

ID: 0413

**RILETTURE**

## **CLINO TRINI CASTELLI: DESIGN PRIMARIO**

Clino Trini Castelli, C. Thomas Mitchell

**PAROLE CHIAVE**

Clino Trini Castelli, Design Primario, Metadesign, Qualistic

L'intervista di Clino Trini Castelli, pubblicata nel libro *New Thinking in Design: Conversations on Theory and Practice* curato nel 1996 da C. Thomas Mitchell, è il soggetto della seconda rilettura di questo numero. Il testo raccoglie l'esperienza di Clino Trini Castelli che descrive i principali passaggi della sua carriera di designer e in particolare il suo percorso verso la definizione del Design Primario. Percorso che ha origine negli anni '70 da una cultura del progetto che cominciava a recuperare attenzione verso tutti quelle che sono gli elementi immateriali dell'ambiente, cioè le strutture soft, rappresentate dal colore, dalle finiture, dai decori, dal microclima, da tutto quel coacervo di esperienze sensoriali che però oggi costituiscono effettivamente la vera esperienza dell'uomo nell'ambiente artificiale. Il design primario rappresenta quindi un tema centrale rispetto al rapporto cultura dei materiali e design in Italia al quale questo numero della rivista è dedicato.

////////////////////////////////////

Clino Trini Castelli is the founder and principal of Castelli Design Milano, a firm whose work explicitly addresses user experience and perception. Most of Castelli's professional activity has involved researching and advising on color trends. In 1973, for example, he established the Centro Design Montefibre with Andrea Branzi and Massimo Morozzi. This project resulted in the Colordinamo, Decorattivo and Fibermatching 25 programs, the last of which was awarded a Compass d'Oro award in 1976. In 1978 Castelli established Colorterminal IVI, the first European workshop for research in color design, and in 1984 he received an IBD Gold Award for his work on color, material and finishes for furniture company Herman Miller. In addition, he has been a color consultant for a number of automobile companies, including Fiat, Renault, and Mitsubishi. Castelli has also worked on projects for numerous other companies in Europe, Japan, the United States, and Australia. Along with his work on color, Castelli has also addressed the role of a number of other "subjective" aspects of space, including light, sound, microclimate,

texture, and scent. In 1972 he coined the term *design primario* for this work; a decade later he founded and directed a postgraduate design course on this topic at the Domus Academy in Milan. When asked about the origin of the term *design primario*, Castelli said:

I came up with the term in the seventies when I was obliged to define activities that related to very deep and profound aspects of our perceived reality. The meaning of *primario* is a little bit long, but I will try to express the idea with some examples and metaphors. Something that is *primario* is very subtle in terms of the energy it expresses, but when that level of subtle energy is present at a larger scale, it becomes important. At that point it becomes something very fundamental and strong from the point of view of sensation or communication.

For instance, color is something that in nature is very soft, something with very low energy produced only by the change in frequency of light, something that is not substantial. If I use color in a small way, then the effect is modest; it is not so fundamental. But if I am able to influence the reality of color, as in our artificial environments, in a way that becomes connected with a period such as the eighties or the nineties, then I am able to identify the nature of a certain color in a certain environment in a very large way. For instance, when I work for car companies and recommend colors, you can then see this effect on very large scales, at this point, the low energy of the color itself has become so important that its level of figuration is very strong.

When we work in the design *primario* way we use very subtle effects - in smell, in light, in color, in many manifestations of reality - and we amplify them to a degree that becomes significant at the figurative level - very significant, very expressive, and very important. So this has guided a sort of poetics, a minimalist poetics, that expresses one phenomenon at a low level of energy, at a low intensity, but that becomes very significant when taken on very large scale.

In one case, for example, I worked on a gray-light concept based on retroreflection from a surface, using 3M reflective material. Everyone else uses this kind of material in a smaller way, say, a piece thirty centimeters square on a car or a dress. I did an application on the Fiat Centro di Qualistica in an environment that consisted of two membranes, one of which was four hundred meters square and covered with the material to make it retroreflective. Those who used the space said that when you see the light retroreflected by a membrane of this dimension, you perceive a completely different reality of light. The light has a different geometry and behavior. The lighting of the objects in the space is completely different because you don't have reflections. So the dimension of the phenomena, which is very difficult to perceive and appreciate on a small scale, becomes something fantastic. It is really

different - very strong and very significative.

Using a metaphor, I always say that I prefer to work in the dimension that connects my work to *bradisismo* - a tectonic phenomenon similar to an earthquake. *Bradisismo* is a very subtle movement of the earth's crust; you don't perceive any movement, but one day you notice that the level of your coast has completely changed in relation to the sea level. This has happened near Naples and in any area where a bridge or pier is completely different in level from the past. What has happened is that this *bradisismo* movement, though mild, has moved a large area and has had a big effect on the environment, even if it is a small change of, say, one meter. At the other end of the spectrum, you have the earthquake with the manifestation of a volcano that appears in the water in front of the coast. In that case you have a poetic manifestation. If you think in terms of design, it's very strong, very condensed, it has a very pronounced appearance; it is very localized, and it is limited to a certain point. With *bradisismo*, on the other hand, the movement is quite extensive, involving a big area of the crust. I work in the *bradisismo* way mostly.

### **Metadesign Systems**

I have one very important point to make here. Design *primario* is a form of metadesign. It has a meaning only if it is pursued in a metadesign way, if it is a metaproject. So when I talk about color in connection with one simple object, that doesn't have a big meaning.

But if I talk about the category of objects behind the single individual design project, in this case it has a certain kind of meaning.

Everybody has experienced the feeling of solving problems connected with a simple object. The real problem comes when you have highly complex products like systems, like the transversal planning of a product line, as in the car industry, or when you enter in the dimension where you have to manage a project completely from zero in terms of immaterial identity. At this point, the metadesign - the ideas behind the design of the single object - becomes significative, becomes very important. By the way, the metadesign makes it possible to do projects that can be used by other designers and applied to any kind of product that follows.

My history in design is entirely connected with metadesign, even my first important professional work in 1969-72, in which I created the Corporate Identity Program for Olivetti. This work resulted in the first manual of a corporate identity to be done in an operational way. It was a metaproject that was done in such a way that you could not solve a single problem finally, but rather so that any kind of problem which resembled the original could be addressed. That was very important and very different.

For that reason, I prefer not to work directly on the final object, but with the group of designers who will apply my metadesign system to the single object later. This is very important, this aspect of metadesign, it has characterized all of my activity. I discovered recently, maybe four or five years ago, that all my activity was different from work that other designers have done, and this is very interesting. It now attracts a great deal of attention from universities and from the Domus Academy as it starts to be better understood.

### **The Qualistic**

Though Castelli has been involved in partnerships and collaborations with a number of leading Italian designers such as Ettore Sottsass and Andrea Branzi, he has in his work focused more on the effects of design than on physical form. When asked why he has chosen this approach, Castelli said:

I don't know, exactly I was educated in formal, traditional three-dimensional design, particularly car design, when I was young. Very soon I started to understand, or better still to feel, that the future of our reality, of our environment, was probably more connected to these kinds of subtle effects that I have gone on to explore through design *primario* than to what we were thinking at the beginning of the seventies. Instead of designing objects like all my colleagues, I started my career designing laminates with glowing lights and things like that. I cannot say exactly why, but to me there was a kind of natural sensibility to that kind of dimension. It was not something that I in any precise way selected, but it was based on a kind of sense that this was important, even if this was not an absolutely well founded belief.

In order to better describe his work, Castelli coined the word *qualistic*.

*Qualistic* is now in the mainstream Italian vocabulary and is considered an analogy. It implies the perception of quality from a subjective point of view. Quality is by definition - from a philosophical point of view and from a certain point in our history practically starting from Galileo - a quantitative dimension, that is, one associated with quantity. It is a dimension where the perception of quality can be shared in an objective way by any person. So if I talk about color, I talk about the quality of the paint. I say, this paint can resist ten thousand hours of the sun's rays or of ultraviolet light - that is a quantitative quality. But if I talk about a certain type of color you like, you can recognize that this paint has a certain kind of quality. Another person does not recognize any quality in that color, so the *qualistic* is concerned with the perception of quality connected with the subjective evaluation - it is the perception of quality that changes from person to person. This dimension we have called

*qualistic* in order to distinguish it from the quality that has a meaning of quantity and objectivity.

When asked how his focus on the *qualistic* or subjective side of designing relates to more traditional fields of user research, such as ergonomics and human factors, Castelli responded:

The *qualistic* has to do with ergonomics and psychology, but it is essentially different because some kinds of human factors are absolutely objective. For instance, if two persons have to use one table I can use ergonomics to do something that will be shared by the two persons. With the *qualistic* approach I cannot do that. For instance, if one person likes blue and another likes red, I cannot propose a violet that might be an intermediate color to make them both happy. That is very important because it means the *qualistic*, as distinct from the ergonomic, cannot be shared.

### **Immaterial Phenomena**

As mentioned earlier, Castelli explicitly addresses the immaterial phenomena involved in the design experience - light, color, texture, aroma, microclimate, sound - in his work. When asked how he manipulates each of these qualities and what effects he tries to achieve with them, he said:

Working with light is the main project of my life because it is fundamental. I am especially interested in the three ways that light is reflected by bodies: scattered reflection, mirrored reflection, and retroreflection, as in the eyes of the cat or in the small drop of water on the top of the leaves in a garden. Retroreflection is the fundamental way to reflect light, and this was never explored in terms of artificial lighting because nobody was putting a large surface of reflective material on the ceiling, for instance. I have now done that. The most recent application, in Japan, was very valid from the point of view of its performance. It was a school for computer instruction that featured three classrooms, each ninety meters square, that worked very beautifully. The reflective material reduced the glare on the computer screens, thus improving human performance for a difficult visual task. This is the main, and perhaps unique, work I have done on light, which I think is something that can be historic and fundamental.

In addition to lighting, there is texture - my passion at the moment. I just completed some experimental furniture for Cappellini International. The pieces are made using a large and different kind of application of texture. This is my actual figurative intent at the moment. I have manipulated aroma in some work presented at the Venice Biennial, but have not developed it further. I have also done some work with microclimate. At

the Milan Triennale of six years ago, for example, there was a room free of dust for domestic use.

But that, obviously, is a minor kind of thing. I haven't done very much with sound either.

The only work I have done was very practical but interesting. It was in application to the control room of a nuclear plant. There was a problem of sound quality, of interpretation of alarm signals and so on. Sound is a field of interest to me, though it is one in which I am less well prepared.

### **The “High Touch” Office for Herman Miller**

In order to more fully set out how he applies his ideas in practice, Castelli focused on the range of work he did in the 1980s for the furniture company Herman Miller.

I will address my work with Herman Miller from the perspective of today; I'm now working on the office and the nature of the office for the nineties with Olivetti and in Japan with others. When initially I was asked to work for Herman Miller, I saw what the situation was very clearly. If you remember 1981 and 1982, the American office with systems furniture followed a military kind of organization. We transformed this through the Herman Miller project and with the showroom at the Chicago Merchandise Mart for Neocon in 1983. We made it a very “High Touch” kind of environment - introducing a multiplicity of color complexity, as well as other aspects that made the environment very rich, more similar to domestic environment. Or, if you prefer, we transformed the office from a factory environment to a hotel environment, because it is more connected with the public domesticity of the hotel than with the private domesticity of the home.

The aim was to change dramatically the perception of the work or office environment in the world. Today it is too easy to understand that our work for Neocon in 1983 was absolutely revolutionary. Before that time everybody was thinking of the office of the future as an environment that would be very cool, very dry, very futuristic, and very technological. We said, “No, our office in ten years will be like this - a high-touch office with a polychromatic color scheme, very rich fabrics, materials, environmental wallpapers, and wood - lots of rich wood.” The feeling of this kind of environment was absolutely different from the others at that time. In fact, offices are still hightouch today. I think it's time to change, right now, but the short-term reality of the office was that one.

As is evident, one of Castelli's primary impetuses in much of his consulting work has been to help “humanize” the impact of technology.

The enhancement of technology in an environment, as in an office where

you have more and more machines, is based on a sort of reduction of the sensory stimulation, a limitation of subtle and profound experience. The strategy for Herman Miller in the 1980s was to make the environment more complicated through use of multiple colors, such as the polychromatic schemes, different surface materials used simultaneously, different tactility. All of this was done in order to enrich the environment with light and shadow-to put in more complexity.

Complexity is a humanizing factor in terms of perception. If you are in a single-perception environment, like a red room, it is very straightforward from the point of view of psychophysical reaction. Very soon you don't notice the color; the color disappears because the stimulus is too simple. So the complexity of stimulation is a dimension of humanization, something that reaches people and produces a better condition of life. Nature is complex, and so subtle. We cannot imitate it, obviously, but I think that inclusion of immaterial quality, complexity, and multiple stimulation is a good strategy to balance the aspects of high technology.

Reflecting on his work for Herman Miller, Castelli noted:

It was an important achievement from many points of view. First, because we identified the language of the qualistic of the eighties in advance. I had started work in 1980, and in 1983 we were ready to go to market. Also, in the same year there was the main exhibition of the Memphis collection, so we were able to identify the polychromatic language for certain kinds of spirit just in time. Today this just-in-time nature of design can be realized, thanks to the capacity we now have to analyze this reality, the reality of the qualistic. This is what we think we have contributed in some way through our work: a technique for analyzing this aspect.

When asked to elaborate on this forecasting technique, Castelli said:

We analyze trends with an umbrella diagram based on decades, which I elaborated at the end of the seventies in order to look back and to look into the future. This diagram is something very important for me. We have an arch - the top of the umbrella - that represents historical periods, or decades; then a small arch - the lower ones - representing fashion periods. The latter are contradictory, shorter, but the reference exists. It's very easy now to recognize future trends now in advance. It's easy. We are therefore able to identify what the proper kind of language is for design at any given time.

### **The Gretel Soft Diagram**

Because of his focus on the qualities of an environment instead of its form,

Castelli has had to evolve an entirely new design process, along with new methods, to achieve his aims.

We designers presently use a technique that expresses space but not these kinds of immaterial aspects; they are not a major feature of the representations. So this is a very important aspect. If we want to improve the subjective quality of our environment, we have to invent the tools that factor in, or represent, this kind of quality. It's important.

We invented the perspective drawing during the Renaissance in order to express the centrality of man in the humanistic condition. We have today to invent a new kind of perspective tool that represents our condition today. This kind of work involves the drawing many times, so the drawing must be reorganized in some way. This is very interesting and I think exciting, but it's a long process.

In general, in our work we have to use methods because we are talking about what is subjective, aspects that are immaterial, things that are very fragile; we have to communicate the process to other people, and this is part of my effort. Ettore Sottsass thinks that my approach is too scientific. But I, however, say no. I have to survive in a world where I don't talk about poetry or poetics only. I have to create a level of poetics that must be shared by other people, and I have to be very cool from a certain point of view, I have to plan and I have to explain what I'm doing.

The Gretel Soft Diagram is, I think, a beautiful exploration of that. It is really something small, it resulted from an intuition and I did it in maybe a couple of hours in the late 1970s, but I never cultivated it. To me it is not only a way to express diagrammatically energies that are immaterial but also a way to represent a certain kind of world where phenomena happen and have a figuration. To me it is like seeing a space, a drawing, an image.

In fact, I never use the Gretel Soft Diagram, because some time ago I had already begun to think in that way. But every year that I gave the masters' course at the Domus Academy, the first work done by students was to represent their school through an environmental diagram. It was very easy for me to see immediately which kind of people were suitable for the work, whether they were "soft"-oriented people (though I don't like that word) or more objectively oriented people. It was a good test, and this exercise was always given. I have kept many of them. By the way, some of them are beautiful; they express quality beautifully - the qualitative of an environment that until today didn't exist in terms of representation.

I think that perhaps someday or other, someone will start a practice based on such analysis. Maybe it won't be me - I don't know - but I believe that it is something useful and important. Obviously, there will be



a kind of common graphic language, such as exists in technical drawing, that will be easier to share. But that is something that belongs to another moment maybe. We have shown a way to solve it; maybe someone in the future will do it.

I myself have intentionally done professional work, not written books, to stress the importance and the urgency of this kind of way of thinking. To test it professionally.

Today I've done enough. I'm no longer interested in that aspect of it. But at the time, I was radical in a certain way; I wanted very much to demonstrate that it was something real, urgent, and useful. We have certain strategies in a certain period. In another period maybe they're better abandoned because otherwise we go too deep and lose the total picture.

### **Return to the Object**

Castelli had originally sought to develop the "soft" qualities of design to the exclusion of form. Now he is exploring its "hard" qualities as well.

I notice that now, because it is twenty years since I began thinking in this way, I am probably ready to change. I have to say that at the moment I am now attracted to the very "hard" aspect, for some reason. But my form has nothing that recalls the traditional formal design process. I have designed furniture but the bookshelves or the chest of drawers that I do express another idea of the form that follows my initial concerns in design *primario*. Addressing the reintroduction of form to his work, Castelli further explained:

I know that form was impossible to eliminate, even if the dematerialization of the contemporary technological object is a reality. But now with my clients, such as one that is developing a computer in Japan, I have for the past three or four years, for the nineties, said that the technological object must be rematerialized. I feel that it now reaches maturity in terms of evanescence. In my poetics at the moment, for example in my furniture designs, the quantity of objects is my last concern. But if an object exists we have to abandon the strategy of the seventies and eighties, which tended to dematerialize the object by making it appear very light through color and shape.

I think now we have to design objects that are very heavy, very present, very strong in their physicality, because we want fewer objects around us, but those that exist should be very strong. We should avoid producing a lot of very light and very camouflaged ones.

This is a very important statement today, I think, and this guided me when I was working on what we have to do in certain fields, like the computer industry in the nineties. Every period is a statement, we must be ready to change strategy continuously in the last Milan Triennale

most people were working on design as concept. I said no, I want to do design again as object, and I want to clarify through form what kind of object it is.

### **A Moment of Happiness**

When asked how he defines good and bad design, Castelli said:

Bad design for me is what I don't appreciate, what I don't notice particularly. The bad things around us are numerous, and they predominate because it is an attitude of man to produce bad things. So bad design is the norm, the dimension where we live. Bad design is the moment where we have no energy, where we think that we are not responsible for something. It's connected with death. When you die you are ready to accept bad design.

Good and bad design have nothing to do with commercial success. We can have fantastic commercial success with bad design. That is normal. So good design is what we hope will remain. Good design has nothing to do with selling a lot or a little of something. It is an effort, a moment of happiness, a happy coincidence of factors. Good design is a real achievement.

////////////////////////////////////

Testo originale:

**Trini Castelli, C. (1996). "Enhancing Perception. Clino Trini Castelli: Design Primario". In Mitchell, C. T., *New Thinking in Design: Conversations on Theory and Practice*. Wiley Publisher. pp. 62-71.**