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National College of Art and Design

Faculty of Design

Department of Industrial Design

TRI BASEI :

**An Analysis of Italian Staircase Design in Four
Milanese Galleries and Showrooms of Design**

by

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ANALYST

INTRODUCTION

For almost thirty years, the Triennale shows in Milan have made Italy a world meeting place and reference point in architecture and in high quality industrial design. Thousands of people each year go to the city's showrooms and it is in this week that the showroom takes on a heightened importance. And perhaps it is due to the Triennale that the showroom holds such importance in Italian design and architectural culture.

An important aspect of the Italian showroom is the range of objects on display. Painting and sculpture has been joined by mass-produced goods which have been elevated to the status of art. "One can enter a museum or gallery and witness first hand, mass-produced products displayed as works of art" (Long, 1994, p.25). So it is not difficult to understand why the shops that sell these products have followed this lead as they move from being retail outlets to becoming galleries. With the resultant increase in the number of exhibitions and displays, there is stiff competition between galleries to entice the public through their doors and this is never so obvious than during the Triennale. The showrooms in Milan must compete for attention not only in their exhibitions but also on the design of their interiors. Adding the fact that most of these showrooms are part of a franchise system, the search to create an individuality and identity is essential. Such are the criteria given to the architects who design these buildings and their interiors.

This study will examine four Italian architects and the showrooms they have created. In all cases, the individuality that they have strived to create has materialised in their designs for the staircases. The four Milanese design showrooms examined in this thesis are :

Showroom Magna Pars, Via Tortona 15

Designed by Architetto Colombo,

Showroom Esprit Italia, Via Forcella 5

Designed by Architetto Citterio

Showroom Carlo Cavallini, Corso Italia 40

Designed by Architetto Dell'Orto

Showroom Barovier & Toso, Via Monte Napoleone 1

Designed by Architetto Gregotti

MAGNA PARS, VIA TORTONA 15

Magna pars is the largest of the four showrooms and was designed by the architect Colombo. Previously a derelict building, it was renovated in 1992 to form a multi-functional space with adaptable partitioned showrooms, exhibition halls, offices and a cafe. The interior can be altered to suit the requirements of the individual client while keeping the overall identity. This identity comes from the variety of steps and stairways in the building.

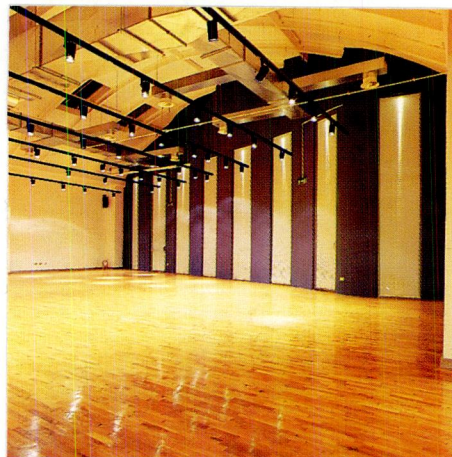


Fig. 1: The interior of one of Magna Pars' main exhibition spaces

ESPRIT ITALIA, VIA FORCELLA 5

Esprit is the headquarters for the Californian fashion design company of the same name. The building was previously a coffee factory and was renovated in 1990 by Architetto Citterio of Citterio Dwan Associates. Antonio Citterio has also designed the company's headquarters in Amsterdam. Citterio has created a multi-functional area for Esprit, housing offices and showrooms as well as fashion design studios and storage areas. Due to the changes that constantly occur in Esprit, this adaptability had to be echoed in the design for the staircases as materials are usually stored on the second floor and there are no elevators in the building.

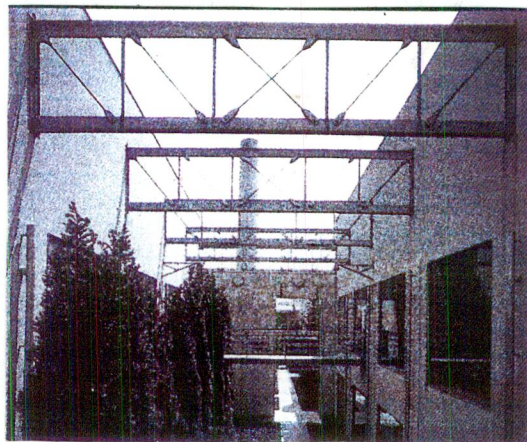


Fig. 2: The internal courtyard between the two main buildings of Esprit Italia

CARLO CAVALLINI, CORSO ITALIA 40

Cavallini is an interior design showroom that exhibits the products of the company of the same name. The principal architect is Mario dell'Orto who created the interior in 1988 for the previous owners Tagliabue, another Italian interior design company. When Cavallini took over the Tagliabue outlet, they left the interior unchanged. The building also houses offices on the second level.



WESTPOST



*Fig. 3: The interior of
Carlo Cavallini*

BAROVIER & TOSO, VIA MONTE NAPOLEONE 1

Barovier & Toso is situated in one of the most exclusive shopping areas of Milan. The interior was created by Architetto Gregotti in 1987. The showroom displays Murano glass objects from the Venetian company but specialises in lighting and chandeliers. This is the only outlet for Barovier & Toso in Milan.

These four examples display an originality in their treatment of the staircase designs in either the functional aspect or just the aesthetic and styling interpretations. This originality also appears in their choice and exploitation of the materials used and in the relationship between their designs for the staircases and the interiors.



"Italian design's nucleus is Milan, which is Italy's cultural crossroads" (Albera, 1989, p.5). This city is also one of the design world's most influential cities. A first hand experience of the Triennale in April 1994 has led to the choice of concentrating this study in the context of Milan. Also, the knowledge gained during a period of work experience in an Italian design studio gave an opportunity to observe Italian architects at work and provided a background to the thinking behind Italian design and architecture projects. It was thus the most important influence in the research of this work.

During the Triennale, visits to Magna Pars and Carlo Cavallini to view the exhibitions made a strong impression. The staircases in both were striking. An architect, Silvio Caputo, working in the design studio of McKimm Albemarle has worked with Antonio Citterio and suggested Esprit Italia and Barovier & Toso as being examples of similar treatments of staircase design in the showroom interior. These showrooms stand alone in the design of their interiors. They have redefined the standard bland white box that has been accepted as the norm for the interior of galleries and museums.

The argument that surrounds the display of mass-produced goods as art pieces could also be applied to these staircase designs. Both exist between the "artistic" and the "useful" often tending towards the former. (Sparke, 1988, p.88). But it is not the purpose of this thesis to provide an argument for or against the validity of modern showrooms or the objects that they exhibit. Neither is it the aim of this study to document the phenomenon that is Italian design. Both subjects can fill volumes on their own. Rather, the study will provide an insight into the design for the staircases and interiors of these examples.

Chapter one puts these staircases into context, giving an insight

into the nature of the showroom and how these architects view their task in designing their interiors. It also gives a brief explanation of the Italian approach to the design project and then finally explains the importance of the staircase in architecture.

In the second chapter, the showrooms chosen are examined. The designs in Magna Pars and Esprit show how the architects have explored the machine aesthetic which is an important aspect of the two building's past, both previously existing as factories. How did the architects reflect this past in their designs? How did they merge this history with the present image of the building? How have they exploited and redefined this industrial aesthetic?

Chapter three examines the staircase in Barovier & Toso. How does this design become like a sculptural division of the room? What is its relationship to the space around it?

The final chapter explores the Italian interpretation of materials and uses Mario dell'Orto's design in the Carlo Cavallini interior as an example. How does dell'Orto use his choice of materials to execute his ideas for his design? How does he resolve his choice of new materials for the interior with existing more traditional materials?

The largest source of information for this study was from the architects themselves. Literature is scarce on the subject of the showroom itself since all attention is paid to the exhibits and displays. However, Cleo Baldon and Ib Melchoir's Steps and Stairways (1989) provided a comprehensive historical context and information about the staircase, as did de Gava's article in Abitare May 1992. For chapter one, Giovanni Albera and Nicolas Monti's Italian Modern as well as Piero Sartgo's Italian Re-Evolution provided a literary insight into Italian design society

and culture. The majority of research was collected from the experience working within the Italian design field and during the Triennale of April 1994 but additional information was collected from the thesis of Frank Long, Exhibiting Design (1994).

For chapter three, a background into the sculptural use of line and space was researched mainly from Paul Zealnski and M.P. Fisher's Shaping Space. The main research for chapter four on the Italian interpretation of materials was taken from the article by Paulo Rizatto in Domus, volume number 756 titled "Design and Materials". Throughout the research for this study, numerous other works were consulted but the ones listed here are the main basis for this thesis.

CHAPTER 1

The Italian Showroom Staircase

The distance is nothing ; It is only
the first step that is difficult.
(Simpson, 1990, p.91).

This chapter will examine some of the general influences on the Italian architects chosen and their approach to their work . It will also contextualise the study in its explanation of the role of the showroom in Italian society and the general role of the staircase in architecture.

The Showroom Defined

Internationally, showrooms have a tendency to be bland and unchanging. Dedicated to their exhibitions, attention is directed solely on the objects displayed, stressing their importance. It can be argued that this is the correct way to exhibit items both on a temporary and permanent basis. However it is in the home of one of the greatest exhibitions, the Triennale in Milan, that the architects who are creating the new and modern showrooms are exploring its role in exhibitions through their use of form and function, lighting and materials, and are thus creating an identity for their interiors and designs. This is the most important aspect of the Italian showroom as the majority are parts of a franchise such as Esprit Italia and Barovier & Toso. Because of this, the architect who designs for these companies must work on ways of almost creating a corporate identity. The Italian architect Antonio Citterio specialises in design for franchise outlet systems, with clients such as Esprit and also Fausto Santini employing him solely to design all of their outlets. But in working with these interiors there is a fine line between creating an individuality for the space without dominating the importance of the exhibits within. Citterio himself has developed his own concept of the commercial architectural project which tends towards articulating the space around the product on display with the result that the exhibit becomes the main aspect in his setting. "The product makes the display

and not vice versa" (Fitoussi, 1993, p.5). This fine balance that Citterio explores is also the main aspect of the other showrooms mentioned later on.

In his approach to the showroom Magna Pars, the architect Colombo defined his parameters for the design as follows :

The client did not impose any constraints, therefore I worked in total freedom giving to the interior a totally individual and personal image : inserting a few *strong* elements in a *neutral* container (Colombo, 1994, Appendix A).

For Colombo, the obvious choice for these few strong elements was the staircases throughout the multi-level building. But Colombo is not alone in his choice or his approach. Each of the other architects who have designed the example showrooms have shared this idea. Each have created their 'neutral containers' which allow the display to exist without domination from the surroundings, but the few 'strong elements' and individual aspects in each showroom are the steps and stairways. (Colombo, 1993, Appendix A).

In general, architects confronted with the problem of spanning floors in a defined interior tackle the problem in two ways :

Feeling called to produce a 'beautiful detail', the architect works with excessive zeal and this is the wrong approach. Rather, an internal stair needs ... to clarify the conceptual gulf that it spans (de Gava, 1992, p.187).

On the other hand, the architect creates a stair of a neutral style to complement the neutral interior, which can then gather its personality from the subsequent interior design and from the occupants.

For the showroom, the occupants are the exhibits and the interior is

secondary. But in the Milanese interiors, the functional role of the staircase has been reinterpreted, bringing it to the fore with their originality in the treatment of form, function, style, structure, geometry and materials.

The four architects designing for the companies associated with these Milanese showrooms have created designs that embody a corporate identity associated with a style, "without transforming showroom architecture into 'furnishings' that merely mimic the objects on display" (Ciorra, 1993, p.15). As well as functioning fully, the stairways they have designed are the embodiment of the identity of the interior. In a situation that is not often considered : when the showroom is without its exhibits and must exist alone, the stairways create character and detail in the interior.

The Italian Approach

Italians ... manage better in the role of mediators between the past and the future. That is why our design is more beautiful and up-to-date than that of other countries (Albera, 1989, p.3).

Italy's position as a centre for architecture and design is unquestionable. In all areas, Italian design is a creative force with a capability of connection with the past that creates new and innovative ideas with a firm foundation in the country's tradition. In Italy, architecture and industrial design are essentially one. Finding a slump in architectural projects after the Second World War, many Italian architects turned to designing for commission, creating interiors for private dwellings.

Thus interior design, along with exhibition design, which was growing in strength as a means by which Italy could show the rest of the world where its creative talents lay, played an important role, allowing the architects to establish themselves in independent professional practices and providing an outlet for their skills (Sparke, 1988, p.12).

This gives the Italian architects a special gift for moving between architecture and interior design, merging the art of living and furnishings into the same simplicity of line. Brigitte Fitoussi characterises this Italian creativity as "simple and elegant, with that dash of humour and style" (Fitoussi, 1993, p.9).

The Italian architect views interior and industrial design as a way of going beyond architecture. It provides a path which allows their ideas to come in contact with the user in a much more personal and direct way than is allowed with pure architecture. This also allows them to enhance and define details of their architecture that they feel need to be emphasised. It is this mentality that gives an insight into why the Italian architects for these showrooms have expressed such care and attention to their interiors and to the designs for their staircases.

In these examples, the staircase is fundamentally generic in that it provides the link between the architecture and the interior design. Firstly, the staircases are part of the architecture due to their structural importance. But they are also a major part of the interior design particularly because they are part of a showroom interior. It is in this neutral container that the stair becomes the focus of the styling and aesthetic which is the identity of the interior design. But when considering the works here,

you perceive that the design factor is ... stimulating and positive. It permeates the architecture at all levels (Sartgo, 1982, p.14).

The Staircase Defined

It is not without reason that the stairway is called a "flight" for by it, foot over foot, earth-bound man may rise to the height of birds (Baldon, 1989, p.13).

A structure that is common to all cultures is the stair, sharing a basic form and function related to human size and ergonomics. But after this, the staircase can be infinitely varied in shape and decoration, and protected from the wear and tear of weather, the interior staircases, especially in public buildings were rich and grand : huge constructions of upward sweeping lines and curves. Often decorated in opulent materials and enhanced by their surroundings, these stairways were feats of engineering.

One example is the magnificent and ornate staircase in the Laurentian Library in Florence designed by Michelangelo. Commissioned by the Pope Clement VII in 1523, the design was to link the library to the existing monastery of San Lorenz. The staircase is considered irrational in its three parallel descents merging into one at the stairhead. (Baldon, 1989, p.193). However, Michelangelo consumes the space in the vestibule with his design with his straight geometrical treads of the left and right stair contrasting and enhancing the curved nosing on the treads in the central run. This irrationality of the structure only helps to make this creation even more exceptional in its grandeur and beauty.

The opulence and style of the historical central staircase often overshadowed its functional role, moving beyond it to become "often more interesting than the building itself, a spectacular and theatrical setting" (Baldon, 1989, p.131).



Fig. 4: Michelangelo's staircase in the Laurentian Library in Florence

But in the modern architecture of today's buildings, the extravagance of the historical staircases is either poorly imitated or simply ignored. Modern high-rise buildings incorporate quick and efficient elevators and escalators, changing movement between floors to a ride on a conveyor belt. Most staircases that are in these buildings are "utilitarian, bland and uninspired" (Baldon, 1989, p.131). And because they are usually intended for use in emergency situations, these runs tend to be hidden behind the walls of the finished building.

The staircase is an extremely important aspect of the interior

because of its permanence. Irrespective of the interior design and the furnishings, the stair is a prominent feature which is "unfurnished, precise and silent" (Laudani, 1992, p.64). The four Italian architects who created the staircases for the showrooms have all displayed an understanding of the fixed nature of their structures and how they relate to the interior. These designs echo the grandeur of past centuries, not in their scale or opulent materials nor in their history or heritage but rather in their poise and elegance relative to the space around them. They have moved from the secondary role that is all too common today to become a central detail of the interior that is not hidden or ashamed.

CHAPTER 2

The Machine Aesthetic

Still glides the stream and shall forever glide ;
The form remains and the function never dies
(Simpson, 1990, p.276).

The primary function of the stair is to span the gap between floors, and its structure should clarify and explore this function so as to entice the user. An important aspect of this is the actual gulf to be spanned in relation to the structure of the stair. The span encountered in multi-storey levels is extremely different to the run between two floors. The multi-storey span produces a pattern which repeats itself and thus, often creates its own sort of design. This multiplication effect can also remove any differentiation between going up and coming down.

It is this enforced geometry that interested the architects Citterio and Dwan when they had to design the staircases in the fashion design studios of the Esprit building. The studios are extremely busy and the staircase is in constant use so the functional aspect was stressed. Esprit was previously a derelict factory and Citterio wanted to reflect this history in the new interior. Citterio considered the repetitive pattern of the metallic multi-storey staircase as having a strong industrial image but the run that he was concerned was only between two floors. Given this small space, Citterio condensed his idea into the one storey by inserting a dogleg stair with a strong symmetry.

Made from galvanised steel, the stair creates a strong geometrical pattern with its criss-cross structural beams, parallel handrails and banisters.

(See Fig. 5 & 6).

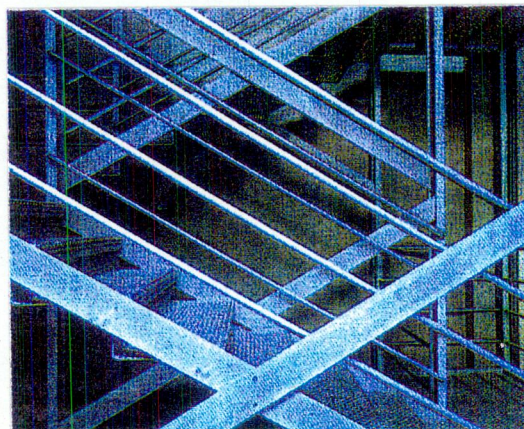


Fig. 5: A side view of the dog-leg staircase in Esprit

THE
FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
WASHINGTON, D. C. 20535

MEMORANDUM FOR THE DIRECTOR

SUBJECT: [Illegible]

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1-1-X
1-1-Y
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The entrance to the building is from the side of the staircase so the geometry of the structure is immediately apparent.

This finely judged balance between a rigid geometrical system and the flexible and functional weightlessness of steel elements, generates the icons of a 'precise architecture' (Ciorra, 1993, p.12).

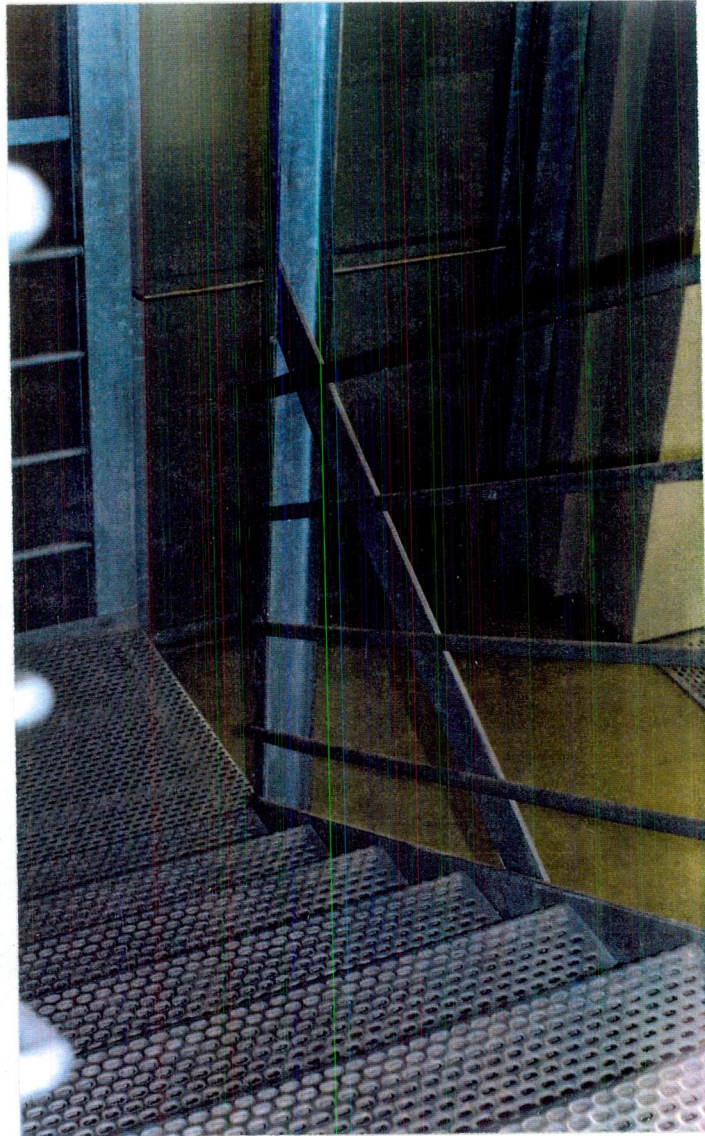


Fig. 6: Dogleg stair from the first landing in Esprit

While Citterio exploited the repetitive nature of the multi-storey staircase in his design for Esprit, In Magna Pars, the chief architect Colombo considered it a major problem in the construction of his main staircases.

ARAT POST



ARAT POST

Magna Pars spans three floors with two main stairwells at the front and the rear of the building. In the structures that he designed, Colombo also used the repetitive nature of the multi-storey stair to his advantage but in a less literal way than Citterio. With three floors to cover, Colombo wanted to stress the differentiation between ascent and descent which can be lost in this case.

The main staircase is extremely light in structure. The treads are sandblasted glass plates resting on triangular tubular steel 'ribs', extending at an angle from the wall. The treads are supported at each end and at the centre by punched solid triangular sections. Taken individually, each step incorporates the three basic geometric shapes of a circle, triangle and rectangle in a subtle play, allowing each shape to dominate the profile of the tread or riser depending on the angle of sight. This removes any of the monotony created in a repetitively structured stair.



*Fig. 7: Ascending front view
of the main staircase
in Magna Pars*

Colombo offers varied but distinct profiles according to descent or ascent, which are solid above and below but light from in front and from the side. When ascending the stairs, the treads and ribs ahead produce a gridwork of very linear and stark lines. (See Fig. 7).

When situated half way along the run of the staircase, the adjacent flight which is uncovered, allows you to look through the structure from the side and shows the strong central triangle which is solid and contains a negative circle (See Fig. 8).



Fig. 8: Side view of the central staircase in Magna Pars

From this same position, looking upwards shows the underneath of the flight to the next floor. Here the treads seem to join together to form a translucent roof of glass with the structural steel ribs creating dark lines against the sunlit steps. (See Fig. 9).





Fig. 9: The underneath of the central staircase in Magna Pars

Finally, on descent, the fourth profile of the staircase is apparent with the glass treads forming a sturdy and clear path safely bordered by a strong tubular steel banister. (See Fig.10).



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Fig.10: Descent on the central stairwell in Magna Pars

Each side of the staircase from above, below and from the side, creates its own look due to the clever construction of the main structure. On one hand the construction highlights and identifies the exactness of its details but still manages to blend them together in an almost organic form. There is no monotony or drudgery in ascent or descent. Colombo has eliminated the enforced visual repetitiveness by considering the staircase from the user's point of view. So often in the case of stairways, architects only consider their designs in terms of a grand ascent. Colombo has considered how the structure should appear from all views whether looking up, down, or to the side. All of this together creates a staircase which is striking when viewed closely but unimposing in its surroundings due to its levity in structure with glass treads and open risers.



However the most common span that the architect is faced with has to deal with the simple one storey run between two floors.

A common pitfall : finding themselves having to work within the four walls of an existing building and having to connect two floors with a stair, architects feel called upon to create a beautiful detail, the 'piece de resistance par excellence' (de Gava, 1992, p.187).

Unlike a multi-storey staircase, the single level stair carries much more importance in that it is not an architectural detail but rather "a distinctive element of an internal box that we should consider as being autonomous" (de Gava, 1992, p.188).

Colombo shares this opinion and demonstrates it with his design for the *mezzascale* in the centre of Magna Pars. Compared to Colombo's main staircase, this stair is extremely small consisting of seven steps spanning a run of about one and a half meters. The staircase leads from the showroom's main reception area to the multi-storey staircase at the rear, accessing the offices upstairs. (See Fig.11).



Fig.11: The reception area and adjoining stair in Magna Pars

This stair also provides a link from the central ramp which runs the length of the building, to the rest of the exhibition halls.

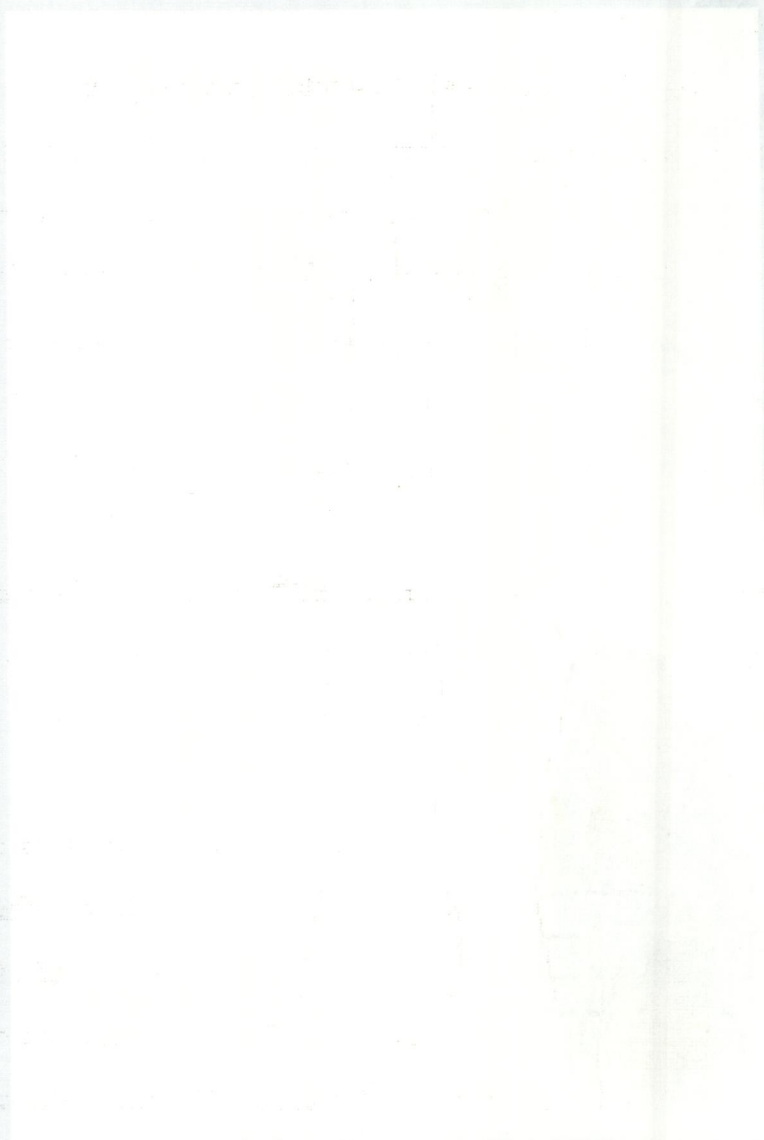
Colombo's design for the stair was influenced by many different aspects. Careful consideration had to be paid due to its close proximity to the reception area and also because it is a link from here to several halls. Colombo's main influence in this design though, was the actual nature of the showroom itself. Colombo sees the most important aspect of the showroom as its adaptability and its continuous transformation into other spaces. This then is the theme for the design in the central ramp and the *mezzascale*.



The most immediate feature of these two elements is their suspension from the roof. The idea for the suspension comes from the changing nature of the spaces, giving the stairs and ramp a 'moveable' appearance even though both are firmly fixed. (See Fig.12).



Fig.12: Suspension detail on the central ramp in Magna Pars



This whole area is designed around a 'hung' theme. The central ramp is also the spine of the ground floor, cutting through the middle of the plan, and around which the different exhibition functions are articulated. The ramp was conceived as an urban symbol suggesting a public area directing all its visitors along its length and at the same time along the length of the showroom. Magna Pars is not exclusive in its use of the transient elements. This theme of adaptability can also be found in the entrance staircase of the Esprit building.

When designing Magna Pars, Colombo's main objective was to insert a few 'strong' elements like the ramp and stairs, into a 'neutral' container : painting the interior white. Unlike Magna Pars where the adaptable aspect is purely aesthetic, in Esprit, Citterio had many functional constraints to overcome. The design studios are situated on the second floor and with no service elevators in the building, the client needed a practical solution to the problem of transporting their materials up to the studios.

Citterio's solution spans one and a half floors, rising from the entrance hall to the reception area on the first floor and then on to the bridge connecting the design offices behind to this main building. (See Figs.13 & 14).

As a staircase, the treads are nearly triple the normal tread depth, with a small open riser. This created a very gradual gradient. The main function of this structure is that of an access ramp. The riser of each step is two small rods which hold the tread aloft. These rods can be removed to allow the treads to fall flat, giving a full ramp. The perforations in the steel treads also provides the necessary grip when transporting materials along the length of the ramp.

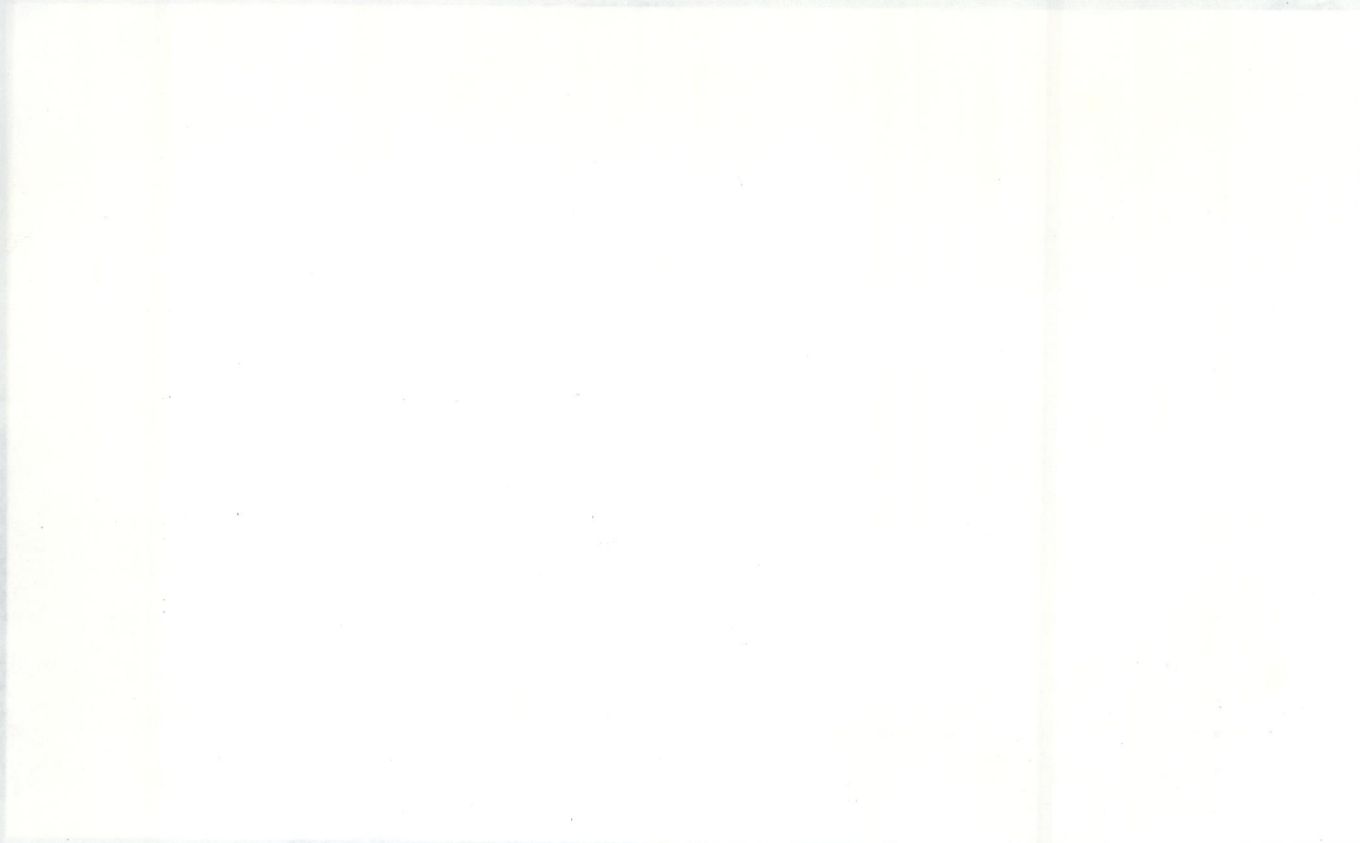


Fig.13: The first run of the access ramp in Esprit



Fig.14: The second run of the access ramp in Esprit

Through their use of their materials and their expression of the functional aspects of their designs, both Citterio and Colombo have created staircases with many similarities. Both staircases share the perforated steel structure with its clearly industrial theme, and the attachment to the wall by hinges in Colombo's curved *mezzascala* and Citterio's access ramp echo the theme of adaptability in the showroom. (See Figs.15 & 16). Both fulfil their functional roles while creating an individual aesthetic. The catchphrase "utility plus beauty" which often characterises Italian design can also be applied here. (Sparke, 1988, p.87). But this role of the transient and multi-functional structure has been rejected for a much more permanent approach by the architect for Barovier & Toso, where the structure becomes the central aspect of its surroundings and the architect creates a sculptural division of the space within the showroom.



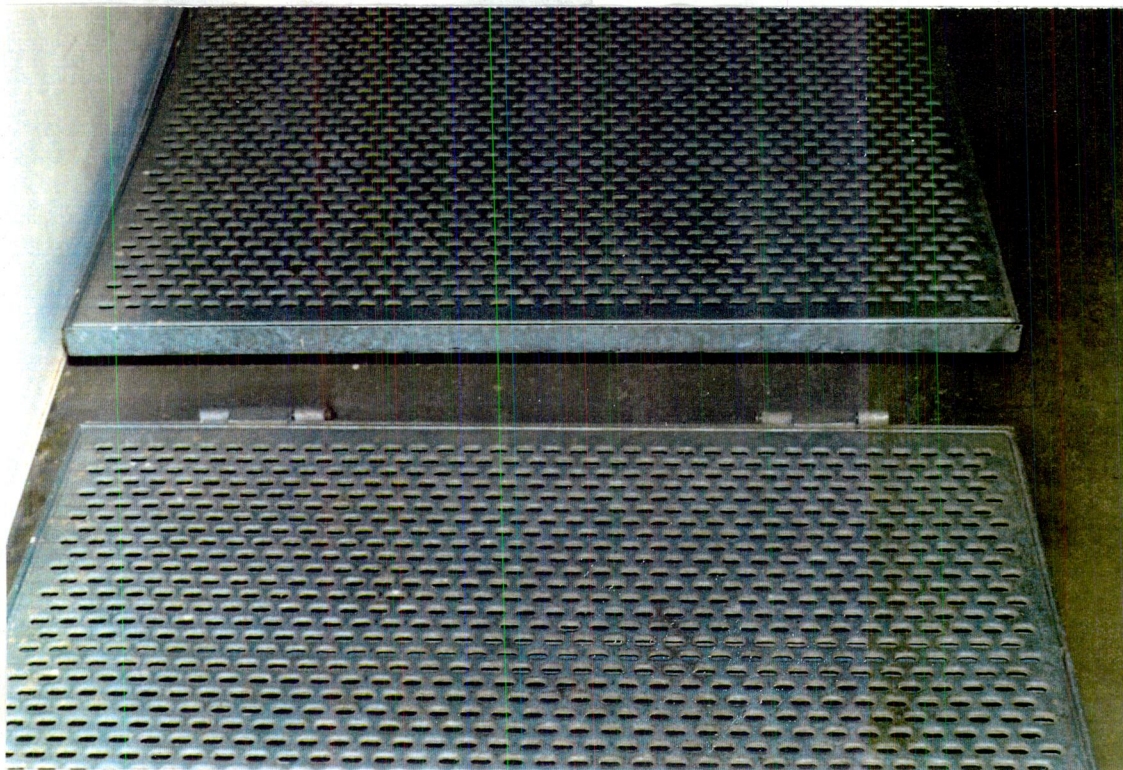


Fig.15 : Hinged treads of the access ramp



*Fig.16 : Hinged detail on the
mezzascale in Magna Pars*



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CHAPTER 3

Sculptural Divisions of Space

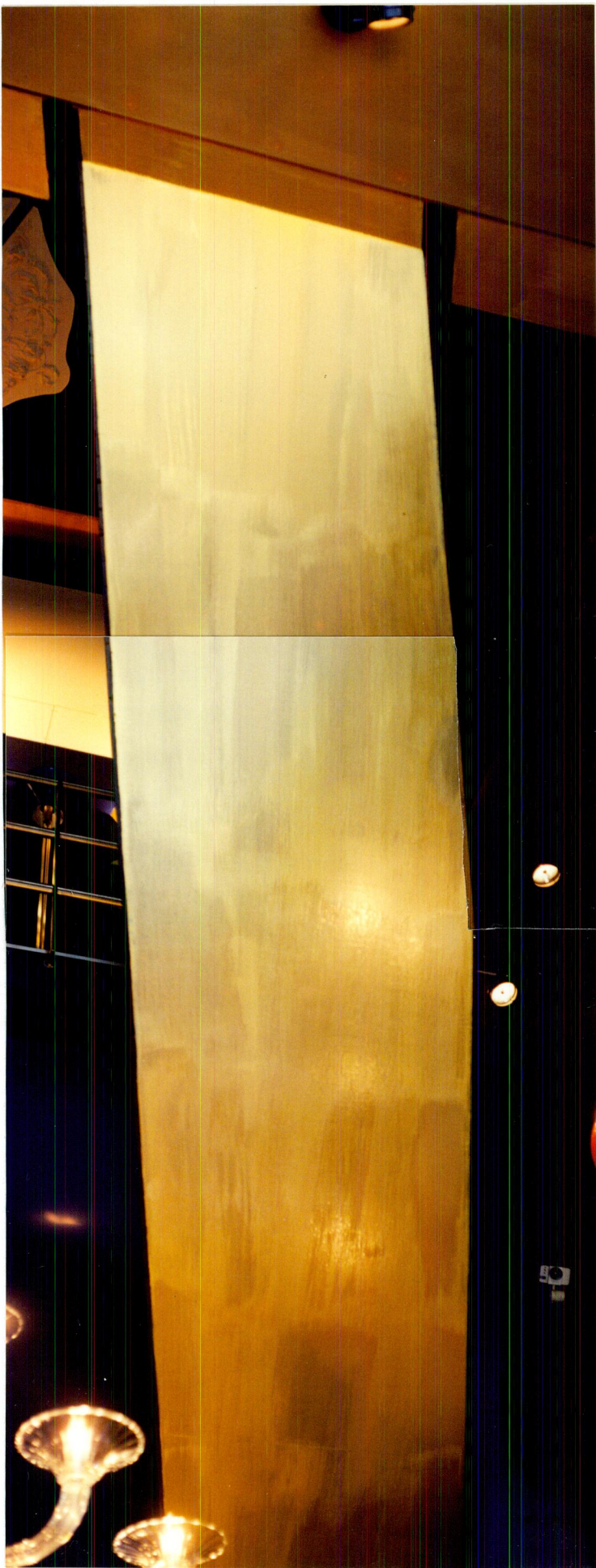
Geometry and Mathematics, rightly viewed possess not only truth, but supreme beauty - a beauty cold and austere, like that of sculpture (Simpson, 1990, p.47).

Barovier & Toso is a showroom on one of the most exclusive shopping streets in Milan, Via Monte Napoleone. It shares this street with names such as Chanel, Versace, Gucci and Tiffanys. Therefore when Gregotti was given the task to design the tiny interior for this outlet, he wanted to create a very opulent space.

The shop space consists of two box rooms one above the other. To create an illusion of space, Gregotti opened into the second level with a balcony which looks down onto the ground floor giving a double height between the floor and ceiling. Due to the limited space on the ground floor, the design and position of the necessary staircase posed a major problem. Barovier & Toso required both levels for the display of their products. Gregotti's solution is a straight stair which runs from the base of the back wall, diagonally across the interior to the front wall on the second floor.

The base of the staircase starts in a niche in the back wall allowing enough room for the person ascending the stair to circle the solid banister and mount the staircase. An inlaid mosaic in the floor winds its way from the entrance to the base of the stair creating a natural pathway which entices the visitor upstairs.

The overall effect that this staircase has on the interior of Barovier & Toso is astounding. The design embodies the sculptural aesthetic that prevails in the glass designs : its vivid use of colour with the contrasting royal blue and gold and its expressive yet simple style. On entering the ground floor, the first and most striking feature of the interior is the underside of the staircase which cuts through the centre of the room like a structural beam or strut. (See Fig. 17).



*Fig. 17 : Underneath of the
staircase in
Barovier & Toso*



The interior of the showroom is painted a deep royal blue, with the gilt of the underneath and sides of the stair creating an impressive contrast in its line and decoration to the rest of the interior. Due to the solid banisters on either side, the stair has a very simple and geometric line which prevents it from detracting attention from the elaborate Murano glass exhibits. The gilt on the underside compliments and reflects the lights and chandeliers in the surrounding interior.

From the second floor the solid banisters are continued around the balcony creating a screen with the staircase descending, and so the stair dominates only in the plan, being seen fully when looked at from the balcony. (See Fig.18)



Fig.18: The side view of the central stair in Barovier & Toso



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When faced with the problem of inserting the stair in Barovier & Toso, the natural and most obvious solution may have been to construct as small a structure as possible. But Gregotti has worked on a much grander scale. When the customer enters, the mosaic pathway on the floor directs them to the foot of the stair, past the displays on either side. This natural progression also helps to protect against breakages by defining the space on either side of the path for exhibition only. This path also entices customer upstairs to the second level and the sales area of the shop.

Gregotti's staircase is sculptural in its use of space and line. The strong linear quality of the underside cuts through the two-storey space around it and makes this area much more visible. An example of a sculpture which treats its surroundings in a similar way is Tony Smith's creation SMOKE in the Corcoran Gallery of Art in Washington DC. (See Fig.19).

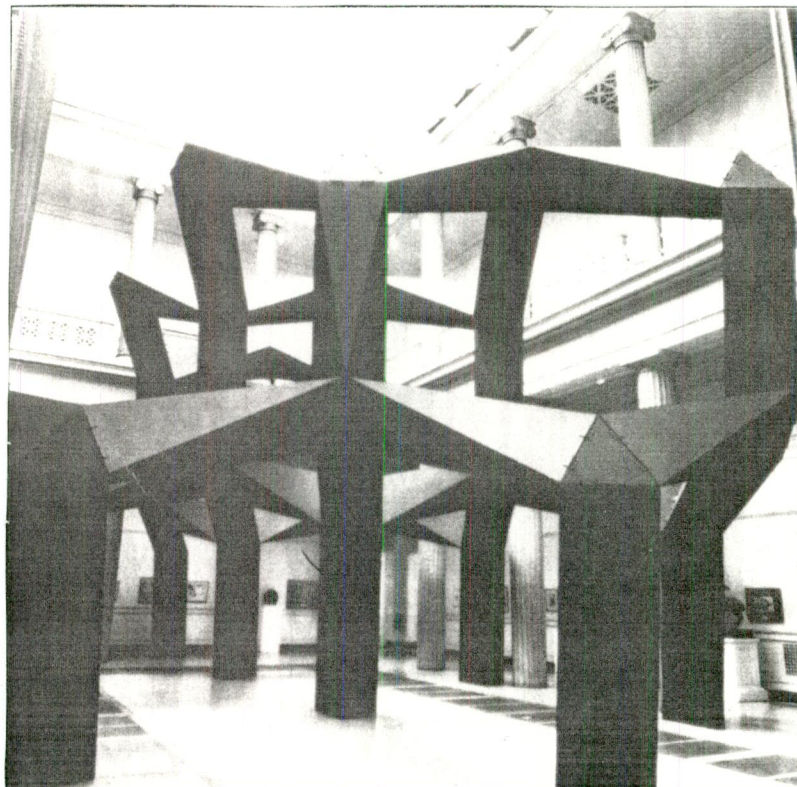


Fig.19 : Tony Smith sculpture SMOKE

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The layout of the hall is similar to that in Barovier & Toso but is much larger. In both, the ground floor is shadowed by a balcony above and there is an internal height of two floors between the ground and the ceiling. Like Gregotti, Smith has created a structure that will not allow the viewer to stand on its outskirts. The work monopolises the central area forcing the viewer to walk beneath it. The domination of space gives the illusion that the structure, whether Smith's sculpture or Gregotti's staircase, is an integral part of the actual building. This tends to give it an invisible or un-noticing quality. Smith creates a metallic gridwork canopy and Gregotti creates a strut or a beam. If Gregotti had inserted a free standing spiral staircase, it would have intruded too much into the space, while his solution seems more like a physical element of the building reducing its occupation of the space. The staircase occupies the plan of the building and not the elevation as is the way with most internal staircases. Viewed from the ground floor, the stair rises above you while from the second floor it takes shape below eye level. "It creates a strongly sculptural atmosphere for the objects displayed within" (Sparke, 1988, p.88).

These Italian architects have experimented with the functional role of the stair and have explored its form and traditional structure. But it is in one area of their designs that these architects have an insight that seems to be exclusively Italian ; in their inherent understanding of the materials that they choose.

CHAPTER 4

Materials

The material produces volume, the volume produces function, the rest is just details (de Lucchi, 1987, p.13).

In his article in Domus on the subject of the use of materials in Italian design, Paulo Rizatto attempts to explain the Italian interpretation and inherent understanding of the materials that they use. (Rizatto, 1994, p.86). In current Italian usage, *materiale* has two distinct meanings. Firstly it stands for the context and situation which has to be taken into account, hard to define other than "as a summation of manifold experiences and spheres of knowledge ; as something abstract that might be called 'immaterial'" (Rizatto, 1994, p.86). Second, it indicates something concrete, constituting physicality, the raw material of the creation, or part of it.

In their approach to design, Italian architects consider both of these aspects, creating a composite and putting together the different parts which make it up. "Historical, type, function, formal, economic, commercial and still other factors come into play" (Rizatto, 1994, p.86). The relationship between these influences is complex and varying in importance according to the situation. If these factors are addressed according to an Italian interpretation, all these relations together are the 'material', or the 'stuff' of the design in its first sense. But when the architects narrow down the factors to the specific areas in which they are concerned, 'material' in the second sense of its meaning comes into play.

In all of the showrooms mentioned thus far, when the architects began their work it was in the confines of an existing building. Magna Pars, Carlo Cavallini and Esprit all have strong industrial backgrounds while Barovier & Toso is strong in its architecturally historical surroundings.

Citterio's approach to the staircases in Esprit was probably the most literal of all of these examples. In her article on Citterio's work.

Brigitte Fitoussi said the following :

Careful attention to construction materials is also a vital part of his poetics. He reveals the nature of plain materials and understates formal or technological gesture to get at what is essential (Fitoussi, 1993, p.4).

Citterio's designs consist of pure lines and bring to mind the famous principle of "less is more". Shadows that are created become of great importance too as light is treated as matter and an integral material. This gives the surfaces an added purity due to the contrast between light and shade. The access ramp in Esprit was left purposely without artificial lighting along the walls of the run. During the daytime, the large glass entrance at the foot of the stair and the glass roofed offices at the stairhead provide sufficient natural light. (See Fig.20)



Fig.20: The entrance and descent of the Esprit access ramp



With the light concentrated in these two areas, it provides an enticement whether ascending or descending the run. During the night, artificial lighting in these two areas produces the same effect.

In his selection of materials for the two staircases, Citterio wanted to reflect the industrial past of the building yet he combines obvious industrial materials with a subtle blend. Perforated steel is used for both staircases but it is contrasted and highlighted by the smooth finished plaster walls, and with the access ramp, the run to the right is also in smooth concrete. "Called in to convert an old building, Citterio and Dwan have learned the advantages of exploiting structures and voids" (Fitoussi, 1993, p.7).

In his choice and use of materials, Citterio has effectively blended modernity with the memory of the building. He chooses to limit his use of colour, using this neutrality to unify his interior.

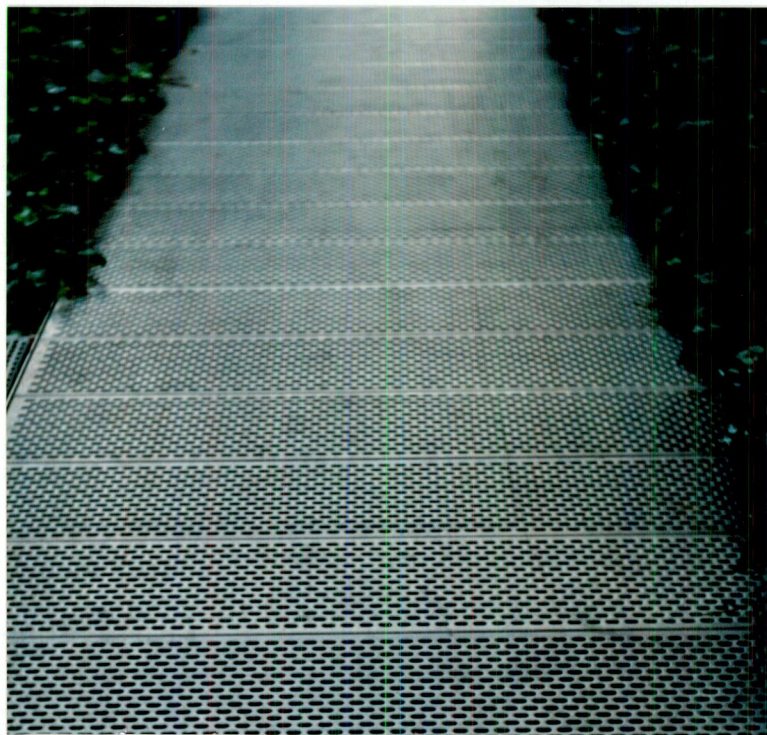
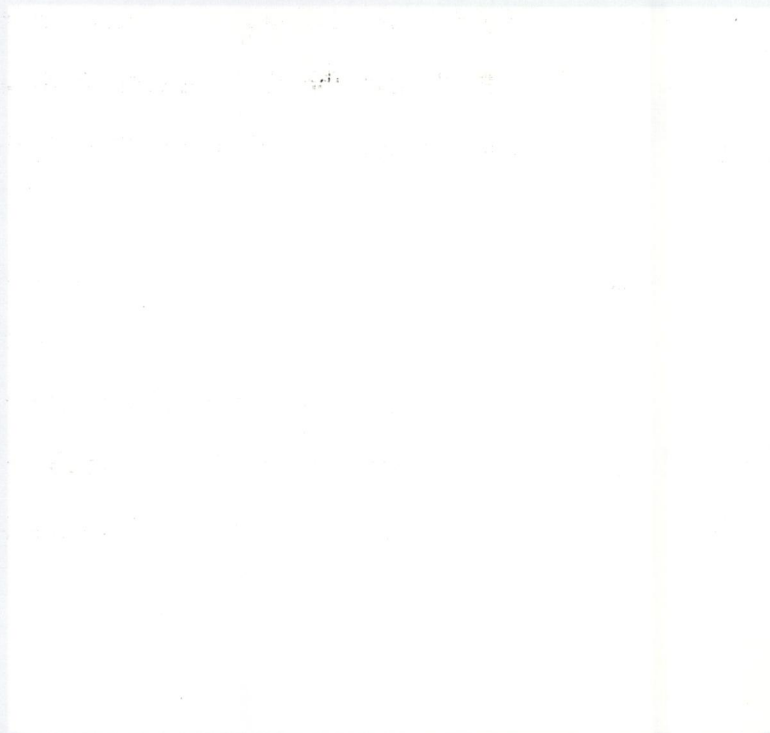


Fig.21: The courtyard paving from perforated steel in Esprit



In both the staircases, the natural materials chosen (galvanised steel, iron, concrete and plaster), are the principal elements of his design and are not just surface finishes. Continuing the use of galvanised steel in the paving in the courtyard in the centre of Esprit, the metal structure then becomes more literal and symbolic, creating a path or thread by which the visitor or guest is lead through the new architecture in the old building. (See Fig.21).

Architetto Colombo shares many of Citterio's ideas in his treatment of materials in Magna Pars. For him also, light becomes matter and a material to be worked with. But Colombo's use of light is much more extensive. Both artificial and natural light play major roles throughout the building but especially in the designs for the central ramp and the main staircase. Here the primary material used in construction is plate glass. The main reason for this choice was to compliment the surround natural light. The nature of the use of light in the ramp and stair is basically the same. With the staircase, Colombo has created a structure in which a "cascade of light falls through the glass, visually inviting the visitor to anticipate the rise before entering" (Colombo, 1994. Appendix A) (See Fig.23).

The same welcoming effect is achieved with the access ramp. Natural light falls on the glass treads from the sky-lights above and during the night, the treads are artificially lit from underneath. This use of light creates a subtle play : the light is considered a workable material but as it falls on the glass plates, it almost dematerialises the treads as it shines through them.



Fig.22: The natural lighting on the ramp in MagnaPars

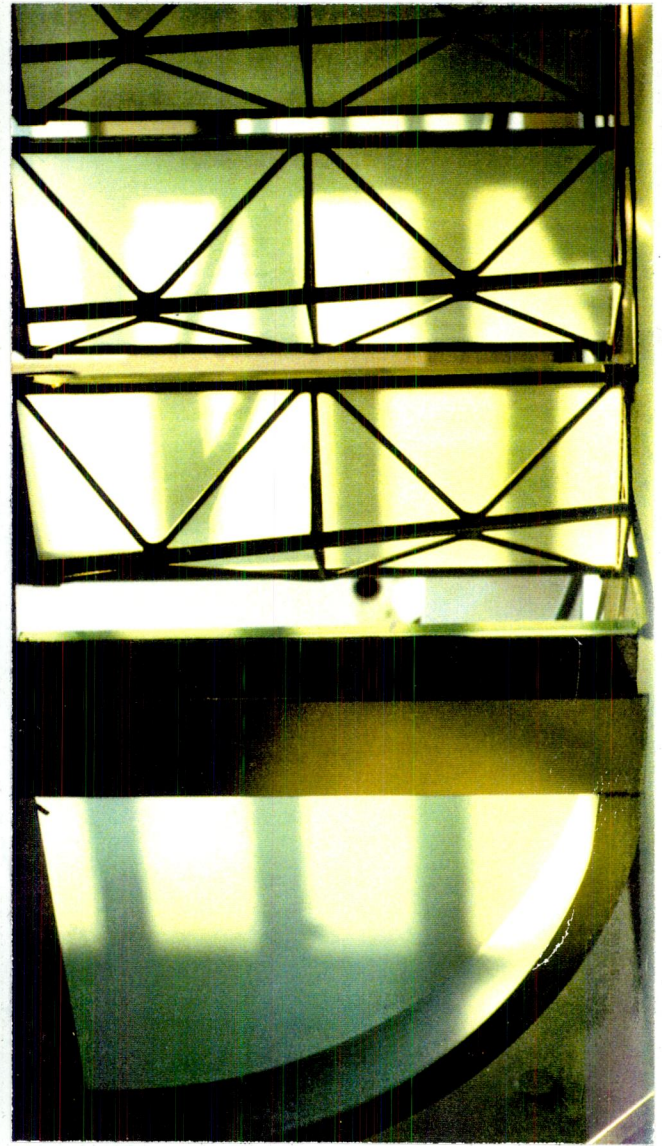


Fig.23: The natural lighting on central stair in MagnaPars

When selecting materials for his work in Magna Pars, like Citterio, Colombo wanted to reflect the industrial past. The showroom architecture was based on two themes : firstly as a reflection of the memory of the building, and then as a creation of a modern identity for the new interior. Colombo tackled this duality by "inserting a few *strong* elements in a neutral container, painting the factory white and the attentive use of materials" (Colombo, 1994, Appendix A). Various materials were chosen according to the different spaces.



Each space has its own function and limitations, therefore, every stair corresponds to the necessities into which it is inserted, without of course forgetting the *global* image (Colombo, 1994, Appendix A).

An example of this classification according to the space can be seen in relation to the treatment of the materials between Spazio Happening and the Magna Pars Cafe. Steps leading into the exhibition space follow a clearly industrial theme mixing riveted white plastic risers with the varnished wooden treads which are a continuation of the flooring (See Fig.24). The white plastic is further highlighted by the large windows at the top of the steps.



Fig.24: The steps in the Spazio Happening exhibition hall in Magna Pars

Colombo changes his materials as you progress from this hall into the Magna Pars Cafe. The steps leading into the cafe also have the wooden treads, but the theme changes from industrial to traditional with the risers becoming wood and the irregular winding run bordered by a ceramic mosaic (See Fig.25). This mosaic then continues on to become the main flooring detail in the cafe (See Fig.26).



Fig.25: The step leading from Spazio Happening to the Magna Pars Cafe



Fig.26: Interior of the Magna Pars Cafe

It is this subtle attention to the materials which creates the natural progression through Magna Pars. Each space leads into the next due to the careful blend of physical elements in the steps and stairways between them. Both Citterio and Colombo have designed their interiors from within the confines of the existing shell, creating their respective new identities in the old surroundings. When Mario dell'Orto was faced with this shell, he preserved much of the existing structural details, building upon it.

When dell'Orto began his work on Carlo Cavallini, the building already contained a large staircase. Built into the wall, the structure was of red brick with the treads and risers covered in a coating of grey

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concrete. Situated at the rear of the building, the stair ran straight to the second level at the front of the building, creating a balcony effect. The client wanted to keep the original floor plan but also required additional space for offices which would have to overlook the entire interior if possible for safety reasons. Dell'Orto decided to situate the required office space at the rear of the showroom but to elevate it to the second level so it was possible to look down onto the ground floor and over onto the first floor. Due to the limited space available, dell'Orto kept the original staircase and built upon it. This way he could create an individual interior for Cavallini without losing the true historical nature of the old building.



Fig.27: The old brick staircase in Carlo Cavallini fitted with the new metallic stair to the offices and the central concrete run

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Dell'Orto intersected the existing brick staircase half way along the run with a metal stair going in the opposite direction and leading back into the new office space. To reach this intersection, another set of steps was added, leading to the centre (See Fig.27). Continuing this central run of concrete steps in a straight line would have cut into the ground space too much so the stair was cut to a right angle to run in the same line as the original brick stair.

To clarify the direction of the staircases and to incorporate both the modernity of the new interior and the history of the old building, dell'Orto has carefully combined several materials. The original brick stair is a direct link to the showroom's past but also creates a strong directional line to the second floor. The metal steps consisting of treads inlaid with a steel grid, continue into the ramp leading to the offices (See Figs.28 & 29).



*Fig.28: The metal steps of
the central stair
in Carlo Cavallini*

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Fig.29: The ramp leading from the metal steps to the new offices

Dell'Orto's use of metal helps to clarify and define the newness of this section of the interior. The central concrete stair resolves these two very different materials. With the concrete finish on the original stair, the new structure when viewed from the stair foot, runs naturally up into the old structure (See Fig.30). Dell'Orto purposely overlooked the introduction of a handrail here as it would interrupt this continuous line. This concrete approach runs as effectively into the steel steps on the other side, blending the two materials which both have a strong industrial theme (See Fig.28).





Fig.30: The right hand concrete run of the Carlo Cavallini main stair

The industrial theme is continued in the design for the ramp leading to the offices. Industrial cable suspends the entire construction from the ceiling, with the cable also being used to form a handrail on either side (See Fig.31).

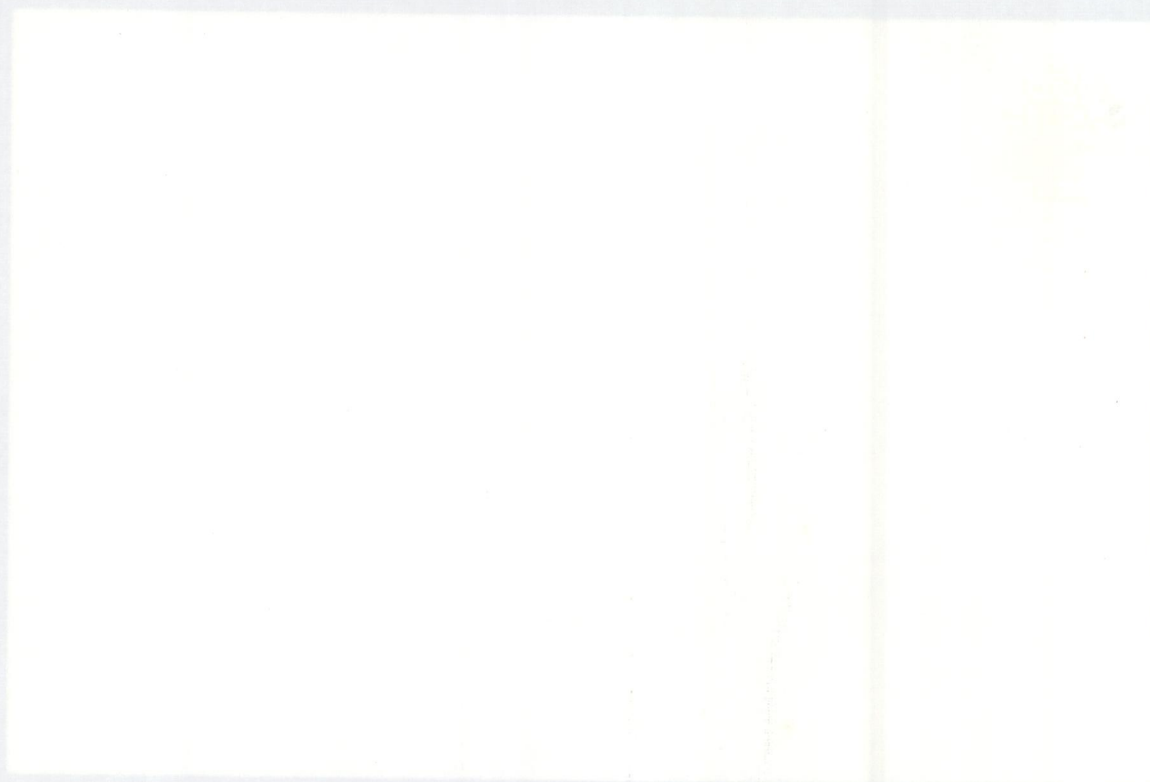


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Fig.31: Side view of the ramp to the offices in Carlo Cavallini

As with Magna Pars, the suspension system becomes part of the aesthetic with the hooks and tensioners clearly visible (See Fig.32).



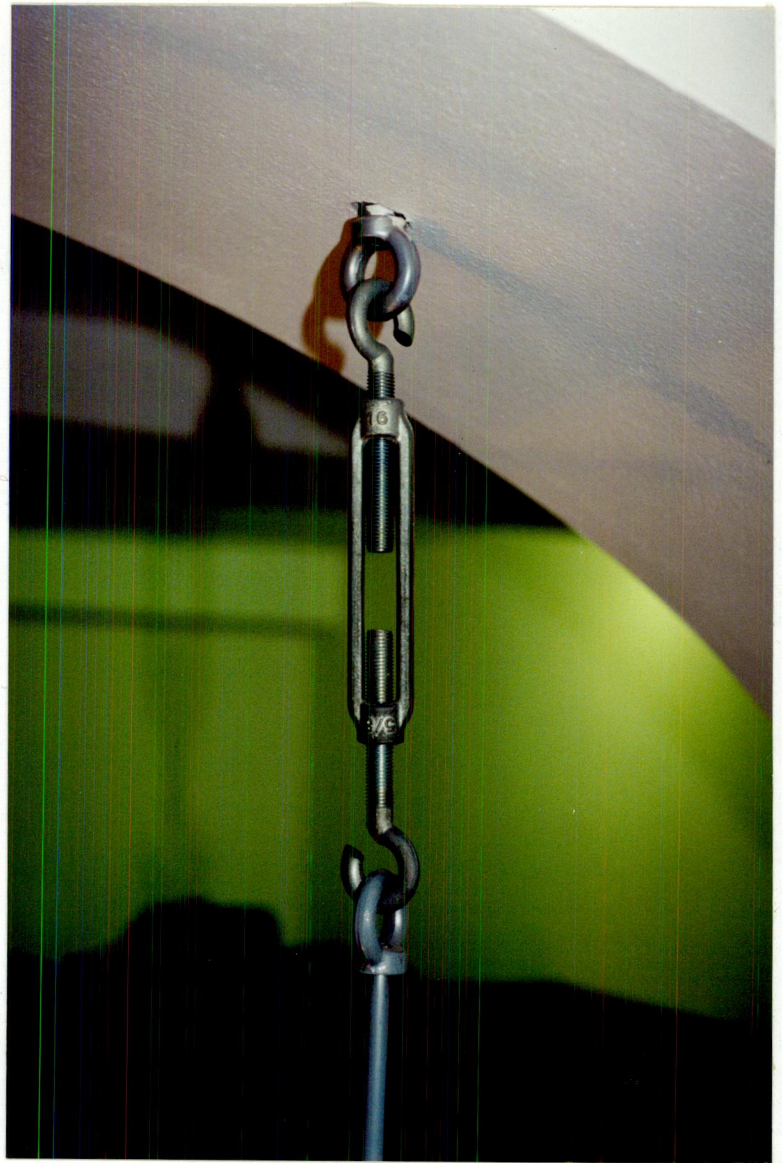


Fig.32: Ramp suspension detail

All of these architects have designed individual and striking constructions which are derived from the same root. All express a connection with the past and apply their heritage, recycling their history into the modern design. With the careful choice of materials, and the sensitive treatment of their aesthetics, these architects have created coherent interiors, recognising the importance of the materials in these creations.



CONCLUSION

Milan is one of the most influential design cities in the world and in this city, the showroom holds an important role in society due to Milan's high regard for design. This combined with the Italian approach to architecture and design has produced an originality where the two have met. In these showrooms, the staircase represents a fusion of the architecture and the interior design which allows these Italian architects to display their skills in both fully. It would be easy to reduce these creations to "designed objects" but the parameters in designing a showroom are varied and complex, having to deal with the creation of an individual identity for the client while enhancing the exhibition or display as well as the more practical aspects of adaptability and constant change which are inherent in showrooms. In dealing with these many factors, the architects, through careful consideration, have fulfilled their clients' parameters, giving their clients an individuality and identity for their interiors.

But, they have also helped to redefine the standard bland white box that has become the usual interior of galleries and showrooms. Minimalist interiors such as those which are the norm for showrooms and galleries throughout the world, are intended to gather their personality and importance for their surrounding exhibits. As a rule the interiors "are static voids instead of flexible spaces" (Sartgo, 1982, p.24). To accept that showrooms gather a personality from the exhibits is folly. This is true to some extent but the showrooms "also 'belong' to what they are made of ; the materials, the fittings, the staircases, the furniture and the special solutions adopted. Together it creates a subtle structural and formal balance" (Ferrario, Dec 1993, Domus). And it takes almost nothing to upset this balance. This is what makes these four showrooms so special. The staircases that the architects have created are the

mainstays of this structural and formal balance.

These staircases represent the Italian excellence in design. Going beyond the functional aspect, the architects have examined and considered all aspects of their designs : the individual aesthetic of the stair, how it relates to the interior as well as the exhibits, and also the other aspects such as trying to express the heritage of the space through its existing modern interior. The architects have examined these questions and the answers have materialised in their steps and stairways. Each detail of their design is carefully thought out and chosen " principally for its intrinsic interest, for its symbolic and representative value as an idea rather than for its functional or decorative necessities (Ferrario, Dec 1993, Domus).

APPENDICES

APPENDIX A : Architetto Colombo Questionnaire

Regarding the staircase design in Magna Pars :

- 1Q : What were the client's design parameters ?
1A : When the client gave me the project they did not impose any constraints ...
- 2Q : What sort of environment did you wish to create based upon these parameters ?
2A : (no.1 contd.) ... therefore I worked in total freedom giving to the interior a completely personal image with respect to the two persistent typologies : from one part a product factory, to the other a palace for offices.
- 3Q : Why did you pay so much attention to the stair design of Magna Pars and how does it relate to your design philosophy ?
- 4Q : What imagery did you base your design on ?
4A : See 2A
- 5Q : Why does each stair differ from the next in both form and use of materials ?
5A : (no.2 contd.) ... This duality was tackled throughout the project by inserting a few *strong* elements in a neutral container, painting the factory white and the attentive use of materials in the *palazzina* for the offices.
- 6Q : Your use of materials follows two main themes : an industrial theme with metal, plastic and glass, and a more traditional theme with ceramics, wood and marble. What were your parameters for combining the two ?
6A : See 5A
- 7Q : Magna Pars spaces are multi-level, heightening the importance of the steps and stairs. How do you feel each stair relates to the next as you progress, especially in Spazio Happening ?
7A : The various typologies of the spaces were made necessary because every space has its own function and limitations, therefore every stairs responds to the *necessities* into which it is inserted, without of course forgetting the *global* image.
- 8Q : Artificial and natural lighting play a major role in your stair designs. What are the major aims regarding their relationship ?
8A : Various materials were used like steel and glass. The use of this last material had the function of allowing a cascade of light to fall from beyond, visually inviting the visitor to anticipate the rise before entering.

- 9Q : An immediate feature of this space is the ramp. How do you see its relation to the exhibition space ?
- 9A : (no.5 contd.) ... The *seamline* of these two realities was resolved/bridged by the insertion of a gangway in steel and glass, which apart from anything else linked two different levels, defining like this the way towards the stairs which permitted the distribution of the various levels of the factory. For this stairs ... (contd.in no.8).
- 10Q : Your designs encompass the main areas of stair design from spiral stairs to ramps. How do you feel this variety effects their role in the interior ?
- 10A : see 7A
- 11Q : Where did the idea to suspend the ramp and stairs in the main hall come from ?
- 11A : The idea to suspend the stairs with the hinge derived partly from the fact that one wished to underline and make obvious the removability of the same piece, the point that we can have a continuous transformation dedicated to the multi-use space.
- 12Q : Why is the curved stairs beside the ramp hinged to the wall ?
- 12A : See 11A

APPENDIX B : Architetto dell'Orto Questionnaire

Regarding the staircase design for Carlo Cavallini :

- 1Q : What were the client's design parameters ?
- 2Q : What image did you wish to create based upon these ?
- 3Q : What imagery were your designs based on ?
- 3A : Each volume has its own material enhancing the appearance of the multi-layer while also expressing the different architectural styles of the space.
- 4Q : What were the major considerations when designing the stairs for Tagliabue/Carlo Cavallini ?
- 5Q : The design for the stairs is rigid and geometrical. What were the aims when it was designed and how were they achieved ?
- 5A : The staircase is a central element of the interior, not only because it is a link between the two exhibition levels but as a bridge between the different historical periods of the building.
- 6Q : Your use of materials follows two main themes : an industrial theme with metal and concrete and a more traditional theme with ceramic and brick. What were your parameters for combining the two ?
- 6A : The volume covered with bricks is the original staircase. This relates directly to the past history of the building, with the brick in a pre-industrial style. This stair is intersected by two other runs ; a larger one in cement and a smaller one in steel.
- 7Q : What do you feel is essentially Italian about your designs for Tagliabue/Carlo Cavallini ?
- 8Q : How do you feel your designs differ from other architects both nationally and internationally ?
- 9Q : How does your work on Tagliabue/Carlo Cavallini relate to your design philosophy ?
- 10Q : What direction do you see the interior design of showrooms following in the future ?
- 11Q : Upon completion, is there anything you would change about the design of Tagliabue/Carlo Cavallini ?

APPENDIX C : Architetto Citterio Questionnaire

Regarding the staircase design for Esprit Italia :

- 1Q : What were the client's design parameters ?
- 2Q : What image did you wish to create based upon these ?
- 3Q : What imagery were your designs based on ?
- 4Q : What were the major considerations when designing the stairs for Esprit ?
- 5Q : The design for the stairs is rigid and geometrical yet weightless in structure. What were the aims when it was designed and how were they realised ?
- 6Q : Why was galvanised steel chosen as the main material ?
- 7Q : What were the main aims behind the access ramp ?
- 8Q : Why is each step hinged ?
- 9Q : What do you feel is essentially Italian about your designs for Esprit ?
- 10Q : How do you feel your designs differ from other architects both nationally and internationally ?
- 11Q : How does your work on Esprit relate to your design philosophy ?
- 12Q : What direction do you see the interior design of showrooms following in the future ?
- 13Q : Upon completion, is there anything you would change about the design of Esprit ?

APPENDIX D : Architetto Gregotti Questionnaire

Regarding the staircase design for Barovier & Toso :

- 1Q : What were the client's design parameters ?
- 2Q : What image did you wish to create based upon these ?
- 3Q : What imagery were your designs based on ?
- 4Q : What were the major considerations when designing the stairs for Barovier & Toso ?
- 5Q : The design for the stairs is rigid and geometrical. What were the aims when it was designed and how were they achieved ?
- 6Q : What do you feel is essentially Italian about your designs for Barovier & Toso ?
- 7Q : How do you feel your designs differ from other architects both nationally and internationally ?
- 8Q : How does your work on Barovier & Toso relate to your design philosophy ?
- 9Q : What direction do you see the interior design of showrooms following in the future ?
- 10Q : Upon completion, is there anything you would change about the design of Barovier & Toso ?

APPENDIX E

Glossary of Terms

Bifurcated stair	Forked stairs or stair which branches off
Dogleg stair	Two straight flights running in parallel but opposite directions with a landing between
Geometrical stair	Steps built into the wall at one end, with each step supported by the one below
Hold	Any protrusion or indentation designed to be grasped when ascending or descending a stairway
<u>Mezzascala</u>	(Italian) A half stair, stair covering half the normal run
Nosing	The frontal projection of the tread beyond the riser
<u>Palazzina</u>	(Italian) The hall way or a large open space inside a building
Riser	The vertical member of the step
Run	The distance between the stairhead and the stairfoot of the stairway
Staircase	The entire structure housing a flight or flights of steps including the framework, supports, landings, handrail etc.
Stairfoot	The level space in front of the lowest step of a stairway
Stairhead	The level space at the top of a stairway
Stairs	A series of steps mounted on a slant one above the other, sometimes interrupted by a landing
Stairway	Stairs supported by an incline either natural or man-made. Stairway is often the term used for any system of steps
Tread	The horizontal surface of the step

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