relate to, or in this case something to relate to. Alessi, rather than reject the presence of consumerism works with it, producing objects that “play with our dreams and fetishes, to smile at them and to encourage the integration of consumerism with our consciences” (Gabra-Liddell, 1994, p.127).

The materials used by Alessi, started off being primarily nickel and silver. The development of the steel industry in Italy in the 1940s paved the way for the use of steel in Alessi designs since the 1950s, to the present day. The products designed and produced in the 1920s are of the same high standard and craftsmanship as products designed and produced by Alessi in the present day. Products such as the best selling kettle by American Architect Michael Graves, stand testament to the high degree of craftsmanship and production present in the Alessi factory (fig.26).

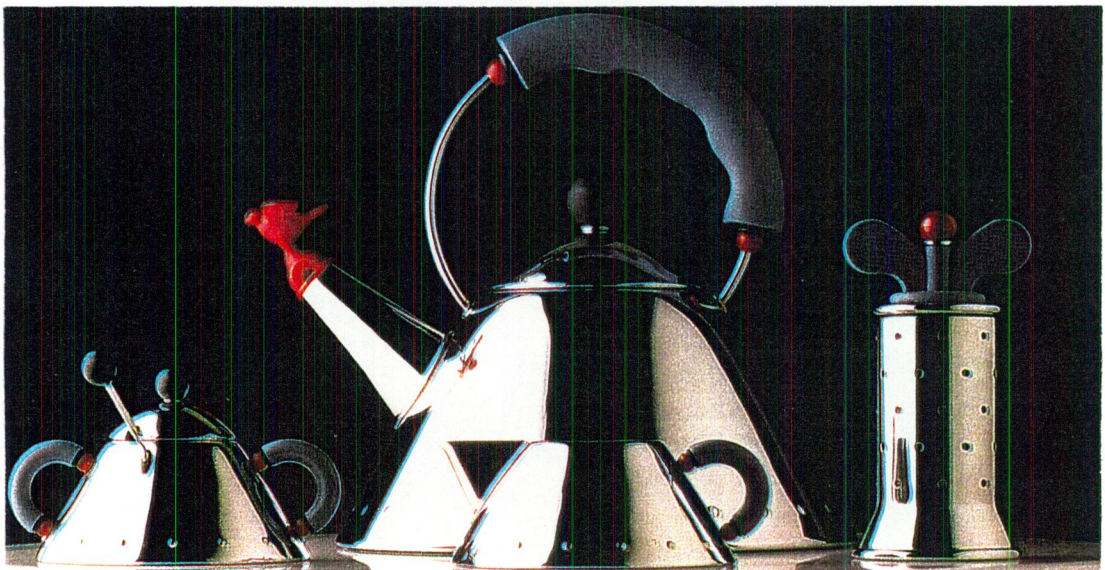


Fig.26 Alessi steel kitchen products, including Michael Graves kettle, characterised by the bird perched on the spout of the kettle.

The development of the plastics industry in the 1960s, enabled Alessi to use plastics in the design and development of many products since the 1970s. The use of plastics was to become one of the best-known and most commonly associated materials with Alessi in their distinctive 'Officina Alessi', line. The birth of this new line of products began in 1983, for the purpose of research and production of objects which, exploited the more artisan oriented side of the Alessi company. This development needed avant-guard designers to carry out the process, Alessandro Mendini in collaboration with Ettore Sottsass, were to be the guiding forces behind this new development, they were later joined by Michael Graves and Philippe Starck. Plastics were not the only material to be used in the Officina line, as the true course of experimentation is never complete with the use of only one material; Metal, wood and ceramic's were also used in the development of the new line. The playful, organic forms evident in the design of many of the products in the Officina line, give the products a life of their own, a life ascribed to the products by the designer (fig.27).

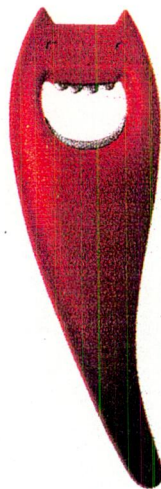


Fig.27 A simple bottle opener is given a life, through the animated features attributed to it by the designer

The use of ironies and metaphors are placed within the life of the products, assigning the product with an almost paradoxical life. The latest development within the Alessi Research Center is related to the creation of objects called 'memory containers'. This research is relatively unexplored, and involves recognition of the languages needed to communicate with all the senses, not just the visual as was previously only considered. This research, while relatively unexplored had already been started at the Dutch Research Center, of Philips.

The development of products called emotion containers, within Philips, are similar to those currently being researched within Alessi. These are small multimedia products, to be given as special presents (fig.28). They have a small screen, a speaker and a scent compartment. This is one of the first products to consider senses other than the visual. Due to the very alienating nature of technological products, this is a move in the right direction in integrating people and their environment. The screen in the unit can show still images, or a video clip with sound, accomplishing on a higher level, essentially what photographs achieve today. The emotion containers are made of rich materials with the intention of being cherished by the recipient. They carry messages, like the avant-guard products that came before them, but in a more personal and significant way. This is just one of the products being produced by the Philips Corporate Design (PCD), department in the Netherlands.

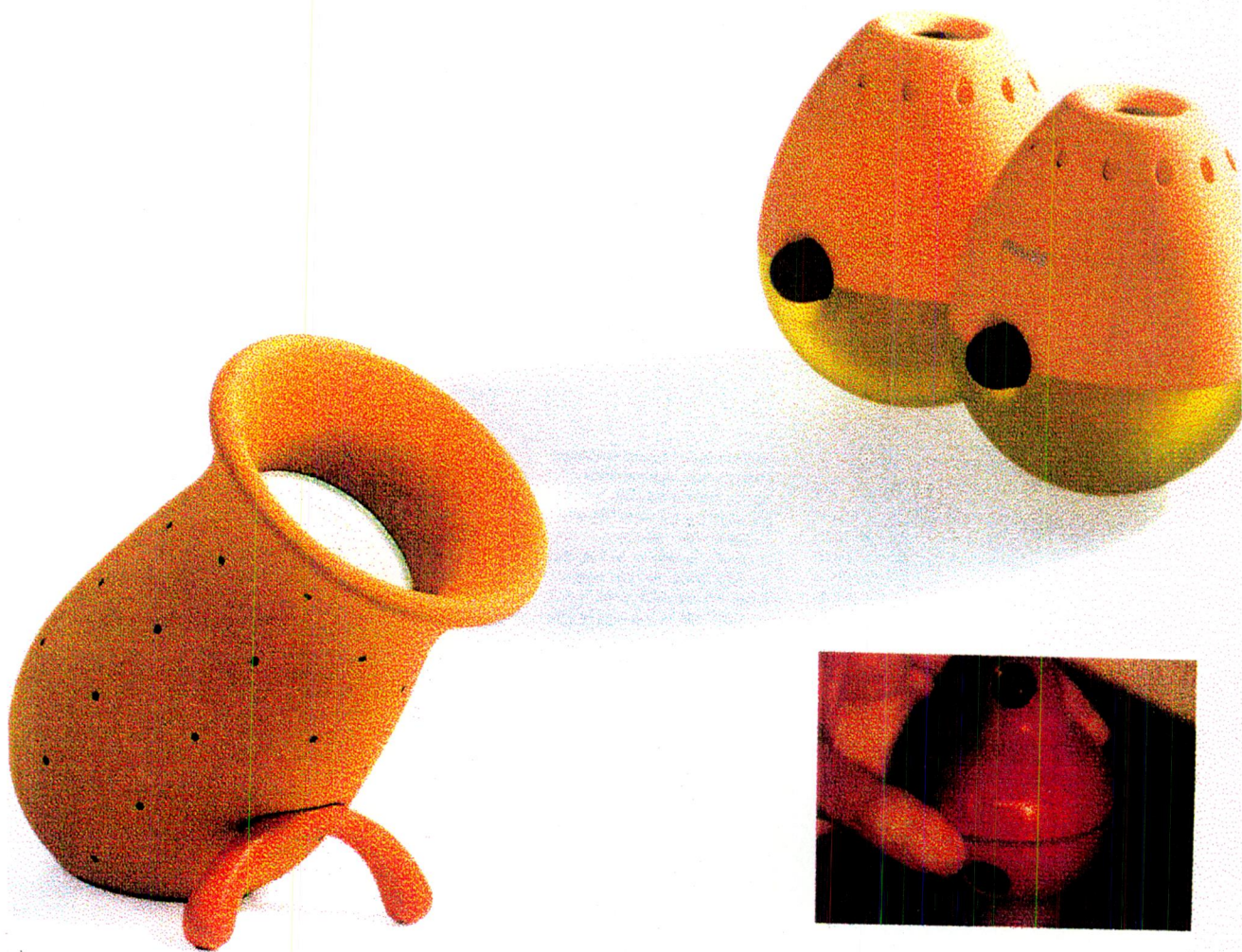


Fig.28 Emotion containers, designed by Philips research team, attempt to stimulate all the senses in evoking memories and feelings.

Philips

Interestingly, since 1991 it is an Italian, Stefano Marzano that has headed the research center in Philips. The main emphasis of research is geared towards the actual needs of the consumer, rather than the perceived needs, and designing products intended to reduce alienation created in the 1970s between the consumer and technology. The researchers in this center, question the need for complex, often excessive options in many of the technologically based products that surround us. The ask, “who actually uses, let alone really knows about every possible option

offered by a video-recorder, stereo, washing-machine or television set?" (Zanco, December 1997, p.67). The simplification of controls and buttons, combined with increasingly sophisticated technology, is evident in the 'Pull-out travel guide'. The product is to aid drivers, giving them access to complex maps and routes, and access to information related to the particular town or place the driver is driving to. The product comprises of a small, compact flexible screen that become rigid when full opened. Using the finger to interact with the display the passenger can access the map and decides new routes, acquires information on museums, or even on restaurants in the area (fig.29).

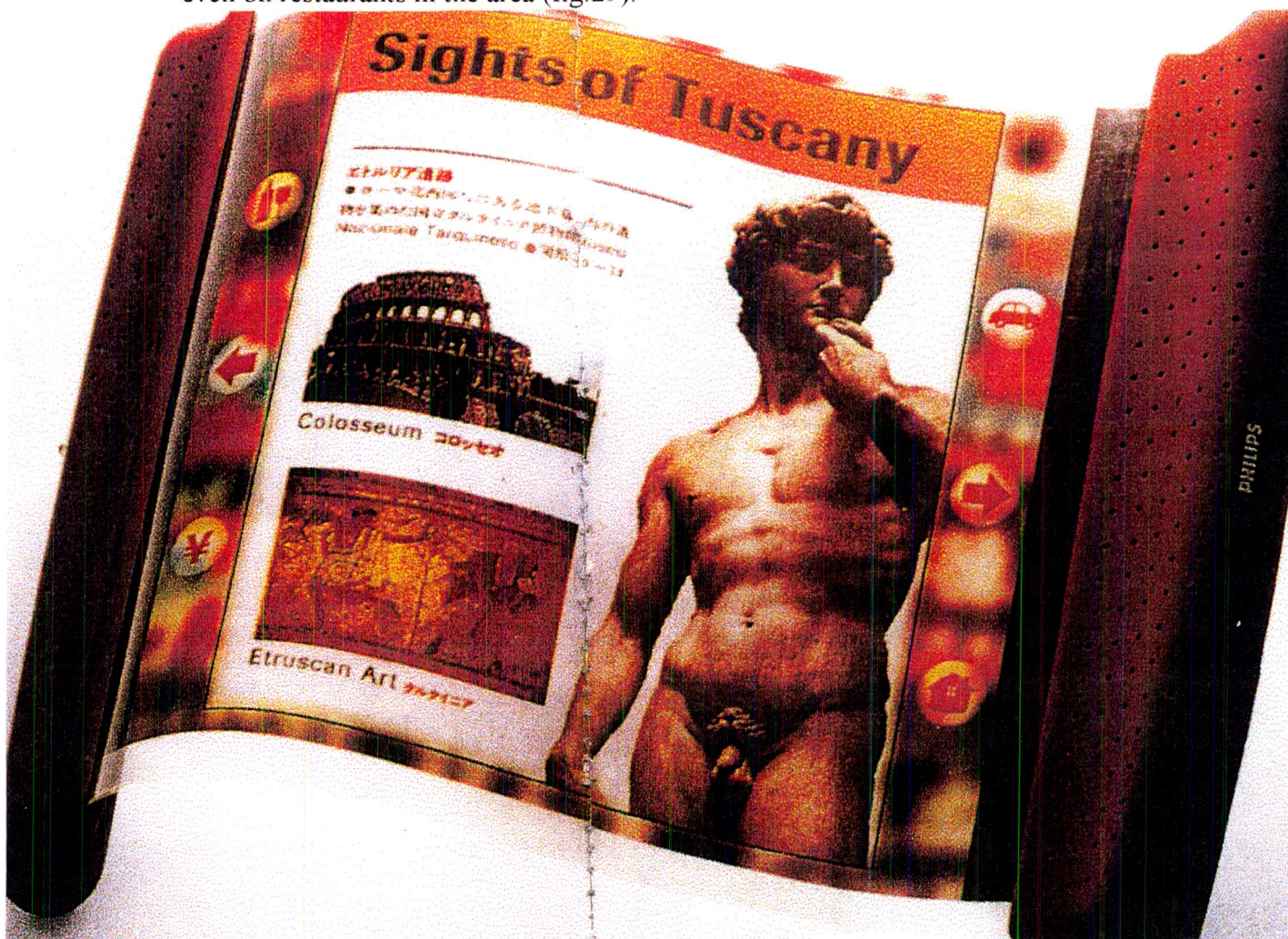


Fig.29 Philips interactive Map and Route Planner

What these designers are essentially doing is actually considering the needs of the consumer, rather than just assuming them. The 1970s premise of the greater the technology the better the product has disintegrated, leaving instead the need for simplicity and consideration of the essentials within the design. The job of these designers is to try and reconcile the increasingly complex technology available, with the desires, aspirations, values and necessities of a public characterized by changeable and ever evolving reactions. This desire to meet the needs of society is achieved through actually questioning the everyday person on the street. This in turn results in a design partly created by the user themselves, with input where needed from designers and technicians. The products which these designers have created in an attempt to make the living environment more user friendly are on display at the Philips Competence Center in Eindhoven. The concepts on show, comprises of 60 behavioral concepts, objects and scenarios, which are divided into four areas of concern: private spaces, the home, public areas, and mobility. The main theme running throughout is an emphasis on communication, and the need for interaction between the person using the product and the product helping the person. A product that encourages a high level of interaction between humans and technology is evident in the design of small robots, named Ludic (fig.30). These are small, 'unpredictable' electronic friends, which respond to voice commands, touching and gestures. Through sensors they begin to learn about their surroundings, its occupants and their physical presence. They can be taught to accomplish simple tasks, possibly replacing the need for a pet, and through this interrelationship they can become objects of affection, holding a position, not

unlike that which is held by domestic animals today.

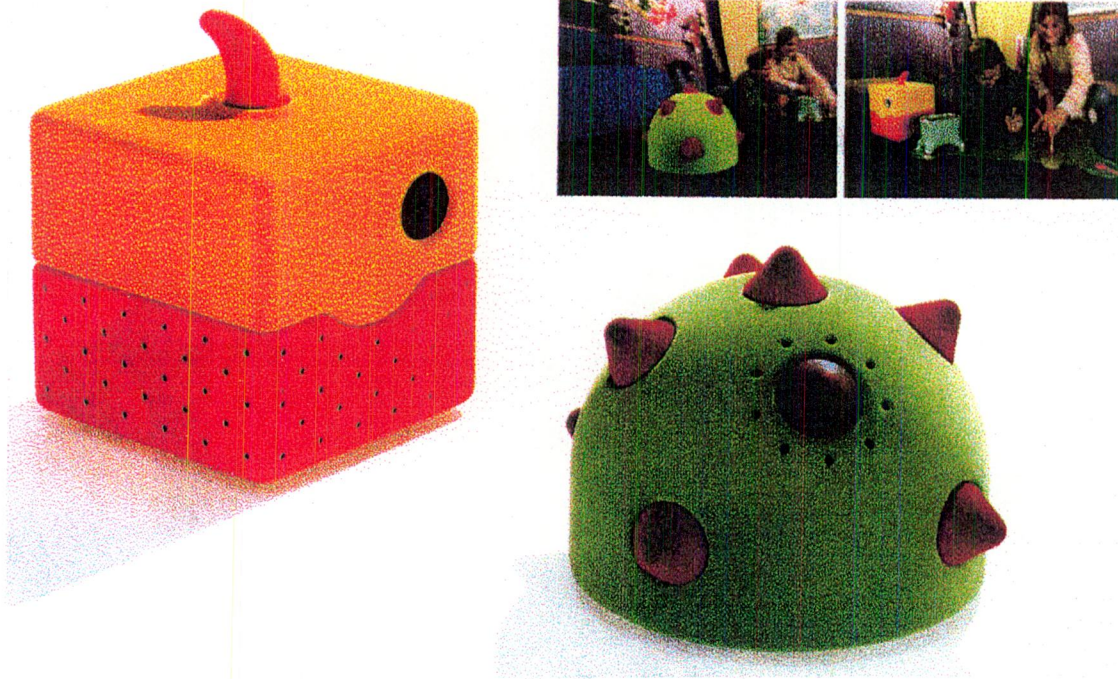


Fig.30 Ludic: technology's desire to replace the household pet!

The emergence of this new form of technology is almost scary, causing me to immediately visualise a world in 1000 years time, run by small electronic characters, more powerful than the humans that created them. The disturbing fact of all this is that humans have willingly segregated themselves from each other, preferring to use the fax machine and e-mail, rather than interact with each other. The main reason for this urgency to communicate as quickly and efficiently as

possible can be blamed on the 'fast culture' we live in. A culture which has become so dependent on telecommunications and lack of interaction with others, that they have begun to deny themselves their basic human needs, that of interaction, sharing of emotions and development of the senses. This fast culture is based on commerce, and the 1990s desire to make as much money as is humanly possible. This culture, is the product of the mass production industry, started in the 1900s, and fought against ever since its creation. Ironically, considering the objectives of the early pioneers involved in the war against mass production, it has taken the field of technology, to finally achieve products that fulfill the emotional and psychological needs of humanity, needs that the avant-guard designers have been trying to fulfill since the 1900s.

Conclusion

This study has concentrated on the journey Italian industrial design has taken through the world of industry. A journey characterised by two very opposing languages; languages based on the opposition to industry, drawing their influences from the art and craft world; and languages based on the development of industry, embracing a new, simplified, 'machine aesthetic', developed as a result of economic and technical restraints rather than an established language.

This journey was one of constant change and development, bringing design from the infant stages of purely aesthetic styling, to that of one, which has an equal regard for style as for function. Evident, from the products displayed at the Salone of 1997, Italian designers have finally realised the need to consider the whole person, the physical and the psychological, man and woman. Rather than take a back seat and complain about all the problems of industry, reflected in the designs of the anti-industrialists, Italian designers of the present day have decided to try to solve the social problems that surround them by using design as a means to do so. Rather than use design to convey messages about how the designer thinks society should behave, present day designers have begun to design products that accept current society, and design products accordingly. This realisation has not resulted in any compromise to Italian designer's highly emotive, communicative, and visual approach to designing. They have realised that design is as much an expression of feeling as an articulation of reason and, an art as well as a science.

It seems ironic, that the languages developed by those in opposition to mass production, today, runs parallel with the very movement that it was trying to destroy. This irony is highly reflective of the chaotic and indecisive nature of Italian society and culture. The Italian designers desire to animate the inanimate and fill the world with living forms, is no different today, that 80 years ago, except, ironically they are now using technology to achieve their desires. Andrea Branzi explained that "Italian design corresponds to a civilised culture, to a debate on ideas, philosophy and politics" (Capella, April 1997, p. 97).

Where domestic furniture and other domestic products are concerned, Italy still manages to lead the way, but today's mood is different from that of fifteen years ago when rebellion and debate were in the air. Exceptional designs such as The 'Magic Chair' by Ross Lovegrave, for Driade and 'Hal' by Marc Saddler, for Cassina, launched at the Milan furniture fair in 1997, prove that Italian ingenuity and flair are as strong as ever. This chair along with the other new products and furniture emerging from Italy shows a distinctive new style and language emerging. This new style has been formulated partly as a reaction to consumerism, partly due to increasing technology and materials, and partly because Italian designers have come to realise that the formula for the 'old' Italian style has become misused, over used and worn out.

In this study we have seen the impact society and social theories have had on

design developments in Italy. We have also seen the designers desire to change society through the use of design. The former developments and impacts were far more long lasting than the latter is, with little actual change arising in society as a result of design. The dominant force in present day design is societies materialistic desires, much to the dismay of designers such as Sottsass, Mendini and Mari. The vital role that design once held in Italy seems to have burned itself out. It is being replaced with the force it always tried to keep down, that of technology, mass marketing, and mass retailing. The purpose of many design groups, setting up a stand and displaying their furniture, at the Salone, is not in the name of, or for the sake of art, or as an opposition to industry. The purpose of these design groups displaying their designs, is purely in the name of commerce. Their aim is to sell products, not for the education of people's visual perceptions, and certainly not in the present day climate of total consumerism, to make a statement.

What is missing from this new language, however, is the level of cultural and philosophical debate that characterised many years of Italian design and gave it its uniqueness and its strength. Consumerism is now accepted, embraced and pandered to. While a new language and style has developed, that considers the actual needs of the consumer, it is uncharacteristic of the thinking of the bold and rebellious Italian designers. Unfortunately, while many products of today do consider the actual needs of the consumer, the need for products with an actual tangible meaning is also required, or else consumerism will become the sole dominating factor in design of the future. The problem with today's design is that it

produces so many products which pretend to have meaning, pretend to be beautiful, products which scream for attention but in reality have nothing to say. This in turn leads to superficial design, which is no benefit to anybody, besides the producer. The enormous flood of visual stimuli produced by our society must be compensated by products that have no meaning whatsoever, things that speak for themselves, useful things that are not even meant to be beautiful.

To say that the old ideals of having cultural and philosophical debate, present in design of today, is all very well, but not entirely possible. Society's needs and consumerism have left little room for such debate, leaving the emotional needs of humanity up to technology to fulfill. The lack of social interaction between humanity means that the previous use of objects as message carriers and senders, are not needed anymore. Products such as those being developed by Philips and Alessi, will become the products of the future. Technology will continue to advance, resulting in greater segregation than is present in the current climate of telecommunications.

So, what is the future of Italian design within this world of technology? Who knows! Italian design has entered a new, interesting and difficult phase of its history. It must stay consistent with its established nature, of originality, dynamism and vitality, in order for it to survive the coming years. But, if Italian designers continue to approach the next millennium with the same enthusiasm, ingenuity, flair and creativity, as they did with the current century, it should be an exciting and interesting time for all!

Bibliography

Books

- ALBERA, G., & MONTI, N.,** Italian Modern: A Design Heritage, New York, Rizzoli Publications, 1989.
- ANBASZ, Emilio (Ed.),** Italy: The new domestic Landscape, New York, MOMA, 1972.
- BAYLEY, S., DEYAN, S.,
GARNER, P.,** 20th Century Style & Design, London, Thames & Hudson, 1996.
- BANHAM, Reyner (Ed.),** The Aspen Papers – Twenty years of Design Theory from the International Design Conference in Aspen, London, Pall Mall Press, 1974.
- BLACK, Naomi (Ed.),** Memphis: Objects, furniture & Patterns, New York, Columbus Books, 1986.
- BORNSSEN-HOLTMANN, Nina,** Italian Design, Italy, Taschen, 1994.
- BRANZI, Andrea,** The hot house – Italian new wave Design, London, Thames & Hudson, 1984.
- DORMER, Peter,** Design since 1945, London, Thames & Hudson, 1993.
- FISCHER, Volker (Ed.),** Design Now – Industry or Art, Munich, Prestel-Verlag, 1989.
- GABRA-LIDDELL, Meret (Ed.),** Alessi – The Design Factory, Great Britain, Academy Editions, 1994.
- HIESINGER, Kahryn B.,** Landmarks of 20th century Design, New York, Abbeville Press, 1993.
- HESKETT, John,** Industrial Design, London, Thames & Hudson, 1980.
- HOLLINS, Bill,** Successful Product Design, Great Britain, Butterworth & Co., 1990.
- HORN, Richard,** Memphis – Objects, Furniture and Patterns,

Books contd.

- JULIER, Guy,** London, Columbus Books, 1986.
The Thames & Hudson Encyclopaedia of 20th Century Design & Designers, London, Thames & Hudson, 1993.
- MARGOLIN, Victor (Ed.),** Design Discourse, London & Chicago, The University of Chicago Press, 1989.
- MARGOLIN, V., & BUCHANAN, R. (Eds.),** The idea of Design, Massachusetts & London, MIT Press, 1995.
- McDERMOTT, Catherine,** Essential Design, London, Bloomsbury, 1992.
- RADICE, Babara,** Memphis – Research, Experiences, Results, Failures and Successes of New Design, London, Thames & Hudson, 1985.
- RAIMONDI, Giuseppe,** Italian Living Design, London, Tauris Parke Books, 1990.
- SPARKE, Penny,** An Introduction to Design & Culture in the 20th Century, London, Routledge, 1994.
- SPARKE, Penny,** Italian Design, London, Thames & Hudson, 1988.
- WHITELY, Nigel,** Design for Society, London, Reaktion Books LTD, 1993.
- VIHAMA, Susann (Ed.),** Semantic Visions in Design, Helsinki, University of Industrial Arts Helsinki, 1990.

Journals and newspapers

- ALDERSEY-WILLIAMS, Hugh,** “Grammer School”, Creative Review, July 1996, pp.44-45.
- BOJARDI, Gilda,** “Italian International Design”, Interni Annual, 1997.

Journals and Newspapers contd.

- BRANZI, Andrea,** "From historical avant-gardes to Permanent avant-gardes", Domus, Vol. No. 783, June 1996, pp. Editorial.
- BURKHARDT, Francois,** "Editorial-2028", Domus, Vol.800, Jan. 1998, pp.3-7.
- CAPELLA, J. & Picchi, F.,** "A Dialogue with Enzo Mari", Domus, Vol. 791, March 1997, pp.60-67.
- CAPELLA, Juli,** "Interview with Andrea Branzi", Domus, Vol. 792, April 1997, pp.97-98.
- CAPELLA, Juli,** "In & Off: Salone del Modile 1997", Domus, Vol. 795, July/Aug. 1997, pp.70-90.
- COLONETTI, Aldo (Ed.),** "Design of Senses", Ottagono, Vol. 121, Dec.1996/Feb. 1997, pp. 34-64.
- GARTON-ASH, Timothy,** "The Machinery of Our Destiny", The Sunday Times, News Review, 8th Feb. 1998, p.9.
- GHINI, Massimo Iosa,** "The Importance of the Symbol", Ottagono, Vol. No. 122, March-May 1997, pp.106-111.
- GOLDSTAUB-DAINOTTO, Edna,** "The Salone del Modile 1997", Graphics 311, Vol. 53, Sep./Oct. 1997, p.10.
- GRILLO, Augusto,** "Significant products", Ottagono, Vol. No. 122, March-May 1997, pp. 122-127.
- HANCOCK, Marion,** "Anarchy", Design, Sep. 1990, pp.55-58.
- O' BRIEN, Heather,** "Alessis: it's a family affair", Graphis 311, Vol.53, Sep./Oct. 1997, pp.40-49.
- PEARLMAN, Chee,** "Vital Signs – Ettore Sottsass's latest collection", I.D., March/April 1997, pp. 69-71.

Journals and Newspapers contd.

- PICCHI, Francesca,** "Designing with air", Domus, Vol. 794, June 1997, pp.67-83.
- ROMANELLI, Marco,** "Works between 1992 &1995", Domus, Vol. 767, Jan. 1995, pp. 85.
- ROMANELLI, Marco,** "Salone del Mobile '97", Abitare, Vol. 364, July/Aug. 1997, pp.35-43.
- SPARKE, Penny,** "Product Semantics," Design, Nov. 1991, p.66.
- TUMMINELLI, Paolo A.,** "Fast design culture", Domus, Vol. No. 788, December 1996, pp. 78-79.
- VOLLI, Ugo,** "New, newer, common", Stileindustria, Italy, Feb. 1995, pp.13-15.
- ZANCO, Federica,** "Visions of the future. The Philips Corporate Design", Domus, Vol. No. 788, December 1996, pp. 61-69.

Promotional Literature

Zerodesigno Catalogue, Spring & Summer, 1997.

Interni Salone Guide, 1997.

Interviews

- O' Mahony, Aine** Prof. Arturo Dell'Acqua Bellavitis, March 1997.

