Bruno Munari: Communicating through Graphic Language

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Abstract

This article examines Bruno Munari's contribution to visual communication, with a particular focus on his approach to graphic design and the graphic-visual language. The aim is to highlight how Munari redefined the processes of visual design by developing a method which, moving beyond a purely aesthetic perspective, integrates formal rigour, expressive synthesis and perceptual experimentation through a 'structural' exploration of how meaning is conveyed through images. The methodology adopted is based on a critical analysis of Munari's major graphic works, enriched by theoretical references to semiotics, Gestalt theory and visual pedagogy. Through the examination of case studies –from the illegible books to editorial design and graphic experimentation for children– the study reveals the process by which Munari constructs an autonomous visual syntax, in which the graphic sign becomes a self-sufficient communication system. The purpose of this study is to demonstrate how Munari's graphic thinking anticipated and influenced concepts that are now central to contemporary design and visual communication. His ability to transform illustration, typography and editorial graphics into tools for cultural and cognitive reflection makes him a key reference point in contemporary design, not only as a practitioner, but also as a theorist of a new visual grammar capable of transcending traditional conventions to create a universal, essential and immediate graphic language.

Keywords: visual culture, graphic-visual language, illustration, publishing and advertising, children's books

Introduction

Within the artistic landscape of the mid-twentieth century, the designer Bruno Munari (1907-1998) stands out as one of the most significant figures, not only for the breadth of his interests [1], but also for his rare inventiveness and his exceptional ability to experiment with new forms. Pablo Picasso even described him as a twentieth-century Leonardo da Vinci, likely struck by Munari's unusual ability to interpret art and by the imagination with which he approached each artistic exploration, employing a wide variety of techniques and materials. His ability to perceive the world from a step ahead –transcending spatial and temporal limits and projecting himself into the future while engaging with contemporary artistic movements [2] and anticipating their trends– makes Munari a truly contemporary visionary.

While much has been written about his work as a designer and his theoretical contributions to creative education –understood as a pursuit achievable through art– less attention has been paid to Munari's contribution to drawing in general, and to graphic-visual language in particular [Munari 1991]. Yet this contribution is essential for fully grasping the innovative nature of his cultural message, which can serve as a starting point for renewed reflections in the field of representation and visual communication. His deep interest in the formal coherence between the parts and the whole of an object, and his ability to discern the underlying structure of both tangible and represented forms, led him to reflect on the importance of observing reality in order to uncover its fundamental rules –geometry, proportions, lines of force (fig. 1)– which become the foundation for developing objects or images capable of clearly conveying meaning, beyond the apparent playfulness of the outcome [Munari 1997].

His reflections on lettering and compositional form –genuine intellectual *divertissements*, often aimed at children and their play (which he himself defined as 'a very serious activity')– also highlight the communicative potential of visualization and of the relationship between signifier and signified inherent in visual language.

Indeed, throughout the work of the undisputed Milanese genius, one can identify clear signs of innovation in the field of graphic-visual expression.

Starting from these considerations and focusing on his output –particularly that linked to the worlds of graphic design and publishing– this study retraces the processes underpinning image construction that inform the design of visual messages, rendering them effective and capable of conveying meaning beyond their surface appearance [Franchi 2024] (fig. 2).

Graphics and visual communication

In examining Munari's role within the field of visual culture, it becomes immediately evident that his graphic work –far from being a mere accessory to the visual arts– constitutes a privileged space of coherent and lucid experimentation aimed at developing a grammar of perception centered on the essentiality of the message. His graphic language is thus grounded in a rigorous system of rules and signs –each endowed with its own form, dimension, texture and color– capable of articulating a visual syntax designed for maximum communicative immediacy.

Munari's reflection proceeds through reduction and synthesis. Every element within a composition responds to a functional logic, with no concessions to the arbitrary. Yet simplicity, far from being a principle of subtraction, is for Munari the very condition of communicative effectiveness, the result of an ongoing process of refinement [3]. In his graphic creations, the conscious use of structure and the Fig. I. Top left: Bruno Munari, drawing of a tree showing its geometric structure (photo by the authors).

Fig. 2. Top right: covers of the magazine 'Domus' designed by Bruno Munari. https://www.artribune.com/arti-visive/2022/10/munari-mostracopertine-milano/ (accessed 2 February 2025).

Fig. 3. Bottom: Bruno Munari, 'Libro illeggibile bianco e rosso' [1953]. <https://www.anca-aste.it/it/asta-1377/libro-illeggibile.asp> (accessed 2 February 2025).



balance between formal precision and semiotic clarity are rooted in a conception of imagination not as mere digression, but as a central, structuring force. This vision, clearly articulated in *Arte come mestiere* [Munari 1997] and *Design e comunicazione visiva* [Munari 1991], does not arise from an attitude of formal austerity, but rather from a structural necessity, placing the incisiveness of the sign at the core of visual language.

This approach is exemplified by the series of illegible books (fig. 3), pioneering examples of a new genre of visual language [Zaffarano 2015], produced between the late 1940s and early 1950s. These works represent a radical exploration of the graphic code, carried to its extreme consequences. The text is eliminated entirely and narration unfolds exclusively through graphic signs, allowing reading to occur intuitively, mediated solely by the act of seeing.

As Zaffarano insightfully observes, in these books "Munari creates compositional rules that take form through the shape of the pages and the cut of the paper, but these rules do not generate a finished work: it is up to the reader to construct their own sequence, their own composition. Thanks to the device of shaped pages, there is no single path through the book; by leafing through it in reverse, sudden areas of color may appear. The work is not meant to be read sequentially in the traditional sense, like a conventional book, but rather to be used by interacting freely with its formal structure, discovering its possibilities in the process" [Zaffarano 2015]. The relationship between reader and work thus becomes essential, as the viewer is no longer a passive decoder, but an active participant in the construction of the narrative.

A particularly significant example is *Libro illeggibile N.Y. 1* [Munari 1967], held at the MoMA in New York. In this work, pages made from cardboard, oiled paper, transparent or colored sheets and string overlap to create a play of visual layers that suggests an alternative mode of reading, one whose sequence is not dictated by words, but by the perceptual relationships between forms (fig. 4). This is not a provocation for its own sake, but a demonstration that visual communication can function independently of verbal language, revealing itself as self-sufficient through the imagination's capacity to construct meaning from perceptual stimuli [Cantelli 2018].

From this perspective, as Zanoletti [Zanoletti 2020] observes, Munari never regarded graphics as a purely aesthetic matter. Rather, it exists within a broader dimension where logic and imagination work together to Fig. 4. Top: Bruno Munari, 'Libro illeggibile N.Y. I', 1967 [Maffei 2002, p. 123].

Fig. 5. Bottom left: Bruno Munari, 'Pubblicità a scoppio', 1931. <https:// www.munart.org/index.php?p=6> (accessed 2 February 2025).

Fig. 6. Bottom right: Bruno Munari, 'Negativo-Positivo', 1953. < https://www. anca-aste.it/it/asta-1617/negativo-positivo-.asp> (accessed 2 February 2025).



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Fig. 7. Bruno Munari, illustrations from "Little Green Riding Hood" [Munari 2007a], "Little Yellow Riding Hood" [Munari 2007b] and "Little White Riding Hood" [Munari 2004] (photo by the authors).

generate meaning. It is not inappropriate, therefore, to see in many of his graphic inventions an empirical anticipation of concepts that would later be developed in semiotic theory. The construction of a cognitive process through visual and tactile experience alone introduces a structural shift: the alphabetic syntax is replaced by a visual syntax. Consequently, semantics is entrusted to the reader's perception, which must interpret the message through the interplay of chromatic variations, textures and forms.

However, since these are not shared codes in the conventional sense of semiotic theory [Eco 1975], Munari's signs –lacking fixed correspondences between sign and meaning–should be understood as autonomous experiments in encoding a visual language.

A semiotic analysis of his work also reveals a number of characteristic graphic strategies, articulated across multiple levels of perceptual and conceptual subversion. Among these are inversion and reversal, which Munari employs both visually and intellectually. A striking example is his sketch for the *Almanacco dell'Italia veloce* (1931), rooted in the aesthetics of Futurism, where the reading order of the phrase *Pubblicità a scoppio* is deliberately disrupted, seemingly with the intent of unsettling the viewer (fig. 5). A similar principle is evident in some of his later works, including the *Negativi-Positivi* series, produced in various versions between the 1940s and 1960s (fig. 6). Here, Munari

plays with the ambiguous perception of figure and ground, which alternate depending on formal and chromatic combinations, making it impossible to establish a fixed distinction between the two visual roles [Munari 1989].

Another form of reversal occurs on the narrative level, as in his retellings of *Little Green Riding Hood* [Munari 2007a], *Little Yellow Riding Hood* [Munari 2007b] and *Little White Riding Hood* [Munari 2004], where the traditional fairy tale is reinterpreted through the chromatic dimension. The monochromatic nature of the illustrations –even their total absence of color in *Little White Riding Hood* – provides alternative and unconventional visual-narrative readings of a universal story (fig. 7).

Even in the field of typography, Munari introduces a process of deconstruction and visual reorganisation of language. In his typographic collages –from the sketch for the book *Le Macchine di Munari* [Munari 1942] to *L'alfabetiere* [Munari 1960]– the irregular arrangement of letters, sometimes aligned to principal axes or distributed 'like rain' according to the shape of the grapheme, recalls the principles of visual poetry. The text is not only to be read –in *L'alfabetiere*, in fact, the nonsensical text serves primarily to play with the sounds of letters– but also to be observed and interpreted as an image (fig. 8). The variety of typefaces and their layout imbue the pages with a dynamic quality that directly evokes Futurist experiments, as seen, for example, in the illustrations from his article



Fig. 8. Left: Bruno Munari, pages from the 'Alfabetiere' [1960] (photo by the authors).

Fig. 9. Right: Bruno Munari, 'Campari', 1965. MoMA Museum. https://www.moma.org/collection/works/6373 (accessed 2 February 2025).

Tipografia, published in *La Lettura* [Munari 1937] [4], or in his *Campari* posters (fig. 9).

As Munari himself wrote: "To be understood by the public [...] in the field of images means using objective images, recognized by all as carriers of certain messages and combining them in such a way that they convey other, previously unknown messages" [Munari 1977, p. 104].

It is precisely this idea of generating previously unseen meaning-constructs that leads him to adopt an approach that could be described as topological, insofar as it is based on the perceptual and structural alteration of visual objects. In other words, rather than focusing on form in and of itself, Munari explores the relationships between elements within the visual field, placing emphasis on structure and perception. Images thus become instruments of transformation and flexibility, subject to shifts in position, unexpected juxtapositions, superimpositions and dynamic interplay between figure and ground. This mode of operation, which in many ways echoes the principles of *Gestalt* theory, highlights the importance of perceptual relationships over isolated elements, leading to a concept of visual composition that unfolds through successive connections and interactions. An example of this is ABC con fantasia (fig. 10), an educational game designed and marketed by Munari in 1960, which features small modular shapes –rectangles of various sizes, semicircles and segments of circular crowns- that can be arranged to create the letters of the alphabet, as well as a wide range of other images.

Color contrast, too, assumes a structural –rather than merely aesthetic– function in Munari's work, though the aesthetic is never absent. Contrasts such as red and black, white and black, blue and white are not simply visual oppositions, but serve as devices to articulate the graphic space, to mark rhythms and reading paths. This logic is clearly visible in the aforementioned 'illegible books', where the relationship between colors becomes a key to interpretation and the object itself resists any single mode of reading, opening instead to a subjective perceptual experience. Munari's interest in chromatic contrast can be traced to his Futurist roots, a movement with which he shared a spirit of experimentation and a desire to explore visual perception through the dynamic use of color.

The notion of topology is also evident in his treatment of spatial layering and interaction. In his cover designs for Einaudi, such as those for *II diario di Anna Frank* [Frank 1954] or Se questo è un uomo by Primo Levi [Levi 1958], the use of overlapping planes and chromatic blending creates an effect of perceptual simultaneity. The viewer is not faced with a static structure, but with a visual system in which multiple layers of information coexist and intersect, generating an experience shaped by the interaction of its components. In this sense, color becomes a hinge between layers, a means not simply of shaping form, but of connecting elements and constructing meaning through their interrelation (fig. 11).

Fig. 10.Top: Bruno Munari, 'ABC con fantasia', 1960. MoMA Museum. https://www.moma.org/collection/works/147958 (accessed 2 February 2025).

Fig. 11. Bottom: Bruno Munari, Einaudi book covers for 'Diario di Anna Frank' [Frank 1954] and 'Se questo è un uomo' by Primo Levi [Levi 1958]. <https://www.artribune.com/arti-visive/2022/10/munari-mostra-copertinemilano/> (accessed 2 February 2025).



Closely related to this logic is Munari's interest in the boundary between sign and support, a theme that again recalls the ambiguity between figure and ground. In many of his works, the support is not a neutral background but an active component of the image, contributing to the construction of its meaning. This idea resonates with the principles of 'plastic semiotics', as developed by theorists such as Greimas and Bertin [5], wherein visual meaning arises not solely from signs themselves but from the spatial relationships between and within them. Munari explores this ambiguity both in his graphic work and in his three-dimensional pieces, where light and shadow function as design elements capable of continually redefining the boundaries between image and material.

All these aspects –color contrast as perceptual structure, transparency as a simultaneous layer of interpretation, and the fluid relationship between sign and support– do not act independently, but rather intertwine continuously, giving rise to a system in which images are never static, but live within a network of relationships. It is precisely this logic that makes Munari's work interpretable through a topological lens: meaning is never absolute, but emerges in the movement between forms, in shifts of state, in the transformations of visual space.

Graphics and illustrations for children

The centrality of the image as a visual vehicle for conveying meaning finds its fullest expression in the illustrations Munari created for children's books [Maffei 2002].

His ability to combine clarity, creativity and innovation within these works offers a compelling synthesis of his deep awareness of the power of visual communication, particularly when applied to the narrative and pedagogical dimensions that characterize children's literature.

Munari's earliest illustrations in this domain date back to the late 1920s, when he earned a living by producing cartoons and drawings for various magazines, including the *Corriere dei Piccoli*. In 1929, he collaborated with the writer Giuseppe Romeo Toscano, illustrating *L'Aquilotto implume* [Toscano 1929], a novel aimed at introducing young readers to Fascist ideology. His early engagement in editorial graphics thus involved projects targeted at a young audience. However, in the years that followed, Munari appeared to distance himself from this field, turning his attention toward a more explicitly artistic context. These were the years in which he pursued research aligned with Futurist theory, translating those

principles into images and demonstrating a sharp analytical capacity to see beyond surface forms and their immediate meanings, reinterpreting reality with irony and wit, and experimenting with innovative techniques and materials [6]. His use of lithography, zincography, collage, photomontage, the integration of text and image, and his employment of unconventional materials –such as transparent papers, fabrics, metal spirals, plastic or composite elements– soon led to editorial products distinguished by what journalist and writer Aristide Marino Gianella had already described, years earlier, as "layouts rich with bold graphic interventions" when commenting on the early work of "a mechanical draughtsman in love with his own technique [...] [with] endearingly personal flourishes [...] [and] a clear humorous sensibility" [Gianella 1927, p. 12].

From this period onward, and throughout the interwar years, Munari also engaged in interior design, stage design, editorial graphics [7] and sculpture and art in highly unconventional ways -think of the three-dimensional experiments of the 'useless machines' or the 'tactile tables', or of the curious devices described and illustrated in his Le macchine di Munari [Munari 1942] (fig. 12). These activities, while seemingly tangential to children's illustration, in fact offered Munari a broad platform for experimenting with materials and methods to represent and communicate dimensions of reality not always immediately perceptible. His return to this genre was linked to the birth of his son Alberto, which gave him direct insight into children's needs, their nature and their ways of understanding the external world, shaped by the different cognitive phases of development [8]. It did not take long for Munari to realize that "there was a whole unexplored area, where a book –even for children who can't yet read– would make perfect sense, like the Prelibri I later created: I'd look at the typical children's books, just text, with a few line drawings, because that was cheaper [...] But with all the possibilities offered by the printing industry –folds, papers, cuts, holes, die-cuts- there were so many other ways to communicate.

A book, after all, is made not just of words and images, but of visual communication, of communication through the senses" [Meneguzzo 1993, p. 10].

Determined to offer a more democratic and accessible way of conveying the meaning behind words [9] and driven by a desire to educate children in reading, art and creativity, Munari broke away from traditional, highbrow models, revolutionizing editorial design for children's publishing. The strength of his approach to visual storytelling –didactic,

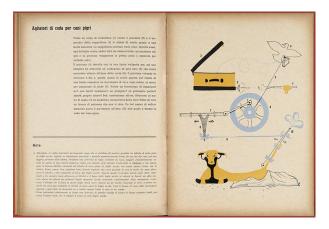


Fig. 12. Bruno Munari, 'Le macchine di Munari' [Munari 1942]. Description and illustration of the 'Agitatore di coda per cani pigri' ('Tail Wagging Device for Lazy Dogs'). <https://www.gonnelli.it/it/asta-0032/munaribruno-le-macchine-di-munari-.asp> (accessed 2 February 2025).

light-hearted and engaging-"rests not on the frivolous [...] but on stripping weight from themes, techniques, formulas, artistic ideas designed for an elite and shaped by critical-academic categorizations' [Antonello 2021, p. 308]. Munari's masterful use of layout, signs, typography, transparent elements, flaps, cut-outs -or other unexpected components that 'pierce' the pages and reveal hidden content- guickly transformed his books, both educational and entertaining, into genuine works of art accessible to the very young. Following his early experiments in 1940, which led to the production of books to cut out, assemble and compose -such as Mondo, Acqua, Aria, Terra [Munari 1940c], Il teatro dei bambini [Munari 1940a] and I negozi [Munari 1940b] (a series comprising seven volumes: Cappelli; Pasticceria; Antica farmacia; Orologiaio; Sali Tabacchi; Salumeria; Musica) – a new wave of titles appeared in 1945: Mai contenti [Munari 1945e], L'uomo del camion [Munari 1945d], Toc toc. Chi è? Apri la porta [Munari 1945g], Il prestigiatore verde [Munari 1945b], Storie di tre uccellini [Munari 1945f], Il venditore di animali [Munari 1945c] and Gigi cerca il suo berretto [Munari 1945a].

Many more would follow as part of the same series, conceived as containers to be opened and explored, revealing the surprises hidden within (fig. 13). These works stage a kind of centripetal' play, unfolding inwardly upon themselves and drawing the reader into an immersive experience [10].



Fig. 13. Bruno Munari, 'Il venditore di animali' [Munari 1945c]. Sequence of internal pages. https://www.gonnelli.it/it/asta-0032/munari-bruno-la-collana-completa-de-i-libri-.asp (accessed 2 February 2025).

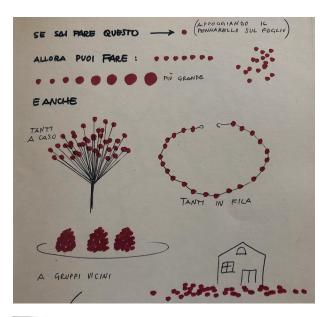
These are, in a sense, interactive objects that evoke curiosity, wonder and anticipation, offering an 'open' form of reading in which the child is the true protagonist [11], actively shaping the narrative's development, one that unfolds in unexpected, often surreal, ways despite its simplicity. As Munari conceived it, illustration for children's publishing becomes an opportunity not only to tell, describe and reveal meaning embedded in a message, but also to experiment, investigate and observe reality through a divergent gaze [12]. The storytelling –anchored more in the visual than the verbal– often unfolds through a visual code in a kind of 'voiceless' narration, built fundamentally on two primary semiotic elements, shared by both written and graphic language: the point and the line (fig. 14). These marks, when treated according to the principles of graphic semiology, vary in form, size, color and orientation, acquiring different meanings through context and transformation. The 'Sign' becomes the main character in Prima del disegno [Munari 1996a], where Munari narrates the adventures of this multi-identity figure, which -whether still or in motion- can become many things, represented as point-based, linear or areal elements [13]. The compositional structure of Munari's illustrated stories, always driven by the goal of clarity and simplicity for the young reader, is often interwoven with logical-conceptual ambiguities that, with his trademark irony, open the door to multiple interpretations. This helps the child think in unconventional ways and nurtures their creative development.

Perceptual games emerge, revealing how a visual sign may carry a meaning quite different from that suggested by its initial appearance; or word games that gain new interpretations simply by shifting or transforming a single mark within the composition.

A striking example of this interplay is Munari's collaboration with Gianni Rodari, for whose books he created numerous illustrations. Like Munari, Rodari had a deep understanding of communication –in his case, linguistic– and the generative process by which an idea (meaning) is linked to a sign (signifier).

Rodari's playful approach to writing is grounded in "the metaphorical interpretation of reality and the literal interpretation of metaphor; the substitution of one letter for another in a word that, by changing, produces a paradoxical reality; the use of conventions to reveal their absurdity, uselessness, and imaginative potential when broken; the collision of elements from different worlds or seemingly incompatible logical systems (fantasy and mathematics, humor Fig. 14.Top: Bruno Munari, graphic activities for children using points and lines. https://www.succodarte.com/noi-si-che-parliamo-di-bambini-con-bruno-munari/ (accessed 2 February 2025).

Fig. 15. Bottom: Bruno Munari, 'll merlo ha perso il becco' [Munari 1987]. <https://www.anca-aste.it/it/asta-0917/il-gioco-dei-quattro-cantoniillustrazioni-di-.asp> (accessed 2 February 2025).





and semiotics); and the syllogism employed for humorous effect, showing a certain 'rational absurdity' in logic, and the gap between linguistic logic and everyday common sense (in comic terms). In short, Rodari dismantles everything his gaze rests upon, and Munari often follows a similar path in his own generative mechanisms'' [Franco 2007], though in the visual rather than verbal realm (fig. 15).

Moreover, Munari himself emphasizes the multiplicity of interpretative layers inherent in the signs at the foundation of communication –visual communication, in this case– in a short essay entitled *Un linguaggio di simboli e di segni?*, in which he observes that it is possible "to use symbols as one uses words in poetry: words with more than one meaning that, depending on how and where they are placed, change expression [...]. The discourse should be very clear in some parts, too clear even, and in others deliberately obscure, like in poetry" [Munari 1997, pp. 76, 77].

Children's books are, then, worlds to be explored: all one has to do is open the 'door' and allow oneself to be guided by words, graphemes and signs that tell a story waiting to be discovered. In these works –perhaps even more so than in other editorial products– typographic devices "should never dominate the page, in fact, they should go unnoticed. They are meant only to guide the eye across the page, to create a kind of imaginary path, like the equator: something that exists but cannot be seen" [Munari 1937].

And while in some cases –particularly in books for which Munari served only as illustrator– the drawing serves to reinforce the mental image evoked by the text, discreetly accompanying the narrative structure and occupying the remaining white space so as not to distract the reader, in others –when Munari is both author and illustrator and designs the entire layout himself– text and image are not always visually aligned or directly dependent on one another, yet they remain semantically interconnected [Franco 2007].

Conclusions

Bruno Munari's work stands out within the landscape of twentieth-century visual culture with an innovative force that resists any singular classification. The protean nature of his research, the multifaceted quality of his thinking and the eclecticism of his output –along with his ability to traverse, with both rigor and inventiveness, fields ranging from design to pedagogy, from artistic



Fig. 16. Bruno Munari, 'The Circus in the Mist' [1996b], English edition of 'Nella nebbia di Milano'. Transparent overlays simulate the visual effects of city fog. https://www.anca-aste.it/it/asta-0917/il-gioco-dei-quattro-cantoni-illustrazioni-di-asp (accessed 2 February 2025).

experimentation to visual communication- attest to a form of operational and speculative intelligence that does not settle into adherence to any single expressive code. Rather, it is grounded in a structural reflection on the image, deeply informed by perceptual as well as semantic considerations.

Notes

[1] On his artistic versatility, Munari stated: "I am asked how it is possible to reconcile the work of a graphic designer with that of an industrial designer, and that with the work of an illustrator, and the illustrator's with that of a painter, and ultimately, with that of a writer. It always seems to me a wrongly posed question. A cat has claws, fur, agile paws and a flexible tail: all elements that are part of him and define him. The personality of any artist should be like this, curious and varied, complex, capable of approaching every single operation with full and context-sensitive engagement". In [Rauch 1988, p. 83]. For further information on Munari's work, see https://www.munart.org (accessed 14 February 2025).

[2] Munari, from a very young age, became close to the Futurist movement, embracing its core principles but interpreting them with irony and personality, often even deconstructing them.

[3] In *Fantasia* [Munari 1977], his analysis of invention, rule and freedom clearly shows how visual creativity, stimulated by graphic design, is a process of synthesis rather than accumulation.

[4] These are Munari's reflections: "Since writing is one of humanity's greatest discoveries, typography –understood as the art of writingassumes an extremely important role in shaping taste, thanks to its According to Munari, the graphic product must be rooted in a visual investigation that takes into account the 'psychological' characteristics of the object, the user and their mutual relationships, ultimately identifying the most coherent image, that is, the one most effective at transmitting a message, also in relation to the 'reading time' [14] and the time required for cognitive processing. For instance, Munari reflects on perceptual criteria for calibrating typeface forms and the spaces between characters [15], or on the importance of white space within the page layout, understood as a moment of pause, of reflection [16]. At the same time, one must possess an understanding of the structural rules that underpin the 'narration' of a graphic product. Graphic storytelling is therefore organized according to frameworks and constructs based on a language composed of visual codes and compositional rules –which may, where appropriate, be intentionally subverted- to guide the formation and transformation of mental images (fig. 16).

This is a language –just like the gestural one explored by Munari in his *Dizionario dei Gesti* [Munari 1994]– that is substantiated by a visual grammar. It refers to modes of non-verbal communication endowed with powerful expressive force, through which it becomes possible to represent even the invisible: meaning beyond form.

broad diffusion [...]. If all of these printed pieces follow a certain aesthetic, even the public [...] will become accustomed to propor-tion, rhythm and harmony [...]. In graphic art [...] harmony is an indispensable condition for good results: starting from the typeface itself, which must be perfectly balanced [...]. The letters must be proportionate to one another, must have graphic affinities and must present to the eye a uniform blotting effect, such that -even when forming a word with letters that don't harmonize- the whole appears coherent. Then come the issues of layout, that is, the distribution of these well-balanced lines of text (each formed from well-balanced letters) on a page, also considering [...] the blank space left around the text [...]. When preparing a booklet, one must also take into account the curve of the page as it opens, i.e., the binding; thus, to facilitate reading, the text must be slightly offset from the crease and harmonize with the facing page, as if the two pages were one. These, in turn, must be linked to others through a guiding thread" [Munari 1937].

[5] Various studies in the 1960s focused on semiology applied first to linguistic, then to visual communication. Among them are *Semantique structurale* by Algirdas Julien Greimas, which investigates the semiotics of forms and the many ways they can be interpreted as instances (horizontal) and levels (vertical) of meaning [Greimas 1966]; and

Sémiologie Graphique by Jacques Bertin, which outlines a theory for visualizing data and information using points and lines, through socalled visual variables (position, size, shape, orientation, color, value and texture) and their graphic treatments, which produce variations in meaning [Bertin 1967].

[6] Technical and material innovation forms a continuous thread in Munari's work. In the early 1950s, for instance, he was among the first to experiment with xerography, using Xerox photocopiers for creative purposes, playing with image deformation produced by motion during scanning. He also reintroduced to Italy the technique of light painting –first used artistically in 1935 by Man Ray and later made famous by Picasso in the 1940s– where light, used as a graphic tool, describes invisible lines in space that become visible traces when captured photographically.

[7] From 1939 to 1945, Munari worked as a graphic designer for Mondadori, Bompiani and the Montecatini group, overseeing the artistic direction of *Domus* (for which he also wrote articles) and other magazines including *Grazia* and *Tempo*. This experience also highlights the primacy of graphics over text, which often functions as a written note supporting the images. Drawings, photographs, diagrams and photomontages –skillfully treated with screens, textures and colors– become the true protagonists of the page [Colizzi 2012].

[8] The idea of rethinking the traditional book format and creating innovative products for children arose when Munari wanted to give his son Alberto a book for his fifth birthday, only to realize that publishers produced books according to adult expectations and standards, treating them as the primary (or only) readers.

[9] In this respect, Munari follows in the footsteps of Marinetti, who in 1913 proclaimed: "I launch a typographic revolution aimed at the beastly and nauseating conception of the outdated and D'Annunzio-like book: seventeenth-century handmade paper adorned with galleys, Minervas and Apollos [...]. The book must be the Futurist expression of our Futurist thought. Not only that. My revolution targets the so-called typographic harmony of the page [...]. With this typographic revolution, I intend to double the expressive power of words" [Marinetti 1913, p. 4]. [10] This conception of narrative experience marks an opposite approach to that of the *Prelibri*, which instead project their content outward, encouraging a tactile and multisensory cognitive process external to the book itself.

[11] In an interview, Munari himself emphasized the importance of not assigning a fixed protagonist in children's books: "because the protagonist indoctrinates' the child. In my books, the protagonist is the child [...] who walks into the fog, who looks at the giraffe through the hole in the page –in the book *Chi è? Apri la porta* – who opens the door: there are many characters and many simple yet curious stories inside the books, but no fixed protagonist. The child should feel like the protagonist" [Meneguzzo 1993, p. 12].

[12] The concept of 'divergent thinking' was later developed by American psychologist Joy Paul Guilford in the 1950s, referring to a form of intellectual creativity that enables problem-solving through unconventional means (as opposed to 'convergent thinking', or standardized approaches) [Guilford 1967].

[13] The sign, as Munari puts it, can be vertical and imposing, can break silently, curve and thicken, represent the space of a breath, the start of a field, an undefined insect, or the motion of a spinning top, just to name a few possibilities.

[14] In *Telegrammi e poesie* Munari considers how the designer must choose typefaces, word spacing and even the spacing between letters based on the reading time and speed of the text –whether quickly scanned like a road sign, or slowly savored like literary prose [Munari 1997, pp. 66-68].

[15] See also La forma delle parole, in [Munari 1997, pp. 62-65].

[16] On the importance of white space, Munari says: "Everyone knows what a typographic 'brick' is, that page crammed with text, dense as sand, with no paragraph breaks or white space. White space plays a crucial role. It's like the greenery in a city, a resting area for the eyes while reading. Once, however, a client told the artist who was designing a newspaper ad: 'I paid for this space you left blank, so you must fill it with text.' A comprehensible mistake, but a mistake nonetheless" [Munari 1937].

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