

Umbrella Diagram: 1981-2021, five decades of forecasts and CMF design

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ABSTRACT

The Umbrella Diagram, developed by Clino Trini Castelli since 1978, is a fundamental tool to configure CMF design languages and forecast historical color and material trends survey. The tool, based on decades, is represented by arches instead of an evolution of a timeline. This cyclical progress proved to be premonitory of the strong changes observed between the color languages of the decades. The umbrella shape of the diagram stems from the coexistence of large arches (historical trends) with smaller arches (fashion trends), frequently in conflict. Castelli first turned to the past of the 70s, 60s and 50s, testing his format backwards based on what was already observed. He then applied the same principles and parameters, looking rather at the 1980s and, till today, to the other four upcoming decades. The Umbrella Diagram was conceived as a proprietary tool of Castelli Design and reserved for his international customers and educational activities.

KEYWORDS CMF design and forecasting, Iconic Colors, Syntactic Colors, Color Presence, Color Distribution

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1. Introduction

This of the AIC 2021 Milan congress is the first public presentation of the Umbrella Diagram executed outside of a professional or educational confidential context. Despite the current presentation of this proprietary tool is taking place exactly forty years after its creation (1980-1981), to this day continue not to be any web recurrences on search engines, except one not-authorized imitations that appeared several years ago using the same graph and the same four basic parameters.

Intending to take over the design company CDM - Consulenti Design Milano, Clino Trini Castelli had already begun, in 1978, the search for a tool that would make it possible to predict the identity of colors and materials languages in advance, as well the related trends.

With the advent of the additive color synthesis era (then completely unnoticed) Castelli founded and directed the Colorterminal IVI in Milan (1978).

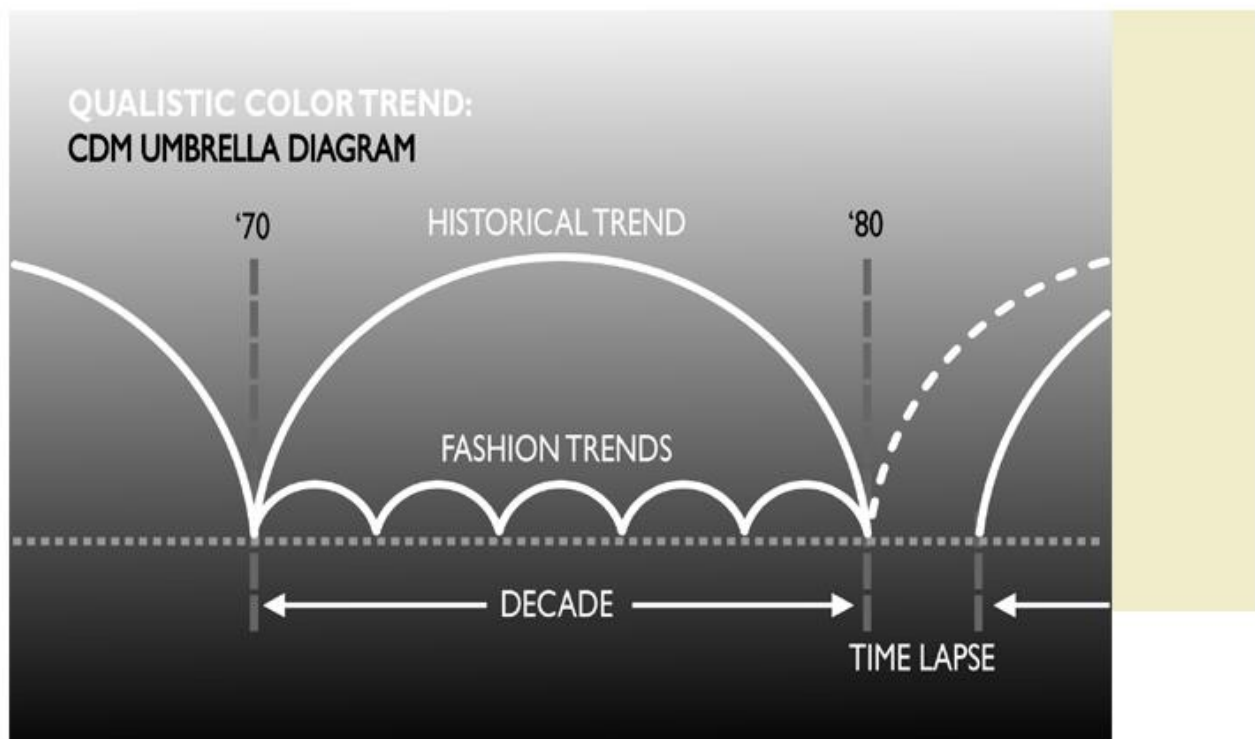
The Colorterminal was the first color research center for design and architecture in the world, enabling the chromatic potential discover of the additive RGB synthesis.

The Umbrella Diagram was going to be a new dialogic tool - like the Gretl's Diagram (1977) now in the CCI Collection of Centre Pompidou in Paris - proper for guiding and training also the designers of the first international customers by Castelli Design, including Louis Vuitton.

With CDM, founded in 1974, Castelli introduced the "extensive vision" of the metaproject in the professional field through the Design Primario, this in opposition to the "intensive vision" of traditional design process.

This had led to the development of qualitative aspects of modernity which was still unsolved, as evidenced by the success of the Colordinamo and Decorativo manuals of the Centro Design Montefibre (1974-1978).

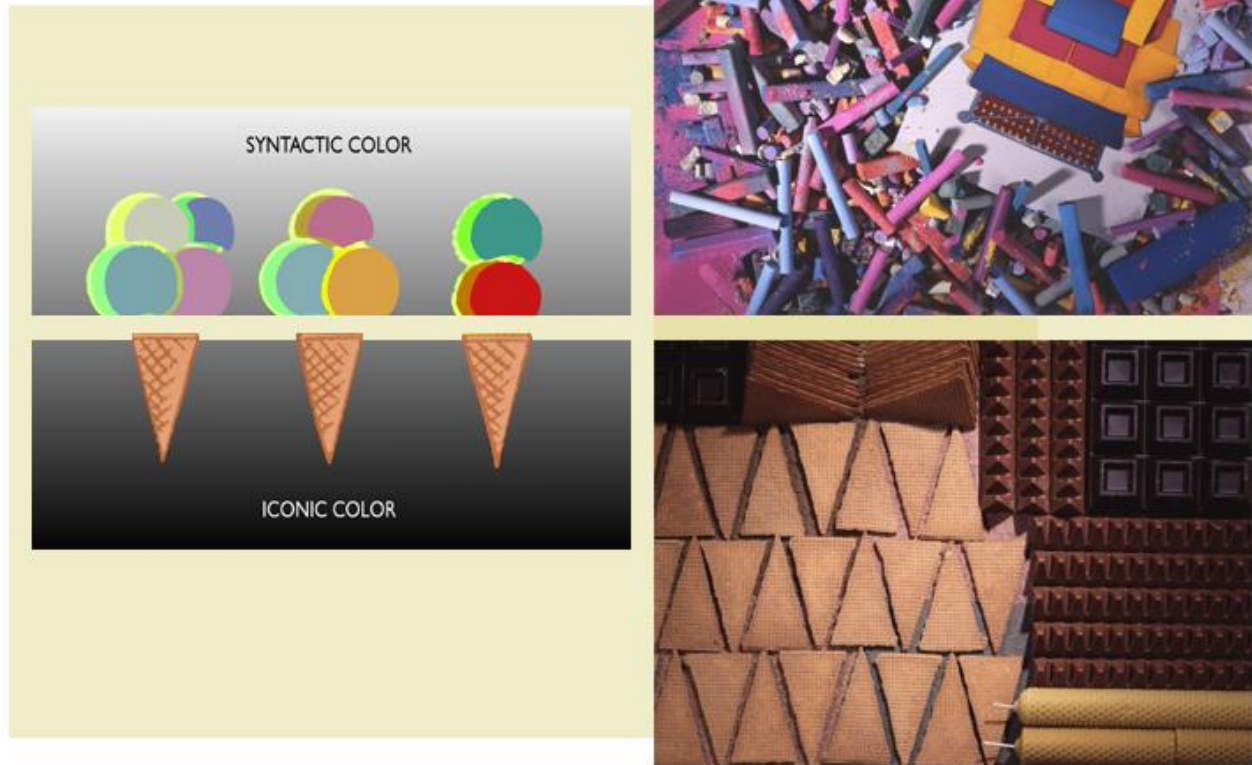
umbrella diagram · *historical and fashion trends*



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Figure 1. The Umbrella Diagram graph with small and large arches inspired by the Kircher's Diagram (1646).

color nature • syntactic vs iconic



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Figure 2: The Umbrella Diagram Chromatic Nature: Syntactic Color vs Iconic Color.

In the CDM - Consulenti Design Milano, beyond Clino Trini Castelli, Andrea Branzi and Massimo Morozzi, also participated for a while the architects Ettore Sottsass and Alessandro Mendini.

Since 1980 the international activity of Castelli Design - with Vitra in Europe, Herman Miller in the USA and Mitsubishi in Japan - has pointed to a great development of CMF design (Colors, Materials and Finishes), an acronym born in 1981 with the CMF project for Herman Miller by Clino Castelli.

Umbrella Diagram graph:

- Color Arches (Historical Trend arch, Fashion Trend arch).
- Time Lapse (Run-Out or Deviation: anticipation or delay from the ideal Historical Trend).

The Umbrella Diagram graph (Figure 1) is derived from the interlaced arches of Kircher's Diagram (1646) published on the art magazine Data Arte.

The article I diagrammi del colore: Trini Castelli (1978) describes the evolution of the color diagrams found in ancient books and other documents provided to the Colorterminal by Faber Birren, the founder of the Yale University Color Library, with which Castelli had begun to collaborate since 1977.

The Umbrella Diagram is a tool based on decade divisions, represented by large arches instead of the classic linear evolution of a timeline. The main idea was to connect a precise historical color language to a decadic trend, already started from the 50s.

This cyclical progress proved to be premonitory of the strong changes observed between the languages of the various decades.

The umbrella shape of the diagram derives from the coexistence of large arches (historical trend) with smaller arches (fashion trends) that develop, often in conflict with the historical trend of the overlying decade: Raimondo (1982).

When Clino Castelli developed the diagram, starting from 1978, he first turned to the past of the 70s, 60s and 50s, testing the format backwards based on what was already known.

He then applied the same principles, looking instead at the 1980s of the upcoming decades, thus anticipating the great novelty of Post-modern and Memphis polychromatic languages, with their Syntactic and Tonal colors: Lentati (1984).

The qualities that make the Umbrella Diagram tool dialogic and peculiar stand in a specific articulation of the factors of judgment and evaluation of the inherent nature of color (such as: Iconic color / Syntactic color) (Figure 2), on the chromatic characteristics of the colors in use and their application on objects and environments (such as: color Presence / color Distribution) (Figure 3).

These factors are always connected to the social, economic and technological contexts of the individual

decades (such as: Socioeconomic context / Technoscientific context).

Umbrella Diagram's original Chromatic Parameters (Table 1) and context:

- Chromatic Nature (Iconic Color, Syntactic Color)
- Chromatic Features (Color Presence, Color Distribution)
- Historical Context (Socioeconomic Context, Technoscientific Context)

2. Umbrella Diagram's Historical Trend Identities

The entire Umbrella Diagram historical trends identities show a sharp decadic opposition jump between the Chromatic Nature languages (Figure 4), that are alternatively Iconic and Syntactic. This is probably due to the need to reach the maximum possible sensation of chromatic novelty.

color features · presence and distribution



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Figure 3: The Umbrella Diagram Color Distribution feature. "The gentleman and the rascal": paradox effect of inverted color distribution on a same black & white color presence.

Decade	Color Presence	Color Distribution	Chromatic Nature
50s	Pastels (Tint)	Bichromatic	Iconic / Syntactic
60s	Primaries	Monochromatic	Syntactic
70s	Naturals	Achromatic	Iconic
80s (Figure 5)	Tonals	Polychromatic	Syntactic
90s (Figure 6)	Iconics	Metachromatic	Iconic
00s	Transitives	Heterochromatic	Iconic / Syntactic
10s	Dissonants	Hyperchromatic	Syntactic / Iconic
20s	Opponents	Autochromatic	Iconic / Syntactic

Table 1: All the parameters seen simultaneously with a hint on 20s decade, that marks the end of the modernity.

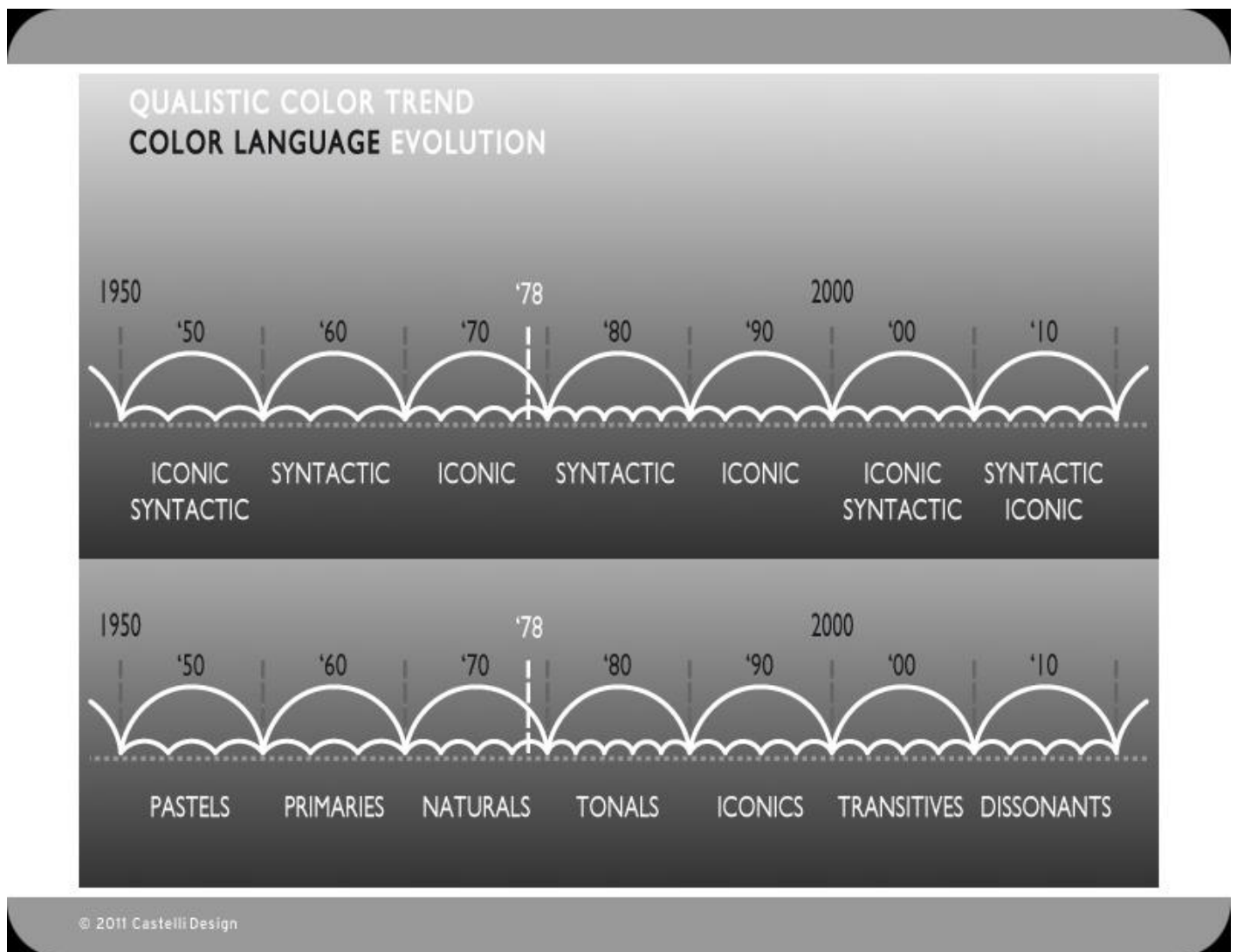


Figure 4: The Umbrella Diagram Color Language evolution graph that show the alternation of Chromatic Nature.

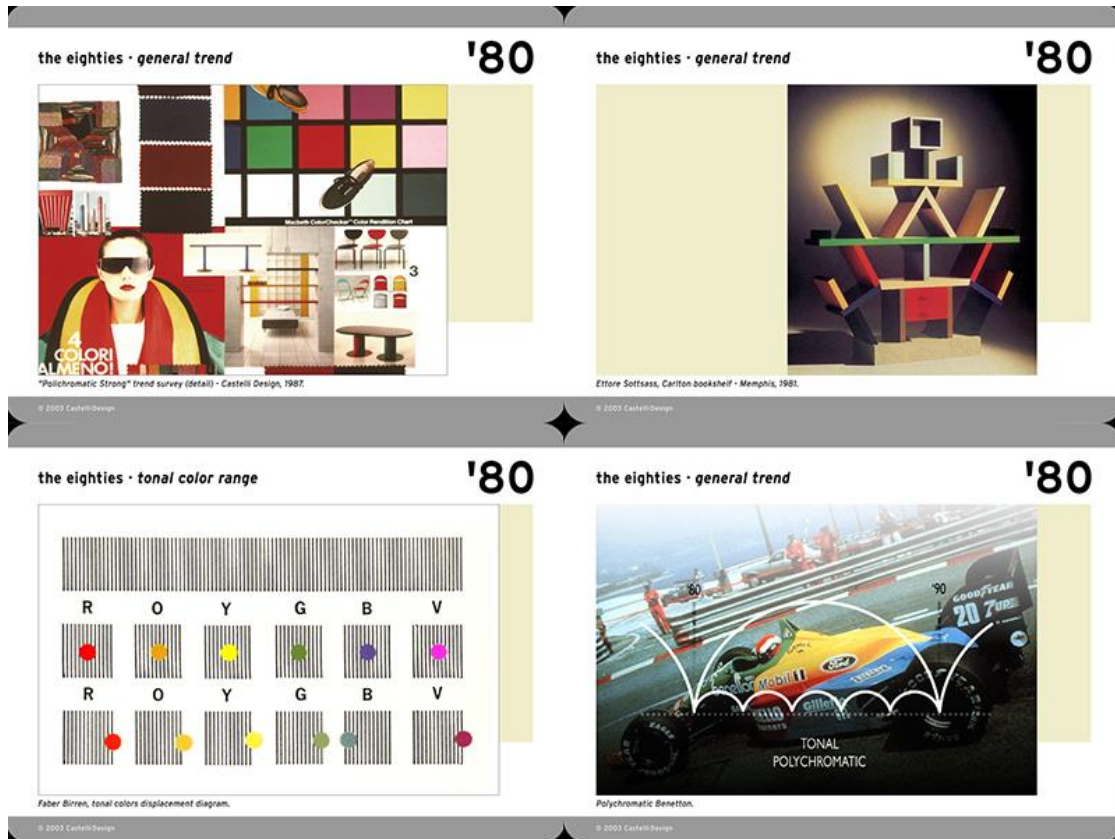


Figure 5: The Eighties Color Trend with Tonal and Syntactic languages.

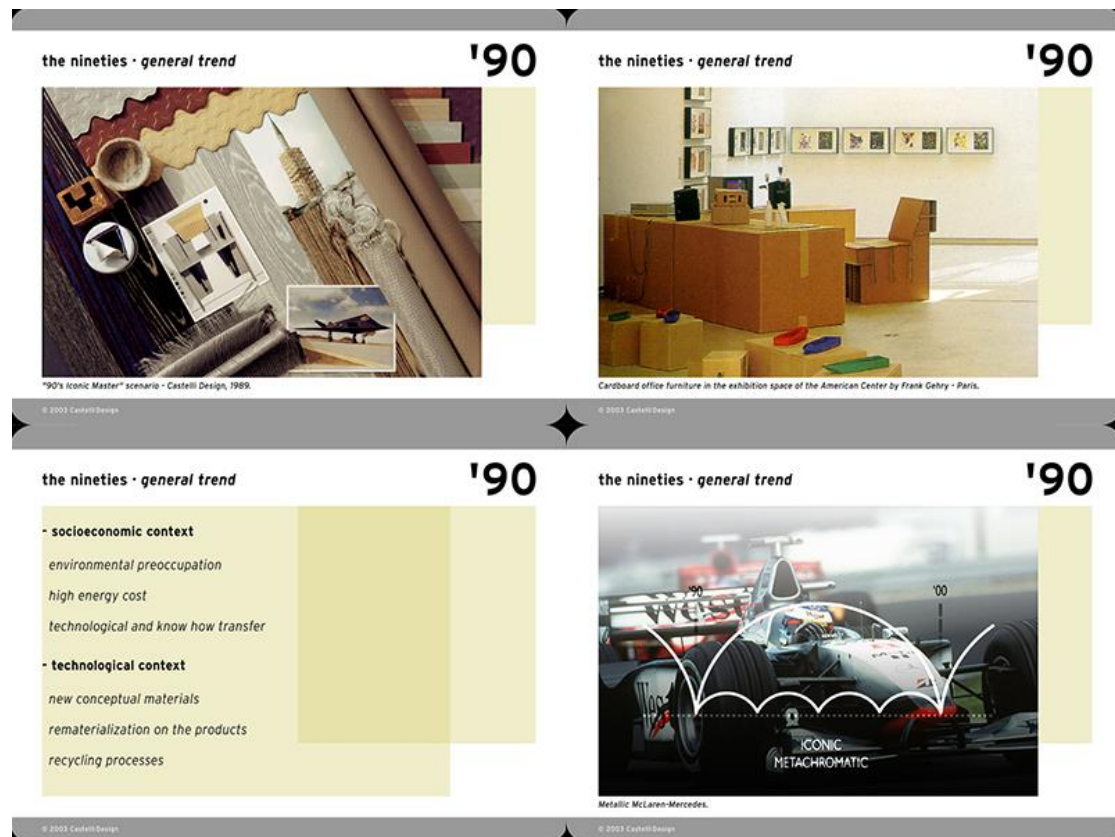


Figure 6: The incoming decade of the Nineties with the Second Ecologism created a strong mutation of the Color Trend in relation to the Eighties.

3. Author's statement on the Umbrella Diagram

"[...] 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 [...]": Mitchell (1996: 68).

The diagram format and images were closely linked to the issues that could interest my customers, as the field of new materials (Europe, Japan), automotive production and related CMF languages: Takehara (1984) (Japan, Europe, USA), large office systems (Europe, USA, Japan, Australia), office equipment, including large servers (Europe, Japan), etc. This meant, for example, that for each decade was selected a Formula 1 racing car because, in addition to having a livery suited to the emerging color schemes of the moment, in most cases was also potentially the winning stable.

In addition to the Second Ecologism of the nineties: Trini Castelli (1995), where Color Distribution (Metachromatic) became irrelevant, the Umbrella Diagram has also highlighted the Natural and Achromatic experience of the First Ecologism of the seventies (Club of Rome, 1968-1973) to which I actively participated in its promotion with the magazine Domus.

However, the most sensational anticipation came with the publication of the book *Transitive Design*: Trini Castelli (1999) and the presentation of the languages of the zero years of the new century where instead the duality of Color Distribution (Heterochromatic) became relevant again. *Transitive Design* also anticipated the visions of Transmodernity that anticipated the great ecological transition that began after the current global crisis due to the pandemic. This crisis was somehow anticipated by the alarming emergence of the Dissonant harmonies, the extreme languages and Hyperchromatic colors of the 10s.

The Umbrella Diagram has been doubly important to me because over time it has allowed to maintain constant attention to certain signals coming from human ambitions and emotions connected to the global "sentiment of color". This is how I had the certainty of having definitively emerged from what was the long and extraordinary human experience of modernity, to now enter in the 20s of Transitive Times floating season.

4. Conflict of interest declaration

The authors declare that there is no any conflict of interest concerning the content of this article.

5. Funding source declaration

This paper did not receive any specific grant from funding agencies in the public, commercial, or not for profit sector.

6. Short biography of the author

Clino Trini Castelli (b. 1944) designer, artist and design theorist lives and works in Milan. Internationally known for CMF design (Color, Material and Finishes) of which he was the initiator, Castelli introduced the "No-form" renewal of plastic languages applied to industrial products through the tools of Design Primario. As opposed to traditional compositional methods, Clino Trini Castelli has focused on the design of the more intangible aspects of figuration, like color and material, light and sound, emphasizing the virtues of a sensorial approach to art and design. Since the early 1970s this has made him a pioneer in research on the emotional identity of products in the industrial sector. His work has received important European, American and Japanese prizes, including two ADI Compasso d'Oro awards.

7. Acknowledgment

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