

D

E

T

A

I

L

Written by:

Steve Delfino

David Feldberg

Joe Regan

Michael Vanderbyl

Penny Benda

Detail in design There are as many ways to write about design as there are ways to practice it. We can describe, analyze, compare, judge and classify; propose theories about creativity, form and social function. We can characterize design as a language or a way of thinking. Or, we can consider one key aspect of design, the detail. For while a detail may be small in scale—a button, a stitch, a latch, a molding—the subject is not a trivial one. The design detail carries larger concepts no matter its size. It may be less encompassing than the whole, but its meaning is not less deep. Detail makes design not only intelligible, but also memorable and meaningful.

Design at its best, in any form, feeds our dreams, evokes emotion, pleases the eye and inspires the hand to reach out and touch. It engages and involves us and makes our life more interesting and more enjoyable. And for that, design relies on the thoughtful, allusive use of detail, those elements that mediate between the object and the human being.

Detail. The word itself, according to the Oxford English Dictionary, derives from the Old French, *detaillier*, which may be translated as “to cut in pieces” or more evocatively, “a twig or a cutting from a tree.” The image of the twig, a detail of the branch, and with its own buds, abscission scars and patterning, seems an apt correlative, neatly linking “detail” to form, an essential part of the form or function of a whole.

Almost always as one looks closely, or microscopically, at the natural world, new levels of detail are revealed not only as a minute structure, but also as a fragment of some larger scheme or order. No detail of

nature is isolated. But whether natural order is defined as mathematical, formal or spiritual, depends on the temperament of the observer and the tenor of the times. Equally, in the realm of design, detail is intimately connected to the broader strokes of the design concept, the “ordering intelligence” of the designer.

Historically, as we know, designers and architects have often been moved to consider the relations of the part to the whole, the detail to the master plan. Such a cast of mind is characteristic of figures like Frank Lloyd Wright and Charles Rennie Macintosh. Paraphrasing Wright, the detail is a “perfectly realized part of an organic whole.” Wright, of course, made rich use of natural motifs and other details in his architectural work, as well as the abstract forms that characterized the work of his *avant garde* European contemporaries.

For the early modernists, detail was often conceived of as something that ought to be muted, suppressed or disappear into pure abstraction. It is a point of view that still resonates, still predisposes contemporary designers to favor clean lines and spare forms although the strict guidelines of mid-20th century modernism have receded somewhat into history and modernism today embraces design that values function, but allows for the option of decoration and may incorporate elements drawn from the past.

The Swiss architect known as Le Corbusier envisioned an architecture in which reason, simplicity and order would prevail. Believing that ornamentation acted only to conceal flaws or to obscure inferior

materials or workmanship, he favored an “engineer’s aesthetic” of exposed structure and materials like reinforced concrete, steel and glass. Yet, although early modernists took a radically different approach to design, stripping away superfluous decoration, the severe work of modernist masters like “Corbu” do not, in actuality, lack detail. One of his last buildings, Le Centre Le Corbusier in Zurich, Switzerland, is designed with multi-colored enameled plates that create a complex facade of “harmonic unity.”

Even Bauhaus disciple Mies van der Rohe could not resist beautiful materials, dressing the Barcelona Pavilion in onyx and green marble and specifying a single piece of ivory-colored pigskin for the cushions of his Barcelona chair. The deep, precise tufting of that chair, hand welting and chrome finish are exquisite details—surfaces, textures, points of emphasis—that give its simple lines (inspired by the folding chairs of the Pharaohs and the x-shaped footstools of the Romans) an eloquent authority. Detail has never been completely suppressed, nor decoration banished, even in the most austere architecture or seamless piece of furniture.

In functional terms, architectural details in the form of joints and corners make transitions between horizontal and vertical surfaces or express invisible elements of structure. The same is true of a chair designed with an exposed joint that makes clear the transition between the seat and back, or one that is fitted with an armrest or column that subtly expresses concealed mechanisms.

Beyond what constitutes a detail, or what a detail should be, what does detail contribute to design? While the answer may differ with each building or piece of furniture, we can say broadly that detail creates difference and identity. The details of design—the proportions of Apple’s “bitten” apple logo, the large x-height of Max Meidinger’s Helvetica font, the numeric graphics of Carl Gustav Magnusson’s CLUBtalk™—set these images, symbols and objects apart from all others. Detail, even in the simplest piece of furniture, indisputably modern, can allude to more than function. It can serve more than structural integrity. Detail can also be a poetic, lyrical comment made through the cresting wave of a curve or the extraordinary beauty of materials.

Detail emerges from the context of culture and the content of the designer’s accumulated knowledge and experience. Design ideas come from being attentive to the worlds of nature and industry, to the realms of art and science, to human affections, amusements and aspirations. As concepts come forward in physical objects, the details of shape, color, surface and structure identify the place of the object in history, not necessarily by allusion, but by the ideas that govern the design.

As an artifact of culture, few objects have exhibited a greater variety of distinguishing detail than the chair. In terms of material alone, chairs are made of wood, steel, plastic and aluminum, molded fiberglass, natural and synthetic woven fibers, as well as canvas, mesh and other textiles in all manner of combinations. In terms of form, the chair can be as ornate as a Queen Anne armchair, as simple as a Shaker stool, as poetic

and ephemeral as Shiro Kuramata’s “How High the Moon” steel mesh masterpiece—or as explicitly functional as the Projek™ task chair.

The details of the chair—material, color, scale and proportion, as well as autonomous details such as an adjustment knob—represent a designer’s vision at a specific moment in time, in a given cultural and economic context. They reveal that design is not purely a rational response to utilitarian demands, but arises from history, personal experience and inner conviction as well as general principles of form and function.

Certain details, of course, are critical to the structural integrity or performance of a chair or a table or lamp. But equally, details give pleasure, they put an enjoyable spin on the tools we use, claim our affections, bring us back to look, touch and perhaps marvel at what has been achieved—simplicity, nuance, beauty. And while concepts of beauty change with the seasons, even those who are not given to mystical reverie may feel that we have seen something valuable when caught off guard by the play of light and space (architecture) or the marriage of form and materials (objects). We may respond with pleasure again and again to the functional elegance of the task lamp that anchors our desk and illuminates our work, to the embrace of our task chair, to the nuances of color, texture and composition that surround us in our homes or offices.

It is well to remember that architecture, interiors and the objects that fill these spaces have no consequence except for the people who inhabit or use them. Furniture relates not only to an aesthetic philosophy, but

much more intimately to the people who sit on the sofas, work at the desks, adjust the lamp. Each of these serves the human body, houses our tools and possessions, animates our imagination and our senses.

Just as the success of a design is limited by the intelligence of the concept it follows, it is governed by the physical, psychological and emotional response of the user. Through detail, design becomes personal, intimate and relevant. Perhaps our most meaningful form of the visual arts.

No detail is too small to surprise us by revealing the human intelligence, imagination and heart; it can move us to pay attention, to make connections and see things refreshingly new, bright and distinct—just one small reason that design does matter.

Nuance Nuance is that most intriguing and elusive of qualities, something that we can never quite grasp, somehow indefinable and yet present to the eye and the mind, the senses and the intellect. Nuance lies in the subtle gradations of color that lend dimension to a textile or richness to a walnut finish. Or again, nuance reveals itself in a detail with overtones of the past, an element of design that references a traditional method of construction or an exquisite finish that blurs the boundaries between technique and art. The details of any designed thing, however small or subtle, evoke ideas, sensations or emotions and are key to the fundamental appeal of the object.

The merest thing—the beveled edge of a table, the slight curve of a seat, the angle of a leg or a lustrous or matte finish on a drawer pull—lends the most practical of objects a refinement greater than its fellows. Details create nuance and hint at possible meanings, they speak to us in ways that we intuitively understand, articulating the purpose or significance of an object, endowing the object with its special distinction and beauty.

To create nuance, we rely not only on concept, on line and proportion, but also on craft, for it is craft that connects concept to execution, the sketch to the prototype and the model to the finished product. Craft transforms ideas and raw materials into chairs, stools, trolleys and tables that look as good and function as well as when the designer intended when they were first conceived. Craft is not limited to the handmade one-off. It is integral to the manufacturing processes that create the visual and structural continuity of mass-produced products as well. The significance of craft reveals itself in such details as the

perfect execution of a sculpted curve or the nuance created by the flawless stitches that fit fabric to the frame of a chair. At the same time, craft reveals a subtle understanding of material—a beautiful pattern of grain or the suppleness of wood—and the techniques that may be used to create the neat fit of parts or fluidity of line.

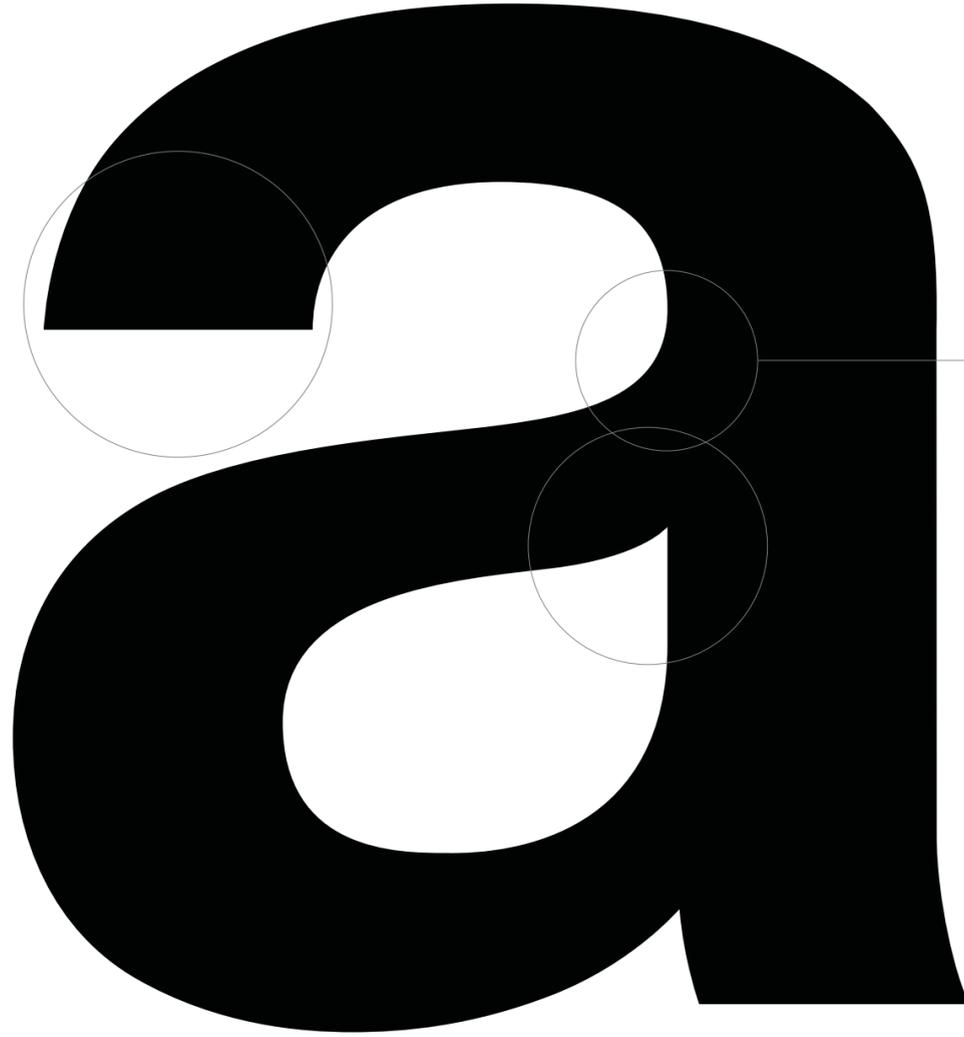
Even in something as apparently simple as the letterforms of a typeface, we can detect subtle details—line, loop, stroke weight, serifs and counter spaces—that create, alter or damage clarity, balance and identity. Here, the lower case "a" on the right is the authentic Helvetica letterform; the one on the left a copy of the original.

Fig. 13.1



It is just such particulars that define the identity of a typeface and create the slight, yet crucial difference between the original handcrafted Helvetica letterforms and the Arial computer font. Thus, the smallest of details assert themselves in the nuances of our message, creating a happy state of consonance or triggering dissonance.

Fig. 13.2





Revealing a scrupulous attention to detail, the design of this lounge chair allows one to discover small moments of beauty—like the sculpted form of the metal leg, echoing the nuanced line of the back of the chair.

Detail reflects the rigor of the designer's intelligence, the insistence upon an exact and complete expression of the design concept in every element of material and form. There is rational thought behind the shape of the chair and in the decision to mirror that shape in the body of the legs that meet and support the seat. It is a small detail, not immediately obvious or quickly comprehended. But in its very subtlety and nuance, lies the power to delight.

Fig. 15.1



Line, scale and proportion are essential elements of design, creating through their delicate balance the perception of a nuanced elegance.

While the legs of a table or desk may be thought of as a structural necessity that supports and stabilizes a tabletop or worksurface, these details of design serve more than function. In a subtle, almost imperceptible way, the curved line and fine bevel of the legs lend elegance to a simple contemporary desking system, contributing to our impression of quality and distinction.

Fig. 17.1





Nuance owes nearly as much to craftsmanship as to proportion and line. Careful attention to the smallest detail is key to achieving the potential elegance of a curved chair back, a tightly tailored seat cushion or the pure line of an armrest. Skilled workmanship and meticulous detailing—seams that flow with perfect consistency, stitches executed with precision and care—are marks of quiet distinction that contribute not only to the aesthetics of a piece of furniture, but also to its proper function and ultimately, the length of its life.

21.1



Fig. 23.1

The smallest detail creates a critical margin of difference. To design an object, or more specifically, a chair, that is something more than generic, one must attend to the details: the way the leg of the chair is angled and tapered (or not) and how the leg meets the floor; the neat intersection of the leg and the seat and the details of manufacturing that ensure a flawless execution. Such decisions—precise and purposeful—elevate the quality of design and allow the chair to achieve its function in a supremely graceful manner.





Fig. 27.1

With its pure and evocative shape, this fully upholstered chair derives elegance through material, scale and the nuanced, but very intentional way that the seat cushion follows the line of the seat and arms. The chair's deeply curved shell—suspended over a polished aluminum base—is capable of superlative function and comfort, as well as effortless style and beauty.

Connect is a multivalent word that carries several potential meanings depending upon the context in which it is used: a connection may be a physical link, a personal relationship or an intellectual reference to something else. In design, the physical connection may be a structural component like a joint or a seam. Connection may also reside in the emotional response an object evokes in its user or in the references the object makes to history or to other concepts and forms in the realms of science, nature or art.

The most minimal of objects carries a message that offers the potential for connection. As a visual language that connects the object to the human being, the details of design express the potential to serve our human purposes and fulfill our needs and desires. The particularity of detail—the exact radius of a curve, the specific nature of the material, the shape and heft of an adjustment mechanism—connect the intention of the object’s designer to its user and give the object value and meaning.

When we interact with a work chair, we perhaps feel affection for our chair because of the way it greets our body and its swift response to any adjustment. We become attached to our tablets, smartphones and laptops because they are designed with an assiduous attention to the details that “connect” with the human hand and eye and intellect, creating what we know as the user experience. Ideally, detail is thoughtful and essential, a vocabulary of form that makes structural, functional, psychological and cultural connections that we can perceive with our senses and grasp with the tools of our intelligence and our intuition. We know immediately what an object is for and how to use it.

The concept of connection in design is perhaps most evident in its physical aspect, in the joinery of a chair or the points at which the legs of a sofa intersect with its seat, which may be either concealed or revealed. At this level, detail mediates between different parts or between the part and the whole. But even these physical connections offer evidence of prior, more abstract connection, between idealized form and material reality, between human concepts and values and their expression in the objects we make and use.

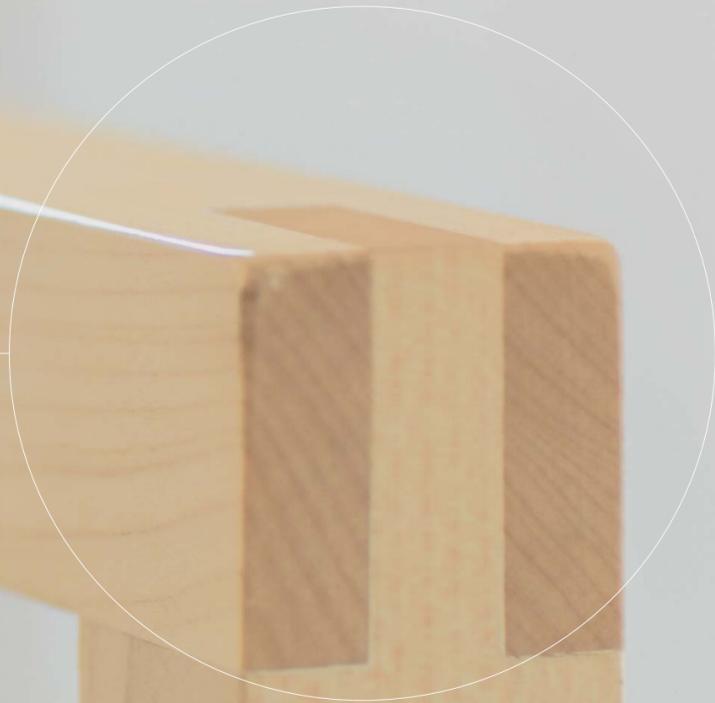
Beauty is often tied to luxurious and costly materials, but that need not be the case. In the midst of a proliferation of product innovation, the stacking chair remains a basic and necessary staple in the vocabulary of furniture design. Beauty can be very simple, residing in a plastic chair as much as one crafted of rosewood and leather.

Fig. 35.1



Fig. 37.1

Detail connects the part to the whole. The traditional joinery of this guest chair is a detail of construction that connects its individual components in order to create visual and structural continuity. Beautifully made with a classic bridle joint, the chair is crafted to achieve both elegance and superior strength.





While traditional architecture is full of trim and ornament with little or no functional relevance, in the modern idiom details are often suppressed or abstracted including the joints and the junctures between panels or materials.

The architecture of the contemporary office is often organized around humane concepts—like allowing natural light to flow through every possible space within the building. Reinforcing that intent, a glass wall system offers seamless transparency with precision-fitted joints that connect the individual panels of glass. A unique transparent adhesive tape creates the appearance of seamless walls of glass. Glazed corners have a mitered edge that employs the same nearly invisible joining method. Connection between parts is achieved in the most discreet manner possible.

Fig. 39.1



Fig. 411.1

The openness and transparency of the modern office create significant new problems to be solved by design. Addressing issues of visual privacy, this desking system makes use of translucent casual screens mounted between adjacent workspaces—an alternative to opaque panels that create barriers to interaction.

To define space and provide a degree of visual privacy, sliding screens can be positioned between desks where workers sit face-to-face. Each person can open or close the screen at will, choosing whether or not to connect with the person on the other side of the screen. In a team environment where focused work frequently alternates with interaction, this detail of design allows workers to easily connect, converse and collaborate—or to signal that privacy is desired.



Fig. 43.1

An elegant architecture echoes the long, low lines of mid-century modern furniture that achieves a remarkable transparency with overlapping horizontal

planes. Stacked surfaces connect the diverse functions of a multi-layered workstation with files housed on a lower plane, a workspace on the medial plane and shelving above. The structural details express and support the conditions of work.



Designed with an impeccable eye for form, the inventive design of an angled leg creates elegant seating marked by a striking originality.

Visible yet discreet, the connection of the angled leg to the armrest is one of the sofa's defining details, solving the problem of support in a unique and unassertive way. The connection of structural elements appears to be barely articulated and yet the sofa is fully supported by a rigid steel undercarriage, a strategy perhaps derived from early modernist models. In every element, an impeccable attention to detail transforms the traditional concept of the sofa from one of bulky comfort to one of simplicity, lightness and ease.

Fig. 45.1





Precision detailing melds diverse materials into a seamless whole: a glass tabletop, a frame of chromed steel and nickel-finish stainless steel ferrules that add another level of refinement. The angular beauty of this sleek glass and steel table draws upon elegant modernist precedents and its cool, clean beauty suits any context.

Fig. 49.1



Function Among its many achievements, modern design opened our eyes to the beauty of functional objects without ornamental disguise, of compact and efficiently arranged working parts, as well as machine-fabricated materials like tubular steel, wire mesh and carbon fiber. In the hands of designers like Marianne Brandt, Walter Gropius or, more recently, Jasper Morrison, even humble domestic items like a corkscrew, a tea set or a coffee pot might brilliantly marry form to function. From an early modernist point of view, furniture too should adhere to strict principles—a chair is not only a piece of sculpture made for visual enjoyment, but also a seat that must abide by the determinants of physical facts and human necessities.

Broadly, one can say that every object that functions properly is a viable product, a successful expression of the designer's intent and integrity, the fulfillment of a need or desire. Yet, there are certain things—buildings, tools, tables, chairs—that reveal more clearly their nature as an artifact, as an item made by the hand of man or his machines to serve a particular purpose. The wood beams of a building, the articulated parts or brass connectors of a piece of equipment, the exposed joints of a chair, offer evidence of constructive assembly and attentiveness to practical matters. Far from rendering such things inelegant or dull, the honest expression of function often comes as a breath of fresh air in a world of visual complexity and stylistic eclecticism.

While modernism or functionalism has been sharply criticized for becoming as formulaic as the traditions it abandoned, today's best designers have recaptured individuality while honoring the precedents

of the 20th century. No detail is either hidden or celebrated, just thoughtfully considered and utterly appropriate in the hierarchy of a product's features. The details of design express and support function, without serving a doctrine that insists that practicality trump aesthetics. At the same time, we would do well to remember that the beauty of all natural objects, and many man-made objects, when examined, turns out to be a by-product of function—the helix of a snail's shell, the structure of a woven material, the materials and contours of a work chair.



Fig. 59.1

Detail is not necessarily a particular class of things—fragments, parts or symbols. It can also be a set of principles—the tenets of sustainability or the determinants of function that are built into the design as a whole.

Supremely functional, this adjustable monitor arm is rigid and robust, yet light in weight and fluid in motion, with details that reference the design of precision-engineered equipment and industrial structures. Utilitarian, yet highly refined, the monitor arm resolves complexity with elegance and economy.

It must be noted that we are not seeing a fire sale of office space as companies move to smaller spaces. Rather, the space afforded by trimming the size and number of workstations is now allocated to public spaces where people can naturally collide and interact. As much as offices were once planned for individuals, today's office is designed for groups, with lounges, coffee bars, and multiple informal collaborative settings—a radical change in thinking and planning, if not in the amount of floor space.

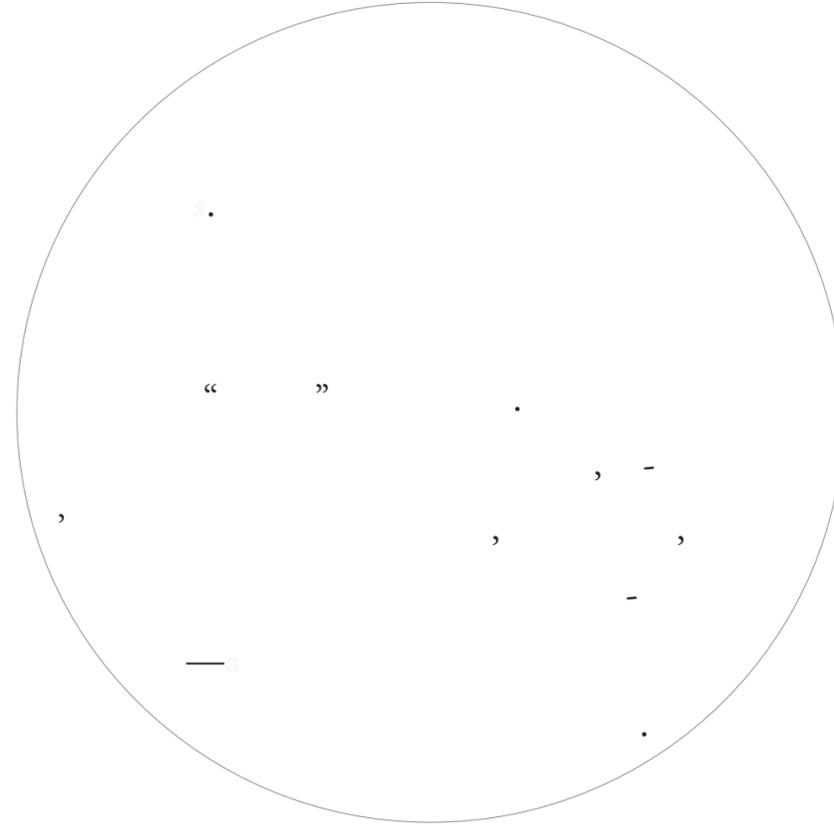


Fig. 61.1

In the realm of language, punctuation serves to structure and clarify the message of the text. A comma left out or misplaced can scramble meaning and create conceptual chaos. Yet, a thoughtful and precise use of punctuation has the power to guide us through the thickets of poetry or prose, giving unwieldy strings of words cadence, flow and coherence in the same way that the details of design may be said to endow the object or the image with unity and meaning.



Fig. 63.1

The open texture of the mesh back is echoed by a grid of perforations that punctuate the wings of the lumbar support—itsself a model of utility and pleasing form. The flexible mesh molds to the back with perfectly defined tension for support and allows air to pass through to cool the body. As detail, the choice of materials and their juxtaposition, the contrast of materials with their different properties of surface and structure—rigid and elastic, opaque and transparent—become essential to the function of the chair as a whole.

Each component of this sophisticated mobile unit—down to the explicitly functional base of the cart and its casters—reveals clarity of concept and exactitude of detail. There is no excess or ambiguity. The design is scrupulous and refined in every detail, elegantly resolving complex issues of function and aesthetics. Note the clean, dynamic lines of the cart and the finesse with which the wood body connects to the metal edge.

Fig. 65.1





Merging function and form, the pure beauty of a highly polished steel base and legs enhances the elegant architecture of an executive desk. The refined detail of the fasteners that connect the angled elements of the x-leg structure exhibits a rigorous aesthetic and accomplished technique; the cool sheen of the metal speaks to an appreciation of fine materials.

Fig. 67.1



Based on a minimal floating element, linear benches combine with curved elements to create a range of free-flowing seating compositions. The thoughtful detail of a wood slide enhances the functionality of the bench by providing a writing surface or a place to rest a drink or a tablet.

Fig. 71.1



71

Material In the vocabulary of design, materiality is a concept proposing that materials shape our perception of space and form. A 4- x 4-foot cube of plywood is not equal to one of polished steel. An office with glass walls feels quite different from an enclosure built of drywall or brick. In terms of physical properties like density and texture, tensile strength and malleability, wood is clearly and essentially different from steel or glass or brick. But wood and steel also differ in terms of cultural associations and their historical uses and meanings.

Materials represent concepts and values as well as physical qualities. Tubular steel and plastic both have stood as symbols of modernity. From a 21st century perspective, wood often represents tradition, although molded plywood was once a hallmark of progressive design and manufacturing, a natural material transformed by technology to make it lighter, more suitable for mass production and adaptable to the human form. Creating new forms with molded wood was at the heart of the work of mid-century designers like Charles Eames, Eero Saarinen and Arne Jacobsen, all of whom experimented with the single plywood shell and brought it to a high level of visual sophistication in the 1950s. When fiberglass and other plastics became feasible for use in furniture design, the molded plywood chair was displaced by innovative new designs in these materials.

The mesh textiles that seem ubiquitous in the 21st century office are simultaneously a symbol of innovation and humanistic values. In appearance, mesh is both organic and technical. In terms of function, mesh is strong, yet flexible. When used as a component of a work chair,

mesh serves both aesthetics and function, fulfilling the need for support and comfort over an extended workday, as well as a contemporary taste for lightness and transparency.

Certainly much of the history of design has also been a history of materials, of exploring limitations and possibilities and of translating materials into new forms to meet new needs. Designers today have use of an extraordinary range of materials—wood and steel, glass and plastic, organic textiles and woven synthetic fibers—along with new technologies and methods of production that allow materials to be used in new ways to improve function and to put more beauty into the everyday environment.



Fig. 79.1

This elegant work chair is built to fulfill functional requirements, but also takes poetic form, satisfying our aesthetic needs with graceful lines and an arresting use of materials – a pressed painted steel mesh shell with a peripheral profile in painted aluminum and supporting frame of painted die-cast brushed aluminum.

Fig. 79.2

A visually arresting combination of organic and high-tech, hard and soft, lustrous and matte materials, this chair offers a rich material vocabulary along with an appealing visual lightness. It displays the designer's virtuosity with materials and assiduous attention to detail and professional finish.



Fig. 83.1



Fine wood veneers and satin nickel-plated pulls add a sense of luxury to contemporary casegoods furniture that stresses simplicity, a lighter scale and discreet technology support. These details of design demonstrate the beautiful possibilities of fine materials and honor the craft of woodworking, expressing continuity with the past, as well as an intelligent assessment of present needs and tastes.

Fig. 83.2



The expert handling of beautiful materials reaffirms the enduring value of wood casegoods furniture. Clean architectural forms are set apart by a glowing Macassar ebony finish that highlights the horizontal grain of the wood complemented by polished nickel drawer pulls in a vertical orientation.



Fig. 85.1

Set apart by the honest use of materials, this laptop table makes a straightforward and an honest design statement through exposed layers of plywood that create a subtle visual and tactile distinction. Functionally, the tabletop provides a stable surface for work tools, folding down and out of the way when not in use. Its purpose is clear and eminently practical. At the same time, telling details—the choice of materials, the beveled edge of the table, the visible layers of plywood—lend nuance to a design of apparent simplicity.



Fig. 87.1

The extraordinary elegance of the iconic Ferrari automobile is the result of an uncompromising design approach that fully integrates aesthetics and performance down to the material details of the car's dashboard, a marriage of carbon fiber, aluminum and leather. Ferrari's use of high-tech carbon fiber reflects an expanding use of innovative materials that offer enhanced performance—such as a very high strength-to-weight ratio—along with new aesthetic properties.



Alluding to a modernist aesthetic, this architectural glass wall system is a model of clarity, simplicity and function. Structural detail is concealed, but not absent, with mitered glass and minimal aluminum transitions yielding a product that fulfills its purposes with nearly invisible structural connections.

Although the cool, clean beauty of this wall system has great aesthetic purity and appeal, the use of clear or frosted glass also has practical applications. The option of double-sided ceramic frit tempered glass offers a translucent vertical plane that physically and visually separates private space from open, public areas. At the same time, the glass provides excellent acoustic privacy and allows light to flow through a building in support of LEED guidelines for office and commercial interiors.

Fig. 89.1



The architectural quality of this casegoods collection escapes austerity through the beauty of wood veneers in a rich Grey Oak finish with accents of chromed steel. Insisting upon the perfection of detail, every edge is cleanly finished. The proportions are nicely balanced. Hardware is concealed so that the purity of line is preserved. The handsome presence of the collection offers proof of the lasting appeal of simplicity and the quiet expressiveness of beautiful materials.

Fig. 93.1



93

Fig. 95.1

Celebrating materials in their purest form, this table combines an unadorned tabletop of translucent glass with a satin nickel finish aluminum frame. The glass top appears almost to hover as it touches down on the minimal metal frame, giving the table a light, floating presence. An elegant instance of how materials change our perception of properties like weight and scale, the pale green crystal glass and satin finish have a beauty and warmth that redeems the purity of the design from a chilled austerity.

Scale Concepts of scale and proportion have come down to us from the ancient Greeks, the mathematicians of the Renaissance and 20th century modernists like the architect Le Corbusier, who centered his design philosophy on concepts of harmony and proportion. Yet, classical proportions still make sense to us, we seem to have an innate sense of the “rightness” of scale and proportion, as well as an ability to interpret scale in terms of function and form.

Does the scale of an object feel right given its function and the context in which it lives? What does scale communicate? The length and width of a desk, its dimensions and proportions, may suggest appropriate uses—and also the status of the user. An over-scaled chair or sofa confers a heightened sense of drama and may convey authority. A trim, lightweight seat suggests a more dynamic mode, a chair that users will move around to suit changing tasks and activities. Thus, scale influences human behavior, prompting an action or reaction whether or not we have consciously interpreted the mathematics of scale at work.

Certainly scale, along with line and proportion, is a primary element of design, a detail that defines the character of an object and one of the key choices that is made in the process of design. The scale of the chair, the table or the lamp—or the relative scale of one of its components—makes the object distinct, expressive of its function and perhaps its spirit of playfulness or restraint. One need only consider the exuberance and wit with which a designer like Philippe Starck approaches scale with his high sided, throne-like sofas and dramatically over-scaled clocks to appreciate the expressive power of scale. At the same time, scale can

be something simpler and more disciplined—the exact scale of the “bite” that distinguishes the Apple logo, the economical measure of a tabletop or the compact dimensions of a clock that is pared down to its essence, a clock that is only a clock and does not double as decor or status symbol.

There is a refreshing honesty about the design of this clock, which quietly performs its function without bells, whistles or ornamentation. Unobtrusive and compact, its design is an intelligent response to the context in which the clock will be used—an office setting filled with monitors and screens and other visual stimuli.

Fig. 103.1



Fig. 103.2

The paring away of non-essentials is evident in the details of design: the use of a simple bar in place of numerals, restricted use of color, the scale of the clock face and the intimate scale of the clock itself, as well as the inclusion of attachments that allow the clock to mount above the worksurface, within reach, but out of the way.

103



Fig. 105.1

The quality of essential details reflects an uncompromising approach to design and execution. Note the architectural design of the foot, the attention paid to its sculpted angles and the integral glide that allows the foot to move up and down, to adjust the height of desks and the vertical dimensions of cabinets. The beveled profile of the foot reiterates the architectural elegance of the furniture itself.

Fig. 107.1

The logo is simply the silhouette of an apple, an apple with one jaunty leaf, "bitten" on one side. Simple. Or is it? In fact, this apple represents a precise and complex geometry that assigns the exact angle and position of the leaf, the radius of the shoulder and the size of the bite. Translating an organic shape into an abstract symbol, this disciplined use of line, proportion and detail creates an image that is asymmetrical, yet visually balanced; one that functions beautifully as an icon, a "simple" sign that conveys multiple layers of meaning.

Why the bite? It is a detail that has inspired much speculation. Is it Newton's apple that fell to the ground and prompted the theory of gravitation? Is it about bits and bytes? Perhaps it is simply an experimental design decision driven by scale, by mathematics rather than myth. It's the right detail in the right place.

Fibonacci and Golden Ratio as applied to the Apple logo.

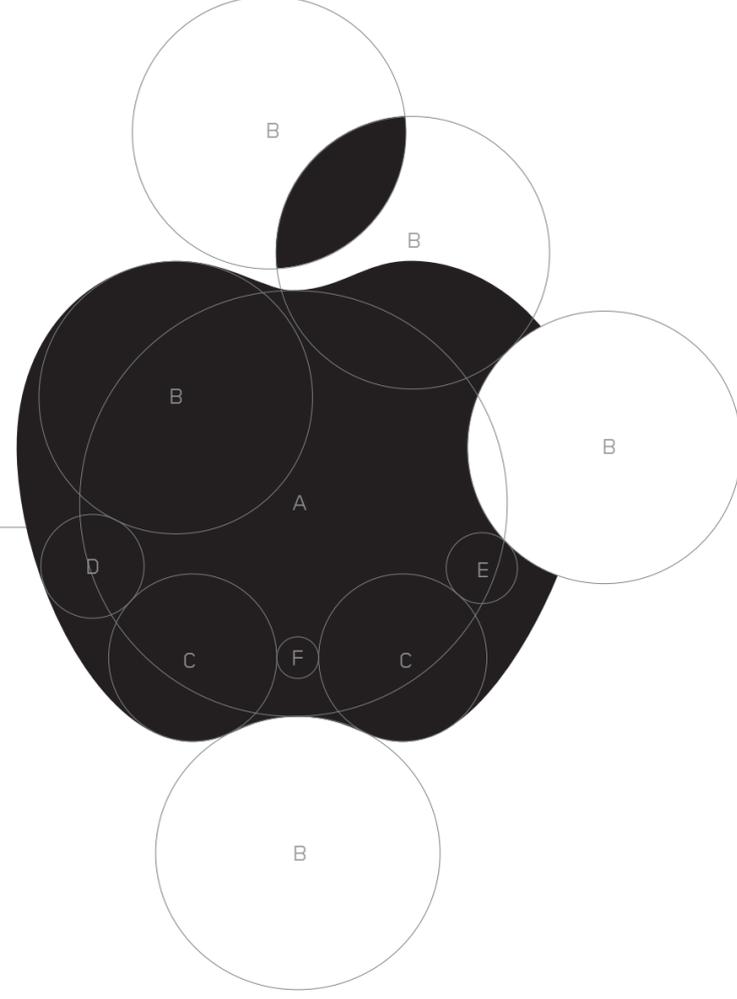


Fig. 109.1

This lounge chair has an engaging and dynamic presence that arises from its sweeping lines and generous scale. But while the scale of the chair offers a certain visual drama, the extra width of the seat also translates into function, supporting the comfortable use of tablets and laptops. With an uninterrupted flow of back and sides, the chair delivers physical comfort, aesthetic pleasure and a touch-down workspace—a uniquely satisfying seating experience.



Color White, it is said, is the color of clarity and simplicity. A pure white is crisp, clean and may convey ideas like integrity and modernity. Or, as ivory or cream, it may be less immaculate, but more friendly and approachable. Yellow, the essence of light, suggests a lively mind. Green is fresh, orange is optimistic and red, the most physical color in the spectrum, is a signal to act or react; it is provocative, stirring and assertive. At the same time, no color carries a single message. Rather, its meaning alters with the context in which it is used. Equally, our perception of a color changes as it approaches and sits next to other colors, when red is used in combination with green and brown, rather than black and white.

Integral to the design of any object, image or space, color is an element of design that can change our perception of scale and weight, of light and heat. The color itself, and its specific hue, saturation and brightness, acts as a cue that triggers a physical and emotional response, altering our experience of a room as restful or lively and our evaluation of an object, including the level of taste and sophistication it represents. Whether one punctuates a white-on-white room with a bit of bright orange for emphasis or uses color and graphics to identify a brand—color acts as a key detail that can distinguish a place or differentiate a product from all others.

Thus, color functions as a message or a mark of identity. But beyond its usefulness, color also has an aesthetic quality that is distinct from, if not wholly independent of, its symbolic function. A fabric in a misty grey or a luminous green may be seen simply as beautiful, deeply affecting

without our quite knowing why or how. The unexpected placement of vivid color or vibrant color blocking may give us a moment of aesthetic delight. The beauty of color is elusive, but it has an extraordinary power to inspire, animate and transform. Through color we recognize beauty not by tracing its lines, but noting its effects; its power to bring us to attention, to elicit surprise or joy.



The surprise of the red melamine finish immediately distinguishes this piece as the product of a rigorous design approach, one that considers even small or internal parts as intrinsic to the design as a whole. Every interior and exterior element reveals the designer's thorough attention to detail.

Is color absolutely essential to the functioning of a simple piece of furniture? Possibly not. But color does add another dimension of interest or another layer to the functionality of an object. Color intrigues the eye and changes the way we respond to and feel about a chair, a sofa or a basic work tool that helps to organize pencil and paper, but is also delightfully, beautifully red. Objects are made for people and design has a responsibility not only to utility, but also to delight. As Charles Eames noted, "Whoever said pleasure wasn't functional?"

Fig. 117.1

117



Fig. 119.1

Color can act as vivid shorthand for a brand. Tiffany & Co., a prestige brand with a heritage spanning two centuries, is associated with a warm robin's egg blue that is now trademarked and colloquially known as Tiffany Blue. The company has used its signature hue since 1845 and today the distinctive blue box is instantly recognized and connected to an image of luxury, quality and exclusivity. The color has become an essential part of the brand's visual identity. It not only delivers the message—it is the message.

TIFFANY



Fig. 119.2

Detail exists on a spectrum of scales. This surface appears at first glance to be simply a textured material. On close inspection, the minute pattern is revealed to be an infinite repetition of the Tiffany "T."

119

Fig. 121.1

The design of contemporary office furniture becomes something altogether more interesting by adding pops of bold color to neutral surroundings. The red accent color and knife-edge case design elevate the aesthetic of a simple metal storage element. Color transforms a basic utility object into something special that combines rigor and flair. As an accent in a white or neutral space, red radiates with a youthful energy that's magnetic and modern.

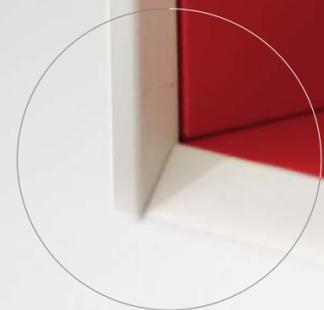
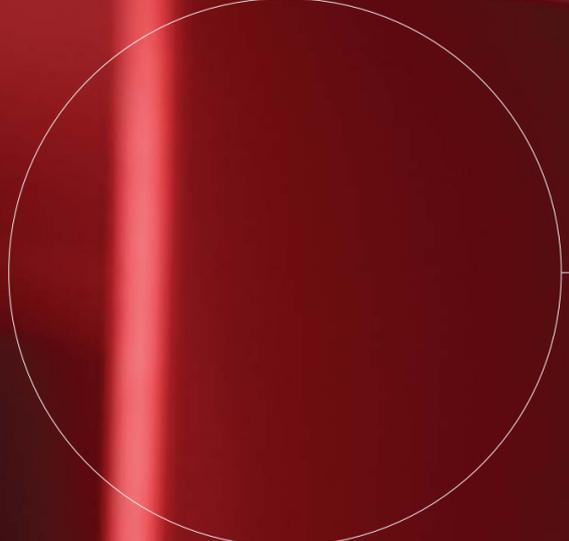


Fig. 121.2

Here, the interior of a storage shelf is painted bright red, an unexpected detail that gives the furniture a livelier and more sophisticated look. The color red makes a fresh statement, wrapped in white and framed by the crisp edges of the metal housing. It acts as a delightful surprise, a vivid detail with the power to create a more engaging work environment.



121



123

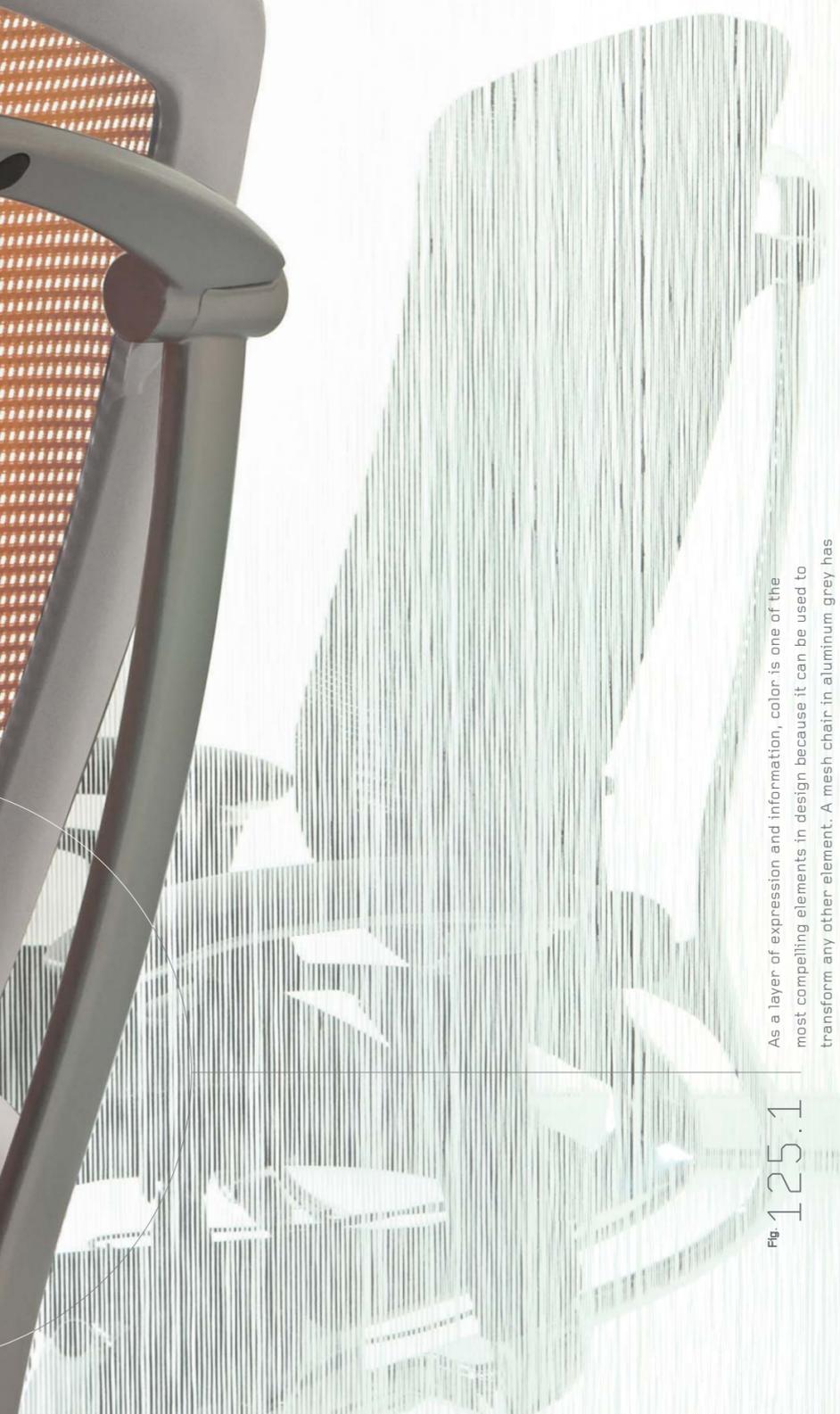
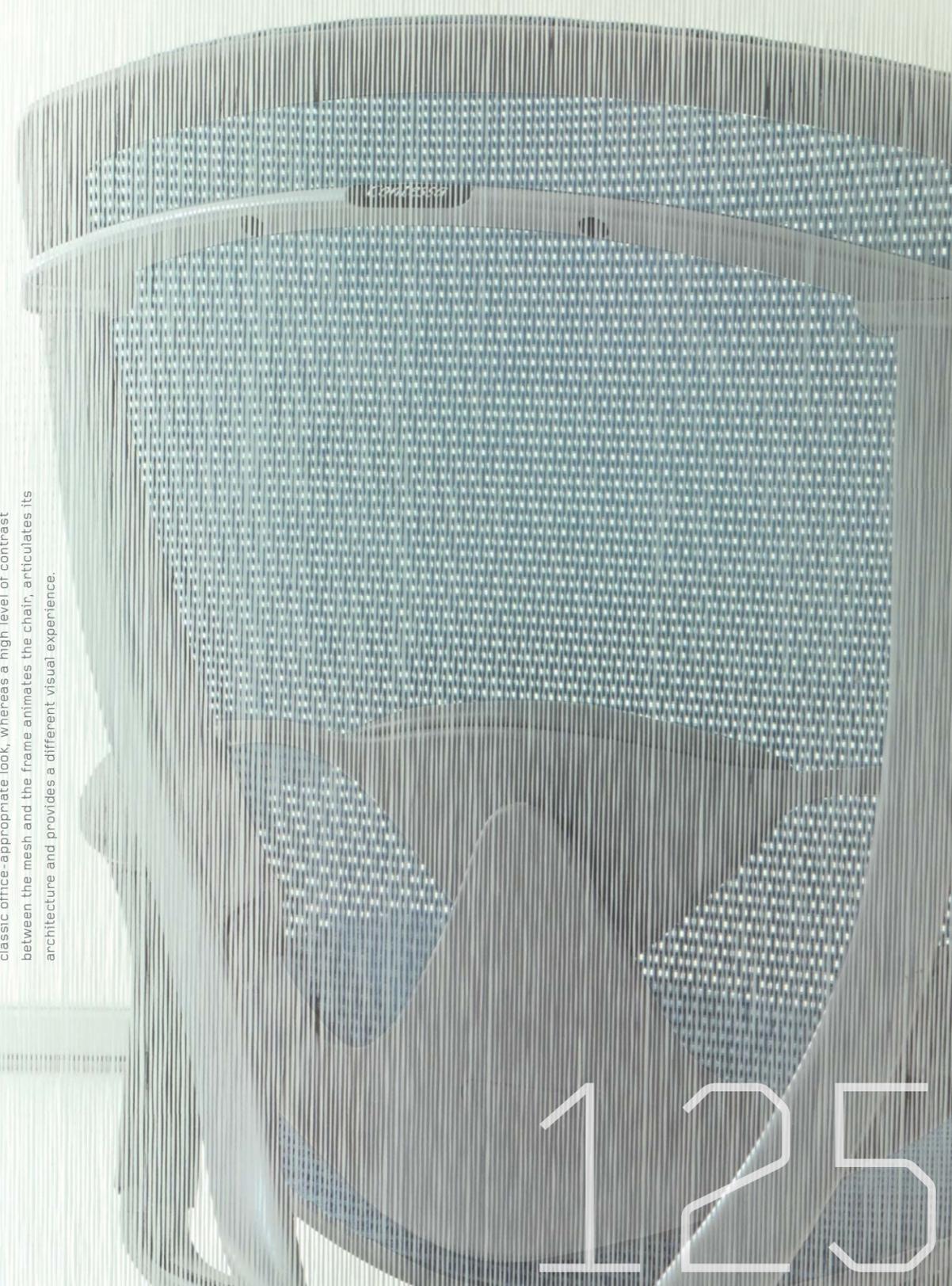


Fig. 125.1

As a layer of expression and information, color is one of the most compelling elements in design because it can be used to transform any other element. A mesh chair in aluminum grey has a discreet presence quite different than the same mesh chair in acid green, orange and blue. At the same time, if the color of the frame is matched to the color of the mesh, the chair assumes a classic office-appropriate look, whereas a high level of contrast between the mesh and the frame animates the chair, articulates its architecture and provides a different visual experience.





Color clarifies and defines the architecture of a piece of upholstered furniture through the striking contrast of a welt seam that adds emphasis and echoes the strokes of the designer's original sketch.

A distinctive profile is highlighted by the bold use of contrasting color on welted seams that trace the contours of back and seat cushions. Color becomes a detail that defines and enhances the aesthetics of the piece, creating a look that is at once precise and seductive, a seating solution that sacrifices neither comfort nor form.

Fig. 127.1

127

Touch The human hand is our most sensitive apparatus for receiving information about the world. With our fingertips, and the hundreds of sensors therein, we can perceive the warmth or coolness of metal or locate objects in the space around us. We can test the soundness of a structure or find pleasure in the hand of a fabric. An object with a smooth, sculpted shape that fits the hand invites interaction or deployment. The welting of upholstery pleases the eye and draws the hand to confirm the visual message of quality. In the same way, the on/off switch of a task lamp—a detail key to its proper function—may have a particular shape, color and size. But another level of detail emerges at the moment one presses the switch. Is the surface rough or smooth? Does the switch feel flimsy or sturdy? Does the feel of the switch aid or hinder its operation? Details inspire or inhibit engagement with our work tools. They alter the quality of our interaction with the knobs and levers on a task chair, the pulls on a desk drawer or the keyboard of our laptop.

Touch as a detail of design is often intimately related to sound, with the perception of sound being contingent on an initial performance of touch—the pressure of the hand to activate a switch or close a drawer, the tapping of the fingertips on the keypad or mouse. Of course, we are surrounded by sound at all times. It is the ambient background of our lives at work, in the street, in the shops. But objects, when encountered, maneuvered or manipulated—that is, touched—also make sounds that may fall almost beneath the threshold of awareness, yet still affect the way we feel or behave.

Touch and sound tell us a great deal about the quality of design. The whisper of your desk drawer as it glides open is a detail that suggests the nature of its construction—quite different than if the drawer rattles or sticks when pulled or pushed. The same is true of a table or chair poised on casters. Does the table roll smoothly across the floor? Does the chair slide easily into place? Or, does our touch reveal a flaw in design or execution? Does sound or the absence of sound call attention to clever mechanics and well-made details? The muffled click of a cabinet door when it is pressed shut reassures us that the door is secure. The “ka-chunk” of a stapler tells us that a job has been done. Touch and sound communicate—often making the difference between an object that functions as it was meant to and one that does not, between a tool that is a pleasure to use and one that fails to fulfill its promise.



Fig. 135.1

Texture is a matter of both eye and hand. Encountering the material, we respond both to what we see and to what we experience as our hand explores the finish and feel of a fabric, the soft hand of wool flannel and chenille, the smooth, dense pile of velvet or the slightly rough, nubby texture of boucle. Applied to a sofa or chair, a panel or a wall, the fabric becomes an essential part of the furniture or the architecture—how it looks, how well it performs, how it feels beneath the hand and perhaps even what memories or associations it evokes.



While ornament is arbitrary, detail is not. The knurled surface of the knob mechanism is not capricious, but rather a tactile detail that provides a useful bit of traction each time the user uses the knob to make an adjustment.

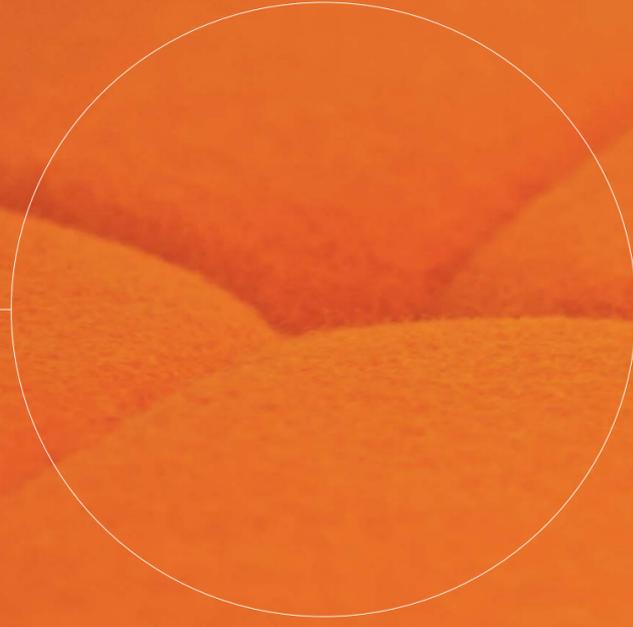
A small-scale element of design, the metal knob offers evidence that a technical problem has been solved. The knob itself, its placement, shape, size and incised surface, is one level of detail. In action, another layer of detail is revealed as the hand encounters the knob. Is the surface cool to the touch? How much pressure is required to turn the knob? Is there a sound that accompanies the action of the mechanism? All of these sensory impressions translate into a sense of "rightness" and ultimately, the viability of the design.

Fig 137.1

A craft that has evolved over centuries, upholstery is meant to create furniture of greater comfort and elegance. Tufting remains one of the classic upholstery techniques, here beautifully executed to yield a warm, receptive look that enhances the seductively soft feel of the fabric.

The tufted seat has many historical precedents, including the Barcelona chair designed by Mies van der Rohe to serve as seating for the King and Queen of Spain in the German Pavilion at the International Exposition in Barcelona. To create the deep, precise tufting that characterizes the chair, it was necessary to cut, hand welt and hand tuft individual panels of leather. The result is a very beautiful and comfortable chair. In the same way, contemporary seating may employ traditional techniques to create a sofa as richly tactile as it is visually elegant.

Fig. 139.1





141

With a sparing, but highly intelligent use of detail, the Braun calculator is a pleasure to use thanks to its friendly shape and the subtle tactility of its rounded and raised buttons. The genius of the calculator's grid-based design inspired the design of the iPhone's calculator application, a tribute to how elegantly and completely Dieter Rams solved the problem presented.

Fig. 143.1

Fig. 143.2

Through his brilliant design of everyday objects like clocks, coffee makers and calculators, Dieter Rams played a significant role in translating the "Neo-Functionalist" aesthetic into a design philosophy with broader appeal. Designed in the late 1970's, Rams' Braun calculator has become an icon of modern design, a simple, minimal tool that employs color inventively to differentiate the function of the buttons and to inject a new level of expressiveness into the design.

All trademarks, logos and images remain the property of the respective owners.



Fig. 145.1

With its refined lines and precise details, this task lamp is a visually and technically sophisticated solution that adjusts at a touch to position the lamp precisely where needed. Its striking simplicity and slender profile never add to visual clutter in any context.

Fig. 145.2

A height-adjustable stem allows for the concentration or diffusion of light. The slender, elongated blade pivots to redirect light as desired, giving users fingertip control over how light is distributed at the desk or a shared worktable.



Fig. 145.3

State-of-the-art in technological terms, the LED lamp also has a sleek, sophisticated housing that displays a rare mathematical refinement, giving this product a distinct visual appeal matched by the pleasure it provides in use.

Nami™

Nami is a contemporary, European-designed stacking chair with a sculpted back that has a gentle controlled flex that moves with the user's body to provide comfort for extended periods. Nami is equipped with accessories that include a tablet arm, bookrack, dolly and ganging option.



Tulip

Designed by Jeffrey Bennett for the B&B Italia Project Collection, Tulip is a 360-degree swivel chair marked by exceptional comfort and flexibility. The chair rests on a brushed aluminum support base and disc. A soft seat cushion adds to its welcoming character.

Keel™

Keel is a versatile lounge chair designed to complement Teknon Studio's Spectrum and Fractals seating programs. Designed by Jeffrey Bennett and Nicholas Dodziuk for Teknon Studio, the chair works equally well in reception areas, private offices and communal lounge areas, as well as blending into hospitality and residential settings.



George

Designed by Antonio Citterio for the B&B Italia Project Collection, the George sofa has a brushed die-cast and extruded aluminum base and a fully upholstered tubular steel frame that may be covered in either leather or fabric. Long, low lines and classic cross-stitch detailing on the seat cushions project a refined aesthetic, as well as superb comfort.



Interpret™

The curved and beveled leg of the Interpret desk system projects both strength and grace, using the vocabulary of form to express the balance of stability and dynamism possible in the modern office. Sleek, simple and thoughtfully detailed, Interpret adapts to any person, any task, anywhere in the world even as demographics change, technology advances and work patterns evolve.



Fractals™

The Fractals Seating Group is distinguished by an inventive intersection of fabric, polished metal and wood that create a new level of aesthetic refinement, as well as comfort, function and versatility. Designed by Jeffrey Bennett and Nicholas Dodziuk for Teknon Studio™, Fractals offers unique seating for the modern office.



Progetto 1

Designed by Monica Armani for the B&B Italia Project Collection, Progetto 1 is a series of tables with a simple, rigorous structure that follows the principles of minimalism. The tables have a steel frame and glass tops designed and manufactured to provide both beauty and durability. With their multi-faceted utility and clean aesthetic, the tables are in perfect harmony with modern furnishings, a striking contrast in traditional surroundings.



District[®]
District achieves a light, floating presence through elevated and overlapping surfaces that provide storage, while maintaining ample space on an uncluttered workspace for writing, reading and using a computer, laptop or other workplace tools.

Optos[®]
Optos is a seamless glass wall system that provides full-height space division with extensive leveling tolerances, as well as visual and functional integration with Teknon's Altos[®] wall system. Precision-fitted joins and glass-to-glass connection projects a highly refined aesthetic.

Spectrum[™]
Designed by Jeffrey Bennett and Nicholas Dodzick for Teknon Studio, the Spectrum Lounge Series bridges the contract, hospitality, public and residential environments. The program offers exceptional flexibility in application and planning for modern spaces.

Interpret[™]
Interpret is a contemporary desk system that works for virtually any person, any task, anywhere in the world. Highly adaptable, Interpret allows for differences among workers and organizations, offering a range of screens that define space and offer varied degrees of visual privacy. Including transparent and opaque casual screens without frames and sliding screens that workers can open or close at will.

Synapse[™]
Designed by Carl Gustav Magnusson, Synapse is a contemporary wood side chair that combines traditional joinery with a unique ready-to-assemble construction. Synapse is comprised of only five parts and assembles in less than five minutes for maximum on-site installation efficiency.

Luta
Designed by Antonio Citterio for the B&B Italia Project Collection, the Luta series features a mesh shell with fluid contours that create a fresh look in contemporary seating. The Luta swivel task chair is constructed using a pressed painted steel mesh shell with a peripheral profile in painted aluminum and a painted die-cast aluminum support frame. The seat, which is made of a thermoplastic material, shaped polyurethane, is available with leather or fabric upholstery.



AC Executive
Sleek, polished and technically detailed, the AC Executive Desk is designed by Antonio Citterio for the B&B Italia Project Collection. The desk has chromed drawn steel legs and a wood top that provides ample usable space to support the range of executive tasks and functions. The rigorous construction of the AC Executive Desk speaks to integrity and functionality, its rich materials to luxury.



Projek
Projek is smart, simple seating designed for today's workplace. Designed by and sold under license from Orangebox Limited, Projek has a clean and unassuming look that allows for visual fit in varied office settings. The chair's ease and range of adjustment also fits the majority of people in a dynamic and diverse workplace.



Cloud
Designed by Naoto Fukasawa for the B&B Italia Project Collection, Cloud is a series of linear and curved benches that have a support frame of chromed tubular steel and polyurethane foam cushions that may be upholstered in either fabric or leather.



CLUBtalk
Designed by Carl Gustav Magnusson and Teknikon, CLUBtalk integrates people, technology and furniture to provide more opportunities for effective collaboration. It distills all the functionality of a conference room supplied with advanced technology support into a simple mobile unit.



MAST
Inspired by the rigorous engineering of bridges and other structures that must withstand the load they are meant to carry, MAST monitor adjustment arms are built around an extremely strong stanchion capable of supporting up to four monitors on a single post. MAST is designed by Carl Gustav Magnusson to provide both fluid movement and exceptional strength.



Designed by Carl Gustav Magnusson as part of the fx workplace accessories collection, the fx analog clock brings a familiar, personal touch to the workstation.



103

Dossier™
Exhibiting a thoughtful use of materials and detail, the Dossier Wood Case-goods by John Hellwig includes a series of worktables and conference tables with a choice of glass, wood or white solid surface tops. Here, the cool beauty of the green glass top provides a quiet contrast with the warm finish of the metal legs, softening the juncture between the two surfaces.



95

Designed by Antonio Citterio for the B&B Italia Project Collection, AC Executive furniture celebrates the beauty of wood in a range of elegant wood-based furniture for executive offices and meeting rooms. The collection includes a series of file storage units, credenzas, bookcases, meeting tables and desks designed to address planning issues and personal needs.



83

Optos®
Optos is available in clean, patterned and textured glass to address the need for varied degrees of visual privacy, while maintaining the flow of natural light within the building. Companies can choose complete transparency or opt for "filtered" visual access as appropriate given the corporate culture.



69

Teknion dna®
Teknion dna is a modular seating system designed to maximize planning options by allowing units to be aligned to each other on all sides and arranged in multiple directions, connections and configurations. Freestanding and integrated tables provide support for work and laptop use. The integrated tables also provide access to power/data for convenient plug-in of mobile communication devices.



58

Dossier™
Designed by John Hellwig, Dossier is classic casegoods furniture with a clean architectural look. Layered surfaces and upper storage combine in multiple ways to meet user needs and spatial constraints. Low storage doubles as bench seating for visitors. Technology support is fully integrated into furniture design.



83

Spectrum™
By using welded seams in a contrasting color, designers Jeffrey Bennett and Nicholas Dodziuk add another layer of detail that emphasizes the distinctive lines of the Spectrum sofa. Within the overall interior design concept and planning scenario, the use of different colors can identify different zones and sitting areas.



Contessa
Designed by Giorgetto Giugiaro, Contessa is an elegant synthesis of European design and seating technology. Contessa's smart operation mechanism encourages precise adjustment, promoting proper posture and ergonomics. The Contessa Tess Mesh fabric suspends the body in comfort and gives the chair a visual lightness that complements its fluid form.

Interpret™
Interpret is a contemporary desking system that works for virtually any person, any task, anywhere in the world. Based on a core platform frame and concise set of reconfigurable components, Interpret is adaptable and scalable with an innovative core structure that can easily be installed, built upon, extended or fully reconfigured.



District®
As a part of Teknon's total ergonomic program, work flow accessories facilitate organization and keep work tools and documents within the user's work zone. This drawer organizer enhances both the aesthetics and the functionality of a District workstation.



Fractals™
Designed by Jeffrey Bennett and Nicholas Dodziuk for Teknon Studio, the Fractals Seating Group functions as a touch-down space for mobile workers, offering a wider seat with ample room to support the comfortable use of a laptop or tablet.



District®
District is a collection of desks, cabinets, windows and walls that reinterprets systems furniture. District combines the attributes of classic furniture with the functionality of systems, making efficient use of smaller footprints.



Conflux is a comprehensive line of LED lighting that offers significant design and technology advancements. Designed by Carl Gustav Magnusson, the Conflux task light also doubles as a power source for mobile electronic devices, featuring wireless Powermat technology and a 5-volt 500mA USB charging outlet.

Conflux™



Designed by Carl Gustav Magnusson, MAST is a family of monitor adjustment arms that display an aesthetic and a function defined by exactitude. The product group comprises a Dynamic and Manual Arm that accommodate multiple arm support and mounting configurations.

MAST™



139



Aegis™
Designed by Michael Vanderbilt and inspired by the national forms of mid-century modernism, the Aegis collection is ideal for reception areas, public lobbies and executive offices.

145

Teknon Textiles™
Created by Suzanne Tick, Teknon Textiles is a line of sophisticated fabrics created for modern contract interiors. The collection introduces new technologies and structures, offering clean, architectural patterns and fresh, clear colors that can be combined to build dimension, create textural contrast or add vibrant accents to a space.

135



Book design:
Vanderbyl Design
San Francisco, California

Publisher:
Teknion

Book is set in Foundry Gridnik.

TEKNION CORPORATION

www.teknion.com

IN CANADA:

1150 Flint Road
Toronto, Ontario
M3J 2J5 Canada
Tel 866.Teknion
866.835.6466
Fax 416.661.4586

IN THE USA:

350 Fellowship Road
Mt Laurel, New Jersey
08054 USA
Tel 877.Teknion
877.835.6466
Fax 856.552.5088

OTHER OFFICES LOCATED IN:

Europe, South and Central America, Middle East,
Asia and Russia

For regional contact information go to www.teknion.com

®, ™ Trade marks of Teknion Corporation and/or its subsidiaries or licensed to it. Patents may be pending. Some products may not be available in all markets. Contact your local Teknion representatives for availability.

Projek is designed by and sold under license from Orangebox Limited. Contessa is designed by Giugiaro Design and sold under license from Okamura Corporation.

All rights reserved. No part of this publication may be reproduced or used in any form or by any means without permission of the publisher.

© Teknion 2013

Contents printed on paper from sustainable forestry.

SK070033

