

The Chromatic Turn in Fashion Environment: From Radical to Sensory-Experiential Design

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ABSTRACT

This study examines the evolving role of color in fashion-related built environments, tracing its historical and conceptual trajectory from the radical chromatic practices of the 1960s–70s to contemporary applications within sensory-experiential design. Through a qualitative, exploratory approach integrating literature review and emblematic case studies—from Archizoom’s Superonda to Gentle Monster’s Aoyama store—the research highlights color as a multisensory, semiotic, and cultural agent. Findings reveal that color has transitioned from a compositional element to a dynamic medium capable of shaping perception, eliciting affective responses, conveying ideological stances, and structuring immersive brand narratives. The notion of the “chromatic turn” is introduced to describe this epistemological shift, establishing color as a central mechanism of design agency and being framed as a dynamic, multisensory medium through which fashion environments construct meaning, articulate ideology, and shape embodied experience.

KEYWORDS Chromatic Semiotics, Radical Design, Design Primario, Fashion Environment, Sensory Experience Design

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1. Introduction

Color has long played a central role in *Design* discourse, not only as an aesthetic element but as a semiotic system conveying cultural identities, values, and narratives (Barthes, 1977; Santaella, 1986; Gage, 1999; Farina, 2006). In fashion—especially retail—environments, color exceeds decoration, acting as a catalyst for perceptual, affective, and experiential engagement (Malnar and Vodvarka, 2004; Pallasmaa, 2005; Lindstrom, 2012; Heller, 2013). This study explores color's evolution from a visual-functional element into a multisensory strategy.

Framed by the shift from modern to contemporary paradigms, the analysis introduces the *Chromatic Turn*—an epistemological change in how color is theorized and applied in *Design* and fashion contexts. Positioned at the intersection of multiple disciplines, it traces chromatic approaches from the 1970s (e.g. Trini Castelli, 1985, 1989) to contemporary expressions in *Sensory Branding* [1], *Sensory Design* [2], and *Experience Design* [3] (e.g., Malnar and Vodvarka, 2004; Hultén, 2017; Rossman and Duerden, 2019).

The study's contribution lies in articulating links between color semiotics, *Radical Design*, *Design Primario*, and sensory-experiential approaches. It investigates how chromatic strategies have historically and conceptually shaped brand identity and user experience, guided by the question: *How has color evolved into a multisensory and semiotic tool for constructing affective and immersive experiences in fashion environments?* In addressing this, the study deepens understanding of color as a medium for spatial storytelling and experiential meaning.

2. Methodology

This research adopts a qualitative, exploratory approach to address its central question through a structured state-of-the-art literature review. From a multidisciplinary perspective, it integrates theoretical contributions with emblematic examples from fashion environments. These were selected based on two criteria: (1) their relevance to the paradigm shifts of color since the late 1960s, and (2) their capacity to express identity and temporal-cultural meaning through spatial experiences with color.

Sources span *Design History and Theory* (e.g., Krippendorf, 1984; Trini Castelli, 1985, 1989; Branzi, 1984, 2008, 2015), *Semiotics* (e.g., Santaella 1986, 2018; Lanigan, 2009), *Color Theory* (e.g., Farina, 2006; Heller, 2013), *Phenomenology* (e.g., Merleau-Ponty, 1962; Pallasmaa, 2005; Millar, 2011; Dedrick, 2015), and *Sensory Experience* (e.g., Malnar and Vodvarka, 2004; Lindstrom, 2012; Manzano et al., 2012; Hultén, 2017;

Rossman and Duerden, 2019), informing the interpretative framework and contextualising color as a sensorial and cultural phenomenon.

The analysis follows a hermeneutic approach structured around two thematic axes: a) color's role in *Radical Design* and *Design Primario* as a critique of modernist austerity; b) the rise of chromatic narratives in fashion environments, where color articulates identity, temporality, and atmosphere. This methodology supports a comprehensive understanding of the historical, theoretical, and experiential shifts shaping the expanded role of color and underpins the articulation of the *Chromatic Turn* as both a conceptual and operative shift in *Design* discourse.

3. Literature Review

This literature review traces the historical and conceptual evolution of color since the socio-cultural turn of the 1970s, emphasizing its semiotic, affective, and multisensory dimensions. It is structured around two thematic axes: the first revisits the transformations brought by *Radical Design* and *Design Primario*, positioning color as a cultural and critical agent in contrast to modernist austerity; the second examines chromatic narratives in fashion retail, showing how color articulates identity, temporality, and atmosphere. Together, these axes frame color as both a *Design* tool and a medium of embodied experience.

3.1. *Radical Design*, *Design Primario* and the Shift in Chromatic Culture

The late 1960's and 70s heralded a radical transformation in the use of color in Design (Branzi, 1984; Farina, 2006). This period marked the decline of the modernist paradigm, which privileged restrained palettes dominated by whites, greys, beiges, and muted pastels — colors aligned with rationalist clarity, hygienic austerity, and technical correctness (Dormer, 1993; Pevsner, 2014).



Fig. 1. Archizoom's *Superonda* covered in red fiery vinyl. Source: Digitally Illustrated, Author (2025).

Within this chromatic regime, expressive tones such as bright fuchsia, saturated orange or green were notably absent, excluded as excessive, ornamental, or “unserious.” *Radical Design* emerged as a counter-movement, mobilizing saturated and contrasting hues not only for visual impact but as semiotic provocations.

Archizoom's *Superonda* (1967) — covered in “rosso fuoco” vinyl (see Figure 1) — exemplifies this shift: the fiery red was not chosen arbitrarily but as a direct sensory assault on modernist neutrality, embodying passion, urgency, and political dissent.

Likewise, Superstudio's *Sofa* (1968), clad in green-and-pink (*Verosa*), or pink-and-orange (*Rosancio*), destabilized conventions of taste by pairing chromatic exuberance with modular, ironic forms (see Figure 2). Studio 65's *Bocca* (1970), upholstered in elastic red fabric, further exaggerated this interplay of sensuality and critique, transforming a consumer object into a dystopian emblem of desire and resistance (Branzi, 1984; Dormer, 1993; Strauss et al., 2007).



Fig. 2. *Sofa*, by Superstudio, in vivid color combinations (*verosa* and *rosancio*). Digitally illustrated, Author (2025).

Beyond furniture, Radical Design groups such as 9999 and Superstudio used color as an environmental medium. Projects like *Monumento Continuo* (1969) and *Supersuperficie* (1972) deployed expansive white grids, fluorescent accents, and artificial lighting to reimagine urban space as a chromatically mediated system. Here, the use of white was not modernist purity but a conceptual “non-color,” a blank matrix for speculative futures — punctuated by flashes of saturated tones that destabilized perception and reinforced the critical stance of these groups (Dormer, 1993).

These experiments unfolded against the backdrop of economic and energy crises, leading to what Branzi (1984) described as a cultural “austerity of silence.” Yet silence did not imply chromatic absence; rather, it provided the conceptual terrain for Clino Trini Castelli's Design Primario. Beginning in the mid-1970s, Castelli redefined color as part of a multisensory ecology of perception, where light, texture, sound, aroma, and microclimate coexisted (Trini Castelli, 1985, 1989). His notion of “non-color” was particularly significant. In his work for Olivetti during the 1970s, chromatic strategy centred on industrial neutrals — layered greys and muted whites accented with precise touches of red or blue — signalling efficiency, discretion, and a subtle humanization of technology. By

the 1980s and 1990s, these palettes evolved toward metallic and pearlescent tones, reflecting a high-tech sensibility where materiality itself became chromatic (Branzi, 1984; Dormer, 1993).

Trini Castelli's pedagogical collaboration with Antonio Petrillo (1989) explicitly linked chromatic perception to linguistic and cultural systems, drawing on Berlin and Kay's (1969) anthropological studies of color vocabularies across cultures. For Castelli, color was not a surface attribute but a cultural operator: semiotic, emotional, and embodied. This vision materialized in projects such as the photoluminescent *Lumiphos* laminates (1973) and the *Tectonica* series (1992), which explored how chromatic modulation interacts with light and material to produce immersive, affective environments. Thus, Radical Design and Design Primario together reframed color as a dynamic and critical agent of sensory and cultural meaning — moving from the saturation of excess to the subtlety of “non-color,” but always against the backdrop of embodied experience.

3.2. Chromatic Narratives in the Fashion Environment

The transformations that were reshaping the field of *Design*—particularly the redefinition of color's role—were simultaneously unfolding within fashion and the spatial environments it occupied, especially retail spaces. This connection establishes a crucial bridge between evolving *Design* paradigms and the material and symbolic practices of fashion, all set against the backdrop of the cultural and aesthetic upheavals of the 1970s. In this transforming landscape between cultural production and aesthetic experimentation, color emerges as a central element in the articulation of identity (Lanigan, 2009; Krishna, 2012; Dedrick, 2015; Bumpus, 2023).

Within this context, color assumes a performative role—capable of reconfiguring the boundaries between commercial and cultural, aesthetic and political realms. The chromatic trajectory defined by the increasing use of color as a tool of cultural critique, symbolic subversion, and sensory provocation finds an emblematic parallel in the early works of *Vivienne Westwood*, the visual language of the *punk* movement and the resonance of 70s' *counterculture* (Rosato, 2022). Westwood's boutique SEX, opened in 1971 on London's King's Road, challenged dominant aesthetic and moral codes by incorporating materials, slogans, and colors associated with fetish culture into the realm of fashion (see Figure 3).

At the core of this visual provocation was the use of bright pink—a hue traditionally linked to femininity and sentimentality—recontextualized within an environment of rebellion, irony, and ideological dissent. Far from being

ornamental, this chromatic choice operated as a semiotic device of rupture, contributing to making the store both a site of cultural resistance and a platform for new forms of visual identity. Decades later, the same shade of pink reappears in the neon signage of Vivienne Westwood's contemporary stores, establishing a chromatic continuity that underscores the brand's enduring commitment to using color as a means of affective expression and critique (Krishna, 2012; Heller, 2013; Perez, 2016; Santaella, 2018; Rosato, 2022; Kids of Dada, 2025).



Fig. 3. Vivienne Westwood's boutique and its shades of pink. Source: Digitally illustrated, Author (2025).

Similarly, Fiorucci revolutionized retail through bold, eclectic palettes that transformed shopping into an immersive cultural experience. The Milan store that opened in the late 60's at Galleria Passarella integrated Radical Design artefacts — notably Archizoom's *Superonda* — within chromatically saturated interiors that combined *pop art* and *kitsch* (Velasca, 2021; Clark et al., 2024). In the history of the brand, color operated not as decoration but as an immersive medium shaping spatial, affective, and symbolic dimensions, fostering multisensory engagement (Millar, 2011; Dedrick, 2015). Fiorucci's chromatic language aligned with postmodern consumer culture, pop art, and kitsch, cultivating an identity tied to 1970s youth culture and transforming retail into a site of cultural production. Its late 1970s New York store (see Figure 4), with saturated colors and neon lighting (e.g. blue, pink and yellow), created a lifestyle narrative beyond fashion, mediating relationships among subject, space, brand and multiple senses (Consorzio Museum Musei, 2018; Velasca, 2021; Clark et al., 2024).

At the 2025 Triennale di Milano exhibition dedicated to Elio Fiorucci, Franca Soncini reflected on this multisensory impact: "First there were the boutiques, then there was Fiorucci. An entire generation was conquered by so much beauty and diversity. There was nothing like it until then,

the joy that could be felt there, the music, the scents, the lights, everything made you feel part of a new experience. Fiorucci became the destination for free time, so much so that people used to say: 'What are we doing today? Let's go to Fiorucci.'"



Fig. 4. Neon lights at Fiorucci's New York Store. Source: Digitally illustrated, Author (2025).

In contemporary fashion environments, sensoriality has become a central paradigm, moving beyond product-centric models toward immersive, multisensory experiences. As earlier exemplified in the chromatic provocations of Vivienne Westwood and the eclectic atmospheres of Fiorucci, color continues to play a pivotal role, now integrated within broader strategies that combine *Sensory Design* [1], *Sensory Branding* [2], and *Experience Design* [3]. These approaches orchestrate stimuli such as light, sound, scent, texture, and especially color to generate emotional resonance, enhance spatial perception, and reinforce brand identity (Lindstrom, 2012; Manzano et al., 2012; Hultén, 2017).

Color plays a crucial role as a dynamic and associative medium, mediating memory, sensation, and identity (Merleau-Ponty, 1962). It helps compose coherent spatial narratives and reinforce brand meaning through atmospheric cues (Song, 2010; Perez, 2016). A leading example is *Gentle Monster*, a South Korean brand that transforms retail spaces into immersive environments blending art installation, *sensoriality*, and brand storytelling. *Gentle Monster's* Aoyama store (Figure 4) showcases choreographed chromatic atmospheres—from subtle tonal gradients (greys) to vivid saturated hues (blue and orange) —interacting with kinetic sculptures, ambient lighting, scenting and tactile materials to create a multisensory space. This environment expresses an avant-garde ethos, navigating between futurism and dystopia.

In *Gentle Monster's* stores, color is embedded within sensorial vignettes that structure a performative, temporal journey. Rather than a mere visual accent, color acts as a dramaturgical medium that shapes temporality, evokes emotions, and conveys symbolic meaning. This approach reflects a shift where color is recognized as central to

creating narrative-rich, immersive environments that unify spatial, sensory, and brand dimensions.



Fig. 5. Aoyama's *Gentle Monster* futuristic palette. Source: Digitally illustrated - Auhor (2025).

4. Discussion

The historical and theoretical trajectory outlined in this article reveals how color has progressively evolved from a compositional element to a central tool of sensory engagement, cultural critique, and identity formation. Early modernist approaches, exemplified by the Ulm School of Design (HfG Ulm, 1953–1968), emphasized whites, greys, blacks, and muted beiges as visual codes of discipline, universality, and rationality. The restrained chromatic palette reinforced modernist ideals of functionalism and objectivity, establishing a baseline against which later experiments with color would act as both provocation and critique. In the late 1960s, Radical Design re-signified color, challenging modernist neutrality and introducing vibrant, emotionally charged palettes.

Among these, the fiery red of Archizoom's *Superonda* epitomizes the performative power of color: its maximal saturation and luminous intensity act as a sensorial provocation, accelerating attention, eliciting heightened physiological and emotional responses, and disrupting the visual comfort of neutral modernist spaces. The term "fiery" captures this effect vividly—like a spark or blaze, the color commands presence, destabilizing conventional perception and acting as an ideological and political sign, signaling rebellion, passion, and resistance against rationalist austerity. In this sense, fiery red is not merely a chromatic choice but a dynamic, semiotic agent, engaging both body and ideology, and establishing a narrative of affective and conceptual provocation (Barthes, 1977; Forty, 1986; Sparke, 2008).

Additionally, red functioned as a performative and media device. *Superonda* was intended for unconventional use—as modular seating, a bed, or a group platform—and its intense chroma drew attention, turning the object into a

visual medium that circulated in print, catalogs, and domestic environments, amplifying its provocative and insubordinate character. Red actively disrupted the modernist paradigm, opposing the notion that color should be purely functional or neutral. Like its undulating form, *Superonda*'s color was anti-functional, designed to disturb rather than reassure, establishing a politically charged aesthetic of dissidence. In Radical Design, red exemplifies the dual role of color as both sensorial activator and ideological agent, shaping perception, provoking affective responses, and mediating cultural critique (Forty, 1986; Sparke, 2008; Pallasmaa, 2005).

This chromatic intensity was mirrored in fashion: Pierre Cardin's 1969 red vinyl overcoat echoed the tonal excesses of the *Superonda*, demonstrating how radical design and avant-garde fashion shared a visual language of counterculture, nonconformism, and affective provocation. Building upon this chromatic discourse, pink emerged as another transformative hue, especially in the 1970s. Vivienne Westwood's pink in the *SEX* boutique appropriated a color historically coded as feminine, deploying it ironically to subvert gender norms and embed punk's anti-establishment ethos into the store's visual identity. Unlike red, which primarily communicated rebellion and corporeal intensity, pink operated through irony and cultural critique, signaling both identity construction and ideological subversion. Similarly, the *Sofa* seating system by Superstudio combined pink with vivid green and orange, producing modular, stackable forms that conveyed joy, visual surprise, and utopian critique.

Across these cases, saturated colors operate as expressive, affective, and ideological tools, mediating emotional and cultural engagement. Fiorucci's stores in the 1970s and 1980s extended chromatic experimentation into immersive sensorial environments, combining neon pink, blue, and yellow across reflective surfaces, decorative elements, and lighting. Color here functioned as a medium of affective engagement, guiding perception, mood, and movement, while reinforcing Fiorucci's identity as a "cultural brand".

The concept of non-color can be briefly traced to modernism, where restrained palettes of whites, greys, blacks, and muted beiges emphasized rationality, discipline, and visual clarity. In the Radical Design era, Superstudio's *Monumento Continuo* (1969) re-signified this chromatic void as a dystopian, anti-functional strategy, emphasizing abstraction and utopian critique. Clino Trini Castelli later developed the concept further in his work with Olivetti, employing industrial greys complemented by subtle red and blue accents, where the materials themselves contributed to the chromatic experience,

creating a functional yet semantically rich color code. In contemporary contexts, brands such as Gentle Monster reactivate non-color as a foundational backdrop, with accent hues—orange, blue, or pastel gradients—serving more as complementary elements than bold statements.

This choice of non-color is particularly effective in Gentle Monster’s Aoyama store, as it supports the communication of dystopian and futuristic atmospheres while enabling cross-modal associations: the grey palette evokes futurism and is reinforced through metallic surfaces (touch), synthetic fragrances (smell), and ambient sound, creating a fully immersive environment where color, materiality, and sensory cues operate in dialogue to shape perception and affective experience. To further illustrate the evolving chromatic paradigms, *Table 1* summarizes the main semiotic and functional differences in the use of color across the selected cases.

Case	Palette	Semiotic	Function
Archizoom Superonda (1967)	Vivid Red	Saturated red acts as a chromatic shock; disrupts rationalist order with pop energy and sensorial rupture	Functions as visual provocation and political symbol, destabilizing modernist decorum
Superstudio Sofo (1968)	Vivid hues (pink, green, orange)	Chromatic blocks embody playfulness, modularity, and critique of modernist austerity; abstract yet joyful, evoking “another world”	Flexible modules enable combinatory living and collective creativity, resisting functionalist discipline
Superstudio Monumento Continuo (1969)	White grid, Black lines, Neutral tones	A chromatic void that emphasizes abstraction, anti-functionality, and dystopian utopia	Visual neutrality becomes critical tool, projecting universality while negating individual experience
Studio 65 Bocca (1970)	Vivid Red	Red lips channel passion, eroticism, and corporeal symbolism; irony undermines functionalist sobriety	Operates as sensory icon and gender-political provocation within domestic space
Castelli for Olivetti (1970s–90s)	Industrial greys, Red/blue accents	Neutral greys frame discipline, efficiency, and modernity; minimal accents mark hierarchy and recognition	Establishes chromatic code for usability and identity, merging corporate rationality with symbolic clarity
New York’s Fiorucci (1970s)	Neon and vivid hues (pink, blue, yellow)	Pop palette stages hedonism, erotic play, and collective memory; color becomes immersive spectacle	Chromatic excess transforms retail into experiential infrastructure of desire
Vivienne Westwood SEX (1971)	Vivid Pink, Pastel Pink	Ironically reclaims feminine chromatic codes, weaponizing pink in punk rebellion	Pink operates as semiotic insurgency, destabilizing norms and constructing new identities
Aoyama’s Gentle Monster (Contemporary)	Pastel gradients (grey scales), Vivid hues (orange, blue)	Chromatic shifts orchestrate temporal perception and ambient storytelling; hues build kinetic atmospheres	Color functions as narrative device, shaping immersive brand worlds and sensory anticipation

Table 1. Comparative overview of chromatic palettes and semiotic functions in the selected design and fashion case studies. Source: Auhtor (2025).

The following scheme (see Figure 6) visually represents the evolution of chromatic palettes from the 1950s to the present. Rendered as spheres of varying sizes and hues,

the diagram symbolizes both the shifts in chromatic strategies and their relative cultural and semiotic weight over time. It highlights transitions from the neutral tones of the Ulm School (whites, greys, muted beiges) to the radical saturation of Radical Design (reds, pinks, oranges), followed by Castelli’s notion of *non-color* in industrial design and its later reactivation in contemporary experiential branding (e.g., Gentle Monster). The figure illustrates how palettes have oscillated between neutrality and saturation, each time acquiring new cultural meanings—ranging from modernist hygiene and rational discipline to political provocation, technological futurism, and sensory atmosphere.

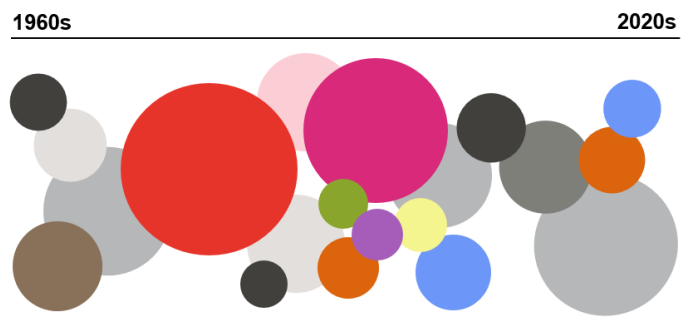


Fig. 6. Chromatic trajectories, from modern to contemporary. Source: Author (2025).

Collectively, the examples, from Radical to Sensory-Experiential Design, illustrated how color has become an active interface for mediating perception, constructing identity, and eliciting emotional participation. Its synesthetic potential—visible in cross-modal associations—positions color as a cornerstone in the design of experiential and affect-driven spaces. Critically, the evolution from Radical Design’s ideological provocations to Contemporary Design’s strategies does not imply a depoliticization of color. On the contrary, the expressive vocabulary established in the 1970s continues to inform contemporary branding and environmental design. The chromatic excesses of Radical Design are recontextualized today to communicate innovation, irony, or cultural differentiation. The subversive becomes commercial, yet it retains the capacity to shape collective imaginaries.

Ultimately, color in fashion-related environments is no longer a passive attribute but a culturally embedded and emotionally charged device. It defines the ambiance of a space, signals brand values, and encodes temporal or ideological cues. Whether as resistance or resonance, provocation or seduction, color operates as a vector of design agency—both shaping and shaped by sociocultural dynamics. These findings position color not merely as a visual or aesthetic component but as a fluid and dynamic language that catalyzes multisensory interaction and deepens the experiential and symbolic dimensions of

branding. Within sensory-experiential design, chromatic strategies are essential for shaping meaningful, memorable, and culturally resonant environments that synthesize brand identity and ideology. Moreover, this study underscores the value of a transdisciplinary perspective, bridging color theory with design, semiotics, psychology, and anthropology. This integrative lens enhances our understanding of color's complex role in shaping perception, emotion, and spatial meaning across time and cultures.

Four key insights emerge from this analysis:

1. Color has evolved from a compositional attribute to a form of situated and multisensory knowledge, deeply entangled with embodied spatial perception.
2. It functions as a dynamic semiotic device, conveying multilayered meanings that engage memory, affect, and cultural identity beyond visuality.
3. Chromatic strategies have become central to sensorial and experiential design, crafting immersive and emotionally charged atmospheres that support brand storytelling.
4. The "chromatic turn" represents an epistemological shift—linking contemporary design practices with avant-garde traditions that reframed color as a cultural, ideological, and sensory agent.

5. Conclusion

This article has examined the evolving role of color in fashion-related built environments, tracing a historical and conceptual trajectory from the critical chromatic practices of Radical and Primary Design to contemporary applications within sensory-experiential design. Through selected case studies—from the provocative pinks of Vivienne Westwood, to the neon exuberance of Fiorucci, and the immersive atmospheres of Gentle Monster—it has been demonstrated that color functions as a cultural, perceptual, and semiotic agent, shaping both individual experience and collective imagination.

Far from constituting a secondary or purely decorative element, color operates as an active interface between space and subject, capable of encoding ideological positions, eliciting affective responses, and mediating multisensory interactions. This expanded role of color reflects a broader epistemological shift: from static visual language to dynamic environmental grammar, and from formal harmony to experiential narrative. The notion of the chromatic turn advanced in this study reframes color as a mechanism of design agency—capable of triggering memory, structuring atmosphere, and organizing identity within complex socio-material contexts. In this framework, chromatic strategies function as vectors of spatial

meaning-making, operating at the intersection of emotion, ideology, and perception.

While this study has focused primarily on emblematic examples from fashion and retail, future research may extend the analysis to additional domains in which color mediates experience and identity, including exhibition design, hospitality, public and urban spaces, and immersive digital environments. Comparative studies could investigate the operation of chromatic strategies across diverse cultural contexts, examining variations in perception, symbolic associations, and affective response. Further inquiry into the intersections of color with race, gender, and social belonging may expand the critical scope of design scholarship, revealing how chromatic interventions reinforce or challenge sociocultural power structures.

Additional avenues for investigation may include the integration of color with emerging technologies—such as augmented reality, responsive lighting, and AI-driven environmental modulation—to understand how dynamic chromatic systems shape multisensory perception. Longitudinal studies on consumer or visitor experience could evaluate the temporal and affective impact of chromatic interventions, while interdisciplinary approaches drawing on neuroscience, psychology, and anthropology may illuminate the embodied, cognitive, and cultural mechanisms through which color influences experience.

Ultimately, by foregrounding the sensory, symbolic, and ideological dimensions of color, this article demonstrates how color has evolved into a multisensory and semiotic tool for constructing affective and immersive experiences in fashion environments. The notion of the chromatic turn reframes color as a mechanism of design agency—capable of triggering memory, structuring atmosphere, and organizing identity—thus positioning chromatic strategies as central to cultural production, material experimentation, and design innovation. In this expanded framework, color emerges not merely as a visual element, but as a dynamic language through which designers, brands, and environments communicate, provoke, and shape embodied human experience.

6. Conflict of interest declaration

The authors declare that there is no conflict of interest regarding the publication of this article. No financial, personal, or professional relationships exist that could have influenced the work reported in this manuscript.

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Marinella Ferrara - Professor of Design History at Politecnico di Milano, specialised in material innovation and design paradigms. Her research explores materials' role in contemporary design. Awarded for her book *Materials that Move*, she is the editor-in-chief of the journal *PAD* and contributes to international research committees, advancing design education and circular practices.

Notes

[1] *Sensory Design* denotes a *Design* methodology that systematically integrates multisensory stimuli into spatial environments, aiming to enhance perceptual coherence, affective resonance, and embodied user experience (Malnar and Vodvarka, 2004).

[2] *Sensory Branding* refers to a strategic approach within brand communication that employs sensory stimuli—such as sound, scent, texture, and color—to construct a coherent and memorable brand identity through affective and pre-cognitive engagement (Hultén, 2017).

[3] *Experience Design* is a multidisciplinary approach to creating meaningful and engaging interactions between people and systems, spaces, products, or services. Rooted in fields such as *Design*, psychology, and human-computer interaction, it focuses on shaping the user's holistic experience—cognitive, emotional, sensorial, and behavioral—across all touchpoints, with the goal of enhancing satisfaction, usability, and emotional resonance. Rather than prioritizing form or function alone, *Experience Design* integrates aesthetics, context, and human needs to craft purposeful, memorable experiences (Rossman and Duerden, 2019).

[4] *Synesthetic* is an adjective that refers to something related to synesthesia, a neurological or perceptual phenomenon where stimulation of one sense involuntarily triggers an experience in another. In *Design* and art, synesthetic often describes experiences that intentionally engage multiple senses, creating cross-sensory effects to enhance perception and immersion (Serrano, 2014).

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References

- Albers, J. (1963) *Interaction of color*. New Haven: Yale University Press.
- Barthes, R. (1977) *Image, music, text*. New York: Hill and Wang. Available at: <https://doi.org/10.2307/429854> (Accessed: 10 June 2025).
- Berlin, B. and Kay, P. (1969) *Basic color terms: Their universality and evolution*. Berkeley: University of California Press.
- Branzi, A. (1984) *La casa calda*. Milano: Idea Books.
- Branzi, A. (2008) *Il design italiano 1964-2000*. Milano: Mondadori Electa.
- Branzi, A. (2015) *Introduzione al design italiano. Una modernità incompleta* [e-book]. Milano: Baldini+Castoldi. Available at: [Access details if applicable].
- Bumpus, J. (2023) *Vivienne Westwood: The story behind the style*. London: Studio Press.
- Clark, J. et al. (2024) *Elio Fiorucci*. Milan: Electa.
- Colomina, B. (1994) *Privacy and Publicity: Modern Architecture as Mass Media*. MIT Press.
- Consorzio Museum Musei (ed.) (2018) *Epoca Fiorucci. Ediz. illustrata*. Venice: Consorzio Museum Musei.
- Dedrick, D. (2015) 'Color phenomenology'. In: Kuehni, S. and Schwarz, M. (eds.) *Encyclopedia of color science and technology*. New York: Springer Science+Business Media. DOI: 10.1007/978-3-642-27851-8_56-3.
- Dormer, P. (1993) *The new furniture: trends and traditions*. London: Thames & Hudson.
- Dormer, P. (1993) *Design Since 1945*. Thames & Hudson.
- Farina, M. (2006) *Psicodinâmica das cores em comunicação*. São Paulo: Edgar Blücher.
- Forty, A. (1986) *Objects of Desire: Design and Society since 1750*. Thames & Hudson.
- Gage, J. (1999). *Color and Culture: Practice and Meaning from Antiquity to Abstraction*. Reino Unido: University of California Press.
- Heller, E. (2013) *A psicologia das cores: como as cores afetam a emoção e a razão*. São Paulo: Gustavo Gilli.
- Hultén, B. (2017) 'Branding by the five senses: a sensory branding framework', *Journal of Brand Strategy*, 6(1), pp. 1–12.
- Kids of Dada (2025) *Sex shop: When the fashion world went erotic*. Available at: <https://www.kidsofdada.com/blogs/magazine/11950453-sex-shop> (Accessed: 15 September 2025).

- Krippendorff, K. (2006) *The semantic turn: a new foundation for design*. Boca Raton: Taylor & Francis.
- Krishna, A. (2012) *Sensory marketing: research on the sensuality of products*. New York: Routledge.
- Lanigan, R.L. (2009) 'Semiotic phenomenology: a theory of human communication praxis', *Communication Quarterly*, 57(1), pp. 62–73. Available at: <https://doi.org/10.1080/01463370902717083> (Accessed: 15 September 2025).
- Lindstrom, M. (2012) *Brand sense: sensory secrets behind the stuff we buy*. New York: Free Press.
- Lupton, E. and Lipps, A. (2018) *The senses: design beyond vision*. New York: Princeton Architectural Press.
- Malnar, J.M. and Vodvarka, F. (2004) *Sensory design*. Minneapolis: University of Minnesota Press.
- Manzano, C. et al. (2012) *Marketing sensorial: comunicar con los sentidos en el punto de venta*. Madrid: Pearson.
- Merleau-Ponty, M. (1962) *Phenomenology of perception*. Translated by C. Smith. London: Routledge & Kegan Paul. (Original work published 1945).
- Millar, B. (2011) 'Sensory phenomenology and perceptual content', *The Philosophical Quarterly*, 61(244), pp. 558–576. Available at: <https://www.jstor.org/stable/23012982> (Accessed: 15 September 2025).
- Pallasmaa, J. (2005) *The eyes of the skin: architecture and the senses*. Chichester: Wiley.
- Perez, C. (2016) *Signos da marca: expressividade e sensorialidade*. 2nd edn. São Paulo: Cengage Learning.
- Pevsner, N. (2014) *Pioneers of modern design*. London: Penguin. (??)
- Rosato, A. (2022) 'Vivienne Westwood and the socio-political nature of punk', *Honors College Theses*, 368. Available at: https://digitalcommons.pace.edu/honorscollege_theses/368 (Accessed: 15 September 2025).
- Rossmann, J.R. and Duerden, M.D. (2019) *Designing experiences*. New York: Columbia University Press.
- Santaella, L. (1986) *O que é semiótica*. São Paulo: Brasiliense.
- Santaella, L. (2018) *Semiótica aplicada*. São Paulo: Cengage Learning.
- Serrano, M.J.C. et al. (2014) *Synaesthesia: theoretical, artistic and scientific foundations*. Madrid: Editorial Fundación Internacional arteciudad. DOI: 10.13140/2.1.2873.0241.
- Song, J. (2010) *Retail design and sensory experience: design inquiry of complex reality*. Ames, IA: Iowa State University.
- Sparke, P. (2008). *The Modern Interior*. Reaktion Books.
- Strauss, C. et al. (2007) *Radical: Italian design 1965–1985*. New Haven: Yale University Press.
- The Conversation (2023) 'Fashion, sex and drag: Vivienne Westwood's queer legacy'. Available at: <https://theconversation.com/fashion-sex-and-drag-vivienne-westwoods-queer-legacy-197403> (Accessed: 15 September 2025).
- Trini Castelli, C. & Petrillo, A. (1989) *Design Primario*. [Teaching material] Academic Year 1989, Chapter: Color. Domus Academy.
- Trini Castelli, C. (2014) 'Clino Trini Castelli: Design Primario', *AIS/Design. Storia e ricerche*, 2(4). ISSN: 2281-7603.
- Trini Castelli, C. and Petrillo, A. (1985) *Il lingotto primario: progetti di design primario alla Domus Academy*. Milan: Arcadia Edizioni.
- Velasca (2021) 'La notte di Haring e Fiorucci in centro a Milano'. Available at: <https://amillionsteps.velasca.com/it/la-notte-di-haring-e-fiorucci-in-centro-a-milano/> (Accessed: 15 September 2025).
- Vidler, A. (2009) 'What is a diagram anyway?', *Footprint*, 5(1), pp. 23–35. Available at: <https://doi.org/10.7480/FOOTPRINT.5.1.732> (Accessed: 15 September 2025).
- Vidler, A. (2009). *Histories of the Immediate Present: Inventing Architectural Modernism*. MIT Press.