Understanding the Rules and How to Break Them

Design Elements
A Graphic Style Manual

Timothy Samara
What It Is

A graphic designer is a communicator: someone who takes ideas and gives them visual form so that others can understand them. The designer uses imagery, symbols, type, color, and material—whether it's concrete, like printing on a page, or somewhat intangible, like pixels on a computer screen or light in a video—to represent the ideas that must be conveyed and to organize them into a unified message. Graphic designers perform this service on behalf of a company or other organization to help them get their message out to its audience and, in so doing, evoke a particular response. Graphic design, as an industry, is a cousin to advertising, both of which were born from the tumultuous period of the Industrial Revolution of the late 1700s and early 1800s, when the working class—finding itself with time on its hands and money to spend in the pursuit of comfort—began to look for stuff to buy and things to do. Graphic design and advertising share one particular goal—to inform the public about goods, services, events, or ideas that someone believes will be important to them, but graphic design parts company with advertising when it comes to ultimate purpose. Once advertising informs its audience about some product or event, it cajoles the audience into spending money. Graphic design, however, simply seeks to clarify the message and craft it into an emotional experience. Granted, graphic design often is used by advertising as a tool to help sell goods and services; but the designing of messages is, at its core, its own endeavor altogether.

This purpose is what differentiates graphic design from other disciplines in the visual arts: a purpose defined by a client and manifested by a designer, rather than a purpose generated from within the designer. True, the fine arts patron historically was often a client to the great painters, but, up until the nineteenth century, artistic creation was understood to be

To understand the meaning of design is... to understand the part form and content play... and to realize that design is also commentary, opinion, a point of view, and social responsibility. To design is much more than simply to assemble, to order, or even to edit; it is to add value and meaning, to illuminate, to simplify, to clarify, to modify, to dignify, to dramatize, to persuade, and perhaps even to amuse.

Design is both a verb and a noun. It is the beginning as well as the end, the process and product of imagination.

intrinsically a service industry. It wasn't until the 1850s that the mystique of the bohemian painter as "expresser of self" arose and, even more recently—since the mid 1970s—the idea of the graphic designer as "author." In the fifty odd years since the design industry began to ask business to take it seriously as a profession, the graphic designer has been touted as everything from visual strategist to cultural arbiter—shaping not only the corporate bottom line through clever visual manipulation of the brand-hungry public, but also the larger visual language of the post-modern environment. All these functions are important to graphic design... but, lest we forget the simplicity of the designer's true nature, let us return to what a graphic designer does. A graphic designer assimilates verbal concepts and gives them form. A designer organizes the resulting form into a tangible, navigable experience. The quality of the experience is dependent on the designer's skill and sensibility in creating or selecting forms with which to manifest concepts, or messages. A designer is responsible for the intellectual and emotional vitality of the experience he or she visits upon the audience for such messages. The designer's task is to elevate the experience of the message above the banality of literal transmission and the confusing self-indulgent egotism of mere eye-candy or self fulfillment—although these might be important to the designer. Beauty is a function, after all, of any relevant visual message. Just as prose can be dull and straightforward or well edited and lyrical, so too can a utilitarian object be designed to be more than just simply what it is. Some time around 1927, Adolf Loos, the noted Viennese architect, said, "There is a great difference between an urn and a chamber pot, and in this difference there is leeway for culture." That's a lot of leeway. Designing is a discipline that integrates an enormous amount of knowledge and skill with intuition, but it's more than just the various aspects that go into it: understanding the fundamentals of form and composition; applying those fundamentals to evoke emotion; and signify higher-order concepts; manipulating color messages; understanding semiotics and the relationship between different kinds of visual signs; controlling the pacing of material and informational hierarchy; integrating type and image for unified, coherent messaging; and planning the fabrication of the work and ensuring its physical quality as an object, whether it's printed, animated on screen, or built.
Twenty Rules for Making Good Design

Rules can be broken—but never ignored.

David Jury  Typographer and author

From the title page of his book About Face
RotoVision SA: Switzerland, 2004
When people talk about “good” or “bad” design, they’re referring to notions of quality that they’ve picked up from education and experience, and often from the experience of thousands of designers and critics before them. Sometimes these notions are aesthetic—“asymmetry is more beautiful than symmetry,” for example, or “a neutral typeface is all you need”—and sometimes strictly functional—for example, “don’t reverse a serif typeface from a solid background if it’s less than 10 points in size, because it’ll fill in.” Both kinds of observation are helpful in avoiding pitfalls and striving to achieve design solutions that aren’t hampered by irritating difficulties—to make every design be all that it can be. Every time an attempt is made to cite rules governing what constitutes quality, however, people are bound to get their underwear in a knot: “That’s so limiting!”

To those people, I’ll say this: get over it.

- Rules exist—especially the ones set forth here—as guidelines, based on accumulated experience from many sources. As such, rules always come with exceptions and can be broken at any time, but not without a consequence. The consequence of breaking one rule might mean reinforcing another, and it might mean true innovation, in the right context—a context in which a revelation occurs that, oddly enough, will establish yet another rule. This is how human creativity works.

- The importance of knowing which rules are considered important (at least historically), and why, is understanding the possible consequence of breaking them so that something unfortunate doesn’t happen out of ignorance.

In addition, rules act as guides in helping to build a communal discussion about interpreting and evaluating creative work.

If everything is “good,” then nothing really can be. Relativism is great, to a point, and then it just gets in the way of honest judgment; the result is a celebration of ubiquitous mediocrity. By no means should any rule, including those that follow, be taken as Cosmic Law. If you’re unconvinced, simply turn to page 248, where breaking every rule in this book is advocated wholeheartedly. But these rules are a starting point, an excellent list of issues to consider while you work. In the end, you will decide how and when to apply the rules, or not, as well as understand the results of either course of action.
Have a concept.

If there's no message, no story, no idea, no narrative, or no useful experience to be had, it's not graphic design. It doesn't matter how amazing the thing is to look at; without a clear message, it's an empty, although beautiful, shell. That's about as complicated as this rule can get. Let's move on.

Zippered plastic bags with evidence stickers package the books in a series of detective novels. The books themselves become artifacts of the crime novels.

Thomas Casam Caraída

A restrained layout presents high-end flatware products in lushly styled and photographed environments to help convey their quality. Materials in the photographs—in this case, a spiral of espresso beans—are subtly repeated in the typography of the copy.

Jelena Droba Serbia
Communicate—don’t decorate.

Oooh… Neat! But what exactly is it?

Somewhat related to Rule No. 1, this rule is all about supporting the all-important concept. Form carries meaning, no matter how simple or abstract, and form that’s not right for a given message will communicate messages that you don’t intend—including the message that you don’t know how to choose forms that are meaningful for your audience or that you don’t care what’s meaningful for them.

It’s all well and good to experiment with shapes and details and cool effects, but if you simply spackle them all over without considering what they mean and how they support or take away from the message, you end up with a jumbled mess of junk that no longer qualifies as design.
Speak with one visual voice.

Consistent use of color, typography, and application of the client's logo across branded print communications create a unified presence for a business entity that will be identified easily among its competitors.

Templin Brink Design
United States.
Use two typeface families maximum. OK, maybe three.

Choose typefaces for specific purposes. In doing that, you'll need to define what the purposes are, and you're likely to find that there are only two or three purposes for text in a project. Because a change in type family usually signals a change in meaning or function—restrain yourself! A single type family with a variety of weights and italics should be enough all by itself; adding a second is nice for texture, but don't overdo it. Too many typefaces are distracting and self-conscious and might confuse or tire the viewer.

This brochure for an orchestra balances exuberant abstract marks with quiet typography. Sans-serif text and notation provide ease of use while a stately serif adds warmth and contrast that usually complements the imagery.

Voice Australia

One type family alone can be used to great effect, as seen in this annual report. Employing only changes in size and color, the designer is able to present a clearly distinguished range of information with accessible, elegant restraint.

C. Harvey Graphic Design
United States
Viewers are likely to see this theater poster's title treatment from thirty feet away, followed by the theater's name and, in a sequence of decreasing contrast, weight, and size, the rest of the information. These type treatments, along with the movement created by the title and the supporting shapes, help move the viewer's eyes from most important item to least important.

Design Rudi Meyer France

Use the one-two punch!

Focus viewers' attention on one important thing first, and then lead them through the rest. Once you capture the audience with a big shape, a startling image, a dramatic type treatment, or a daring color, steadily decrease the activity of each less important item in a logical way to help them get through it. This is establishing a "hierarchy"—the order in which you want them to look at the material—and it is essential for accessibility and ease of use. You're designing the thing to grab the audience's attention, to get them the information they need, and to help them remember it afterward. If there's no clear focus to start with, you've already lost the battle.
Pick colors on purpose.

Don't just grab some colors from out of the air. Know what the colors will do when you combine them and, more important, what they might mean to the audience. Color carries an abundance of psychological and emotional meaning, and this meaning can vary tremendously between cultural groups and even individuals. Color affects visual hierarchy, the legibility of type, and how people make connections between disparate items—sometimes called color coding—so choose wisely. Never assume that a certain color, or a combination of colors, is right for a particular job because of convention either. Blue for financial services, for example, is the standout color cliché of the past fifty years. Choose colors that are right, not those that are expected.
This is a riff on an adage left over from Modernism, sometimes known as the "less is more" theory. It's not so much an aesthetic dogma now as it is a bit of common sense: the more stuff jammed into a given space, the harder it is for the average bear to see what they're supposed to be seeing. Plus, it's trashy; anybody can load a bunch of stuff onto a dull message and pretend it's a complex work of art, but there's a big difference between "complicated" and "complex," a state that often comes about in a simple context.

True art lies in the harmonic convergence of thoughtfulness and creativity applied to very little. If the concept and the form are truly beautiful, there can be very, very little of it to look at—without sacrificing a rich experience. Think about how much visual garbage gets thrown at someone walking down the street every day, and ask yourself: "Wouldn't it make more sense to delete some of that mush in favor of something sleek, clear, and noticeable?" Make more meaning out of what's there; don't gunk it up. If the idea is clear without adding, putting more stuff in is just "gilding the lily;" if the idea isn't there and it's not visually interesting, adding to it is simply trying to make "a silk purse from a sow's ear."

Exquisite, decisive control of the minimal elements, alignments, and the spaces around and between them creates a dynamic, almost architectural space that is active and three-dimensional... which is all you really need for a brochure for a contemporary architecture firm.

If you can do it with less, then do it.
Negative space is magical—create it, don’t just fill it up!

It’s often said that negative space—sometimes called white space (even though there might not be any white around)—is more important than the stuff that’s in it. For the most part, this is true. Space calls attention to content, separates it from unrelated content around it, and gives the eyes a resting place. Negative space is just as much a shape that you have to deal with in a composition as positive shapes, whether pictures or type. When you don’t deal with it at all, negative space feels dead and disconnected from the visual material it surrounds. If the space gets filled up, the result is an oppressive presentation that no one will want to deal with. A lack of negative space overwhelms and confuses the audience, which is likely to get turned off.
Both the style—bold, all upper-case, sans serif—and placement of the type help complete the composition of this poster. The title does double duty as landing strip and identifier; the logo itself appears as an airplane (with the hour of the numeral creating its propeller); the angular quality of the numerals is placed in direct contrast with the curves of the cloud forms; and the small text at the top draws the diagonal motion of the other elements upward and activates the space at the top of the poster.

C+G Partners United States

Treat the type as image, as though it's just as important.

9

A sad commentary on typography today is that most of it fails in this regard: it's either unimaginatively separated from photography in the notorious "headline/picture/body-copy" strategy seen in countless ad campaigns during the past sixty years or insensitively slapped across images, in quirky typefaces, under the assumption that if it's big and on top of the photo, it's integrated. Time for a reality check! Type is visual material—made up of lines and dots and shapes and textures—that needs to relate compositionally to everything else included in the design, no matter how different they seem to be.
Make it legible, readable, or whatever you want to call it. It should go without saying that type that can't be read has no purpose; but, unfortunately, it bears repeating. Yes, typography can be expressive; yes, typography can be manipulated for inventive interconnection of structural elements within language; and yes, typography can resonate with its subcultural audience and reference this or that pop-cultural zeitgeist. Whatever! It must still transmit information. Back when typography was treated very rigidly and always in good taste, Beatrice Ward, an English type critic, likened it to a crystal wine goblet—a transparent vessel designed for utmost clarity, not for looks. Beatrice might be dead and her crystal goblet might have been replaced by the far less stuffy jelly jar, but the jelly jar still lets you see what kind of wine you're drinking.

Type is only type when it's friendly.
One of the reasons you like this poster so much is that it speaks to our common knowledge so clearly; it feels almost as if it hasn’t been designed. A hot-colored circle floating over a cool blue horizon and punctuated by a refreshing yellow field pretty much explains itself.

Talking to oneself is the domain of the fine artist. Being universal is the domain of the designer. A very large audience, not a few people who are “in the know,” has to know what you mean with those shapes, that color, and that image you chose. Graphic design comes with an agenda—sometimes a small agenda, such as getting people to come to a film festival, and sometimes a big agenda, such as helping people find their way out of a burning building. The instant you forget—or shamelessly ignore—this little fact, you jeopardize the clarity of the message. It’s not likely someone will die as a result, so let’s put this in perspective. The worst that could happen is that millions of people will think your poster was really cool—although they can’t remember what it was about, and your film festival clients won’t hire you to achieve self-fulfillment on their dime again. But consider if you had been working on a way-finding system, and the neat inks you insisted on didn’t have enough contrast in a smoky environment. As a result, twelve people asphyxiated trying to get out of the building.

**Be universal; remember that it’s not about you.**
Squish and separate.

Create contrasts in density and rhythm by pulling some material closer together and pushing other material further apart. Be rhythmic about it. Give the spaces between things a pulse by making some tighter and some looser unless, of course, you’re trying to make something dull, lifeless, and uninteresting. In that case, everything should be about the same size, weight, color, and distance from everything else. Nothing kills a great idea like a dull layout that has no tension. “Without contrast,” Paul Rand once said, “you’re dead.”
Take a suggestion from the world of photography: make sure there's a wide range of tonal value. Renowned landscape photographer Ansel Adams advocated a nine-zone system of tonal value, suggesting that any photograph without all nine zones didn't have enough, and therefore didn't live up to its potential. Furthermore, don't spread out the tonal range all over the place. Concentrate areas of extreme dark and light in separate places; create explosions of luminosity and deep undercurrents of darkness. Counter these with subtler transitions between related values. Above all, make distinctions between light and dark noticeable and clear.

Soft, rippling transitions from deep black to luminous blue provide a sensuous backdrop for the bright, sparkling typography in this poster. By changing the sizes of type clusters, as well as the spaces between them, the designer also is able to introduce transitions in value that correspond to similar transitions in the image.

Dona Design Associates
United States

PHILADELPHIA YOUNG ARTISTS ORCHESTRA 10th ANNUAL FESTIVAL CONCERT

Sunday, May 15, 2005
3:00 PM • Perelman Theater
The Kimmel Center for the Performing Arts

PHILADELPHIA YOUNG ARTISTS ORCHESTRA
Paulette Tang, piano
Matthew Koon-Aiken, trumpet
Louis Scaglione, Conductor

Distribute light and dark like firecrackers and the rising sun.
Be decisive. Do it on purpose—or don’t do it at all.

Make a thing appear one way or another. A great deal of the process of understanding visual material is the ability to distinguish the difference between things. It’s a strategy left over from millennia of surviving in the bush by knowing that the big object in front of us is a large rock and not an attacking predator. Place visual material with confidence, and make clear decisions about size, arrangement, distance from other material, and so on. Decisiveness makes a viewer more likely to believe that the message means what it says; weakness or insecurity in the composition opens up all kinds of nasty thoughts in the viewer, even if he or she is intellectually unaware of the source—something feels off, unresolved, or not quite right. Suddenly, the viewer is trying to figure out what the issue is and not paying attention to the message itself. And that we just can’t have.

Every attribute of the relatively simple material in this poster has been clearly and confidently resolved. The differences in the type sizes are unmistakable, as are the differences in their color, and the type’s positioning aligns with strong vertical and horizontal structures in the image. The resulting negative spaces are visually dynamic.
Measure with your eyes: design is visual.

A thing is what it looks like—make it look the way it’s supposed to look. The eyes are funny things; they’re often fooled by visual stimuli, the notorious optical illusion. Oddly, optical illusions account for ninety percent of the visual logic of composition. Horizontal lines, for example, appear to drop in space and have to be adjusted upward to appear centered from top to bottom. Circular forms always look smaller than square forms that are mathematically the same height, so they must be faked a little larger than the square forms to appear the same size. Make decisions on behalf of your audience: Are the two elements the same size or not? Is the form touching the edge of the format or not? Are two elements aligning or not? If you intend one element to align with another, do it by eye—don’t measure. If the viewer perceives the two items as aligning, it will assume they actually do. If you align two items by measuring and they don’t look like they do, it doesn’t matter that they’re really lined up. The viewer will see two items that look like they should have aligned and will remember that some sloppy designer forgot to make sure that they did.
Commissioning illustration allows a designer to completely customize the imagery for a project. Plus, illustration—whether conventional drawing and painting or digital—need not be bound by the laws of nature.

Create images—don’t scavenger.

Make what you need, and make it the best you can—or pay someone else to do it for you. Nothing is more banal or meaningless than a commonly used instance of stock photography that shows up everywhere. Try not to rely on what already exists, even though it might be cheaper or easier. Sometimes a simpler and more meaningful solution is no further away than a couple of dots and lines, or a personalized scribble that—while not slick, glossy, and full color (and lesser in meaning for your project because it was seen last week in a shopping-mall’s newspaper ad, a billboard for used cars, or male enhancement product packaging)—might connect powerfully with the audience. Plus, you can say, quite proudly, that you did it all yourself.

All it takes to make an image new and original—even a bad one provided by a client—is a little manipulation. Whatever the source of this portrait, it’s been given a new, specific life with a color change and a little texture.

Muzaffer Gorneli

No photography or illustration available? Can’t draw? No sweat. A designer with a strong understanding of how abstract form communicates—and what simple means (here, drawing software and a blur filter)—can transform uncomplicated visual elements into strikingly original and conceptually appropriate images.

Clemens Thöeber Schäfer

Austria
17
Ignore fashion. Seriously.

Granted, this can be a tricky rule to follow because your job is to communicate to your audience who, unless time travel is now available to the public, exists today and only today, in the present. These people in the present have particular tastes and expectations about how they like their communications to look. Other designers around you are getting significant attention because their work is so new and cool and with it. Forget that. Look at it this way: if you design the project and style it around the meaning, not the audience's expectations of current stylistic conceits, several good things will come out of it. First, it's likely to mean more to the audience and be useful a lot longer, so it won't end up in a landfill as quickly, polluting the ecosystem. Second, it might even have the staying power to qualify for the history books. Nobody looks at the Pantheon, designed almost two thousand years ago, for example, and says, "Ewww, that's like, so First Century."

Although illustration is enjoying a rise in popularity, this particular illustration is not what's popular: flat, posterized, clearly digital images with complex texture and detail. This image, in honor of its subject, is nearly handmade in appearance and harks back to an earlier time.
By positioning the letters at staggered intervals around the format and then rotating the formation in the background, the designer creates not only a dynamic set of positive and negative intervals but also optical motion and a perception of shifting between background and foreground.

The extremely large type and texture in the background appear to pull to the left against the edge of the page while the white block appears to move to the right. The left alignment of the text block creates a vertical movement... never mind the ambiguous foreground and background state.

Comma Deliberate

People make a weird assumption about two-dimensional visual stuff, and that is—it's flat and lifeless! Go figure. This is why painters and designers have been working like dogs for 1,000 years to create the illusion of three-dimensional movement on a flat surface: to fool the viewer into having a moving experience! If a layout is clearly flat and fails to offer a sense of movement or spatial interaction, a state that is relatively easy to achieve, the viewer's brain is likely to be uninterested enough to hang out and see what the message is. Static compositions say, "You've figured me out... so walk away, nothing to see here."
Look to history, but don't repeat it.

The design of the past has its place. It’s inspiring and important for a designer to consider how communication strategies and aesthetics have changed over time, and to understand how his or her own work fits into the continuum of thought and practice. Even more useful is the realization that somewhere along the way, another designer faced a similar problem... and solved it. To slavishly reproduce a particular period style because it’s really cool—or worse, because the clients think that their “Circus Party” invitation should look like an 1846 wood-type poster—is just unacceptable. Learn from the work of others, but do your own work.

This cover for a reissued version of a significant art movement text represents the energy and irreverence of the period and its style without mimicking it; instead of repetition and overlap, hallmarks of the style, this type is distorted and deformed.
Every letter has its own shape, and, at such a tremendous size in this poster, these shapes are all exaggerated; as a result, the repeated three-letter structure becomes intricate and asymmetrical as the viewer is able to appreciate the varied contours of black space around the forms. A dynamically irregular spatter of red dots introduces random movement and a sense of unexpected violence.

Studio International Creo

Although the black figure essentially is centered in the format, it participates in an asymmetrical arrangement of forms—both positive and negative—that moves compositional elements in a diagonal breaking of space from upper left to lower right. The line of type at the lower left enhances the asymmetrical quality of the arrangement.

Dochdesign Creo

It’s true that symmetry occurs in nature—just look at our bodies—but that doesn’t mean it’s a good strategy for designing. Symmetrical visual arrangements are generally static and offer little movement (see Rule No. 18). Worse, symmetrical arrangements make integrating asymmetrical image material awkward, and limit a designer’s flexibility in pacing and dealing with content that doesn’t quite want to fit into the symmetrical mold. Last, but certainly not least: symmetry shouts very loudly that the designer is lazy and likes to let the format do the designing. The format has a center axis, and clearly everyone can see that. Why let the format tell you what to do? You tell the format who’s boss.

Symmetry is the ultimate evil.
FORM

I am convinced that abstract form, imagery, color, texture, and material convey meaning equal to or greater than words.

Katherine McCoy
Graphic designer and former director, Cranbrook School of Design

Chapter 1
There is no longer agreement anywhere about art itself, and under these circumstances we must go back to the beginning, to concern ourselves with dots and lines and circles and all the rest of it.

Armin Hoffmann

Graphic designer and former director,
Basel School of Design: 1946–1986
First Things First  All graphic design—all image making, regardless of medium or intent—centers on manipulating form. It's a question of making stuff to look at and organizing it so that it looks good and helps people understand not just what they're seeing, but what seeing it means for them. "Form" is that stuff: shapes, lines, textures, words, and pictures. The form that is chosen or made, for whatever purpose, should be considered as carefully as possible, because every form, no matter how abstract or seemingly simple, carries meaning. Our brains use the forms of things to identify them; the form is a message. When we see a circle, for example, our minds try to identify it: Sun? Moon? Earth? Coin? Pearl? No one form is any better at communicating than any other, but the choice of form is critical if it's to communicate the right message. In addition, making that form as beautiful as possible is what elevates designing above just plopping stuff in front of an audience and letting them pick through it, like byc- nas mulling over a dismembered carcass. The term "beautiful" has a host of meanings, depending on context; here, we're not talking about beauty to mean "pretty"

Seeing Form and Space

Categories of Form
Putting Stuff Into Space
Compositional Strategies
A Foundation for Meaning

Form is stuff—including all kinds of imagery and type.

Every form, no matter how abstract it appears, is meaningful. A circle, for example, is a continuous line, and its roundness is a very specific trait. A circle is therefore endless, organic, rotational, cellular, and a totality. A square, conversely, has angles and sides that are equal in measure, and is static. A square is therefore analytical, mathematical, unnatural, and finite.

The idea of formal beauty is highly subjective. Both these images can be considered beautiful, despite the fact that one is sensuous and "clean" and that the other is aggressive and "dirty."
or “serene and delicate” or even “sensuous” in an academic, Beaux-Arts, home-furnishings catalog way. Aggressive, ripped, collaged illustrations are beautiful; chunky woodcut type is beautiful; all kinds of rough images can be called beautiful. Here, “beautiful” as a descriptor might be better replaced by the term “resolved,”—meaning that the form’s parts are all related to each other and no part of it seems unconsidered or alien to any other part—and the term “decisive”—meaning that the form feels confident, credible, and on purpose. That’s a lot to consider up front, so more attention will be given to these latter ideas shortly. ■ Form does what it does somewhere, and that somewhere is called, simply, “space.” This term, which describes something three-dimensional, applies to something that is, most often, a two-dimensional surface. That surface can be a business card, a poster, a Web page, a television screen, the side of a box, or a plate-glass window in front of a store. Regardless of what the surface is, it is a two-dimensional space that will be acted upon, with form, to become an apparent three-dimensional space.

In painting, this space is called the “picture plane,” which painters have historically imagined as a strange, membrane-like “window” between the physical world and the illusory depth of the painted environment. Coincidentally, this sense of illusory depth behind or below the picture plane applies consistently to both figurative and abstract imagery.
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THE VERTICAL FORMAT of this annual report intensifies the human element as well as the vertical movement of figures upward; the sense of privacy is shown, in part, by the image, but expressed vertically by the upward thrust of the format.

Coban Nisman

The shape of a space produces overall visual effects that will have a profound impact on the perception of form interaction within it. A square format is neutral in emphasis—no side exerts any more influence than any other. A vertical format is confrontational, creating an upward and a downward thrust. A horizontal format produces a calmer, lateral movement that is relatively inert compared to that of a vertical format.
The Shape of Space  Also called the “format,” the proportional dimensions of the space where form is going to do its thing is something to think about. The size of the format space, compared to the form within it, will change the perceived presence of the form. A smaller form within a larger spatial format—which will have a relatively restrained presence—will be perceived differently from a large form in the same format—which will be perceived as confrontational. The perception of this difference in presence is, intrinsically, a message to be controlled. The shape of the format is also an important consideration. A square format is neutral; because all its sides are of equal length, there’s no thrust or emphasis in any one direction, and a viewer will be able to concentrate on the interaction of forms without having to pay attention to the format at all. A vertical format, however, is highly confrontational.

Its shape produces a simultaneously upward and downward thrust that a viewer will optically traverse over and over again, as though sizing it up; somewhere in the dim, ancient hardwiring of the brain, a vertical object is catalogued as potentially being another person—its verticality mirrors that of the upright body. Horizontal formats are generally passive; they produce a calming sensation and imply lateral motion, deriving from an equally ancient perception that they are related to the horizon. If you need convincing, note the root of the word itself.

A small format enhances the presence, or apparent mass, of an element; a larger format decreases the presence of an element with the same physical size.
DYNAMIC, ANGULAR

spaces contrast with the solidity of the letterforms' strokes and enhance the sharpness of the narrow channels of space that join them together.

Research Studios United Kingdom

THE BLACK, LIGHTWEIGHT

letter P in this logo, a positive form, encloses a negative space around a smaller version of itself, but that smaller version becomes the countercspace of a white, outlined P. Note the solid white "stem" in between the two.

Apebiq: Design France

VARIED CONTRASTS IN

positive and negative areas—such as those between the angular, linear break, the round dot, the curved shoulders, and the sharp claws in this griffon image—spark interest and engage the viewer’s mind.

Vicki Li Iowa State University, United States
Positive and Negative  Form is considered a positive element, a solid thing or object. Space is considered negative—not in a bad way, but as the absence, or opposite, of form. Space is the “ground” in which form becomes a “figure.” The relationship between form and space, or figure and ground, is complementary and mutually dependent; it’s impossible to alter one and not the other. The confrontation between figure and ground defines the kind of visual activity, movement, and sense of three-dimensionality perceived by the viewer. All these qualities are inherently communicative—resolving the relationships between figure and ground is the first step in creating a simple, overarching message about the content of the designed work, before the viewer registers the identity of an image or the content of any text that is present. Organizing figure—the positive—in relation to the ground—or negative—is therefore one of the most important visual aspects of design because it affects so many other aspects, from general emotional response to informational hierarchy. The figure/ground relationship must be understandable and present some kind of logic to the viewer; it must also be composed in such a way that the feeling this compositional, or visual, logic generates is perceived as appropriate to the message the designer is trying to convey. The logic of composition—the visual order and relationships of the figure and ground—is entirely abstract, but depends greatly on how the brain interprets the information that the viewer sees. Visual logic, all by itself, can also carry meaning. An extremely active relationship between figure and ground might be appropriate for one kind of communication, conveying energy, growth, and aggression; a static relationship, communicating messages such as quietness.
restraint, or contemplation, might be equally appropriate in another context. The degree of activity might depend on how many forms are interacting in a given space, the size of the forms relative to the space, or how intricate the alternation between positive and negative appears to be. However, a composition might have relatively simple structural qualities—meaning only one or two forms in a relatively restrained interaction—but unusual relationships that appear more active or more complex, despite the composition’s apparent simplicity. In some compositions, the figure/ground relationship can become quite complex, to the extent that each might appear optically to be the other at the same time. This effect, in which what appears positive one minute appears negative the next, is called “figure/ground reversal.” This rich visual experience is extremely engaging; the brain gets to play a little game, and, as a result, the viewer is enticed to stay within the composition a little longer and investigate other aspects to see what other things he or she can find. If you can recall one of artist M.C. Escher’s drawings—in which white birds, flying in a pattern, reveal black birds made up of the spaces between them as they get closer together—you’re looking at a classic example of figure/ground reversal in action. The apparent reversal of foreground and background is also a complex visual effect that might be delivered through very simple figure/ground relationships, by overlapping two forms of different sizes, for example, or allowing a negative element to cross in front of a positive element unexpectedly.

THE TWO MUSHROOM SHAPES appear to be positive elements, but they are actually the negative counter-spaces of a clumsy letter M, which, incidentally, bears a resemblance to a mound of dirt.

Forest Design Associates

DESPITE THE FACT THAT most of the elements in this symbol are lower and appear to occupy the same, flat spatial plane—the small figures toward the bottom appear to be in the foreground because one of them connects to the negative space inside the mark, and the line contours around these figures are heavier than those of the larger, crowned figure.

Benjamin Park, Iowa State University, United States
Comparison of an active figure/ground relationship (left) with an inactive figure/ground relationship (right) hints at the potential for meaning to be perceived even in such a fundamentally simple, abstract environment. Compare these pairs of simple, opposing ideas:

- loud/quiet, aggressive/passive;
- nervous/sedate; complex/simple;
- energetic/weak; and living/dead.

As shown earlier, cropping large forms within a smaller space may generate the perception of new forms that become positive, a simple example of figure/ground reversal.

The intrusion of a small shape of exterior negative space, relative to the positive form, causes the negative space to take on the quality of a positive white form while still allowing the eye to perceive the black form as positive overall. This complex figure/ground reversal presents rich optical possibilities in composition, even among relatively simple, or relatively few, form elements.
It is what it appears to be. Make decisions about forms based on their appearance rather than on intended effect or, worse, measurements. Form is optically deceptive and so must be judged according to what it looks like; this is what perspective and composition are about. This optical illusion is a function of how our brains interpret rounded, angular, and square images relative to each other (see Geometric Form, page 54). If the goal here is to make all three shapes appear to be the same size, the circle and the triangle must be adjusted in size until they do (bottom). Only when all shapes appear to be the same size do they really appear the same size—as far as the viewer is concerned.

Consider each element in this abstract page spread. Which form is descending? Which form is upper in the background? Which forms descend from right to left? Which form contrasts that movement? Which form changes from top to bottom? Which angles align and which do not? What effect does texture appear to have on the relative thinness or depth of the overall background color? Being able to describe what forms appear to be doing is crucial to understanding how they do it and how to make them do it when you want to.

Andrew Orwig

Seeing Form and Space
- Categories of Form
- Putting Stuff Into Space
- Compositional Strategies
- A Foundation for Meaning

040
041
Clarity and Decisiveness

Resolved and refined compositions create clear, accessible visual messages. Resolving and refining a composition means understanding what kind of message is being carried by a given form, what it does in space, and what effect the combination of these aspects has on the viewer. First, some more definitions. To say that a composition is "resolved" means that the reasons for everything is, how big the things are, and what they're doing with each other in and around space— the visual logic—is clear, and that all the parts seem considered relative to each other. "Refined" is a quirky term when used to describe form or composition; in this context, it means that the form or composition has been made to be more like itself—more clearly, more simply, more indisputably communicating one specific kind of quality. Like the term "beautiful," the quality of "refinement" can apply to rough, organic, and aggressive forms, as well as sensuous, elegant, and clean ones. It's not a term of value so much as an indicator of whether the form is as clear as possible. This, of course, brings up the issue of "clarity," which has to do with whether a composition and the forms within it are readily understandable. Some of this understandability depends on the refinement of the forms, and some of it depends on the resolution of the relationships between form and space and whether these are "decisive," appearing to be on purpose and indisputable. A form or a spatial relationship can be called decisive if it is clearly one thing and not the other: for example, is one form larger or smaller than the one next to it, or are they both the same size? If the answer to this question is quick and nobody can argue with it—"The thing on the left is larger" or "Both things are the same size"—then the formal or spatial relationship is decisive. Being decisive with the visual qualities of a layout is important in design because the credibility of the message being conveyed depends on the confidence with which the forms and composition have been resolved. A weak composition, one that is indecisive, evokes uneasiness in a viewer, not just boredom. Uneasiness is not a good platform on which to build a complicated message that might involve persuasion.

An image's degree of refinement refers to how much it is like itself, how clear and undisturbed by distracting or conflicting elements—rather than how "clean" or "finished" it might appear. Shown here, first, is a form that is not yet refined; its internal relationships are unclear, somewhat awkward or unresolved. Slight adjustments refine its inherent characteristics so that they are more pronounced. An overlay of the original (gray) and refined forms provides a detailed comparison of these alterations.
Each of These Things Is Unlike the Other
There are several kinds of basic form, and each does something different. Rather, the eye and the brain perceive each kind of form as doing something different, as having its own kind of identity. The perception of these differences and how they affect the form's interaction with space and other forms around it, of differing identities, is what constitutes their perceived meaning. The context in which a given form appears—the space or ground it occupies and its relationship to adjacent forms—will change its perceived meaning, but its intrinsic identity and optical effect always remains an underlying truth. The most basic types of form are the dot, the line, and the plane. Of these, the line and the plane also can be categorized as geometric or organic; the plane can be either flat, textured, or appear to have three-dimensional volume or mass.

KLEINE UND GROSSE EROBERUNGEN

IT'S TRUE THAT THIS BOOK spread is a photograph of what appears to be a desktop. But it's actually a composition of dots, lines, rectangles, and negative spaces—all of different sizes and orientation, relative to each other.

Niklaus Troxler Switzerland

ALTHOUGH THE JAZZ FIGURES are recognizable images, they behave nonetheless as a system of angulated lines, interacting with a secondary system of hard- and soft-edged planes. In addition to considering the back-and-forth rhythm created by the geometry of all these angles, the designer has also carefully considered the forms' alternation between positive and negative to enhance their rhythmic quality and create a sense of changing position from foreground to background.

Niklaus Troxler Switzerland
MOS OF THE VISUAL elements in this brochure are dots; some are more clearly defined, such as the circular blobs and splatters, and some are less so, such as the letterforms and the lettering at the top. Despite not physically being dots, these elements exert the same kind of focused or radiating qualities that dots do, and they react to each other in space like dots. In terms of a message, these dots are about gesture, primal thumping, and spontaneity... and, more concretely, about music.

Voice Antonio

(No text from the image can be transcribed accurately.)
The Dot. The identity of a dot is that of a point of focused attention; the dot simultaneously contracts inward and radiates outward. A dot anchors itself in any space into which it is introduced and provides a reference point for the eye relative to other forms surrounding it, including other dots, and its proximity to the edges of a format's space. As seemingly simple a form as it might appear, however, a dot is a complex object, the fundamental building block of all other forms. As a dot increases in size to cover a larger area, and its outer contour becomes noticeable, even differentiated, it still remains a dot. Every shape or mass with a recognizable center—a square, a trapezoid, a triangle, a blob—is a dot, no matter how big it is. True, such a shape's outer contour will interact with space around it more dramatically when it becomes bigger, but the shape is still essentially a dot. Even replacing a "flat" graphic shape with a photographic object, such as a silhouetted picture of a clock, will not change its fundamental identity as a dot. Recognizing this essential quality of the dot form, regardless of what other characteristics it takes on incidentally in specific occurrences, is crucial to understanding its visual effect in space and its relationship to adjacent forms.

When a dot enters a space, it establishes an immediate relationship with the space; the proportion of the dot to its surrounding area is the most important consideration; second is its relative position to the edges of the space.

As dots approach each other, the tension between them increases. If the space between dots is just about zero, its presence assumes more importance than the dot itself, and even more importance relative to any other spatial interval. If the dots overlap, especially if they are different sizes, the tension created by their closeness is somewhat relieved. However, a new tension arises—the dichotomy of flat, graphic form and the appearance of three-dimensional depth as one dot seemingly inhabits a foreground, and the other, a background position.

The closer the dots are to each other, the more powerful the sense of their unique identity as objects; the further apart, the more pronounced the sense of structure, induced by the invisible path between them.

Additional dots in close proximity to the pair, however, reduce the focus on identity and increase attention to their reciprocal relationship and thus, a sense of structure or meaning. How far are the dots from each other?

Is each dot the same distance from its counterpart? What is their configuration, and what outer shape does it make? What does this shape signify?
Categories of Form
Putting Stuff Into Space
Compositional Strategies
A Foundation for Meaning

Working together, dots create an endless variety of arrangements and increasing complexity — a single vertical or horizontal row, rotated rows, an isolated dot in contrast to a group, progressions in interval, ordered rows in a grid structure, angles and geometric patterns, curves, and so on.

You don't need more sources of financial information.
The negative dot is created in reverse from the convergence of other forms.

Clustering dots of different sizes creates a more varied contour, but overall the cluster retains its identity as a dot.

The perception of spatial depth occurs among dots that are different sizes; a larger dot advances in front of a smaller one. Changing the relative tonal values of the dots, however, can create an ambiguous spatial tension among the dots, even though their relative sizes remain the same.

A tremendous number of small dots create (A) a regularized pattern or (B) a randomized texture. The darkness or lightness of these dots depends on density—how close the dots are to each other.

**THE CLUSTER OF DOTS**

A kind of undulating mass. The outer contour of the cluster is very active, with differing prominence and tension to the format edges. The initial "b" offers a complement to the cluster and contrast in scale. The compositional logic is clear and decisive.

Leonardo Sonnoli, Italy
The Line  A line's essential character is one of connection; it unites areas within a composition. This connection may be invisible, defined by the pulling effect on space between two dots, or it may take on visible form as a concrete object, traveling back and forth between a starting point and an ending point. Unlike a dot, therefore, the quality of linearity is one of movement and direction; a line is inherently dynamic, rather than static. The line might appear to start somewhere and continue indefinitely, or it might travel a finite distance. While dots create points of focus, lines perform other functions; they may separate spaces, join spaces or objects, create protective barriers, enclose or constrain, or intersect. Changing the size—the thickness—of a line relative to its length has a much greater impact on its quality as a line than does changing the size of a dot. As a line becomes thicker or heavier in weight, it gradually becomes perceived as a plane surface or mass; to maintain the line's identity, it must be proportionally lengthened.

GAL NAUER ARCHITECTS
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A line traveling around a fixed, invisible point at an unchanged distance becomes a circle. Note that a circle is a line, not a dot. If the line's weight is increased dramatically, a dot appears in the center of the circle, and eventually the form is perceived as a white (negative) dot on top of a larger, positive dot.

A thin, single line has no center and no mass, expressing only direction and an effect on the space surrounding it. Breaking the line increases its surface activity without distracting from its movement and direction. Several thin lines together create a texture, similar to that created by a dense grouping of similar-sized dots. Separating the lines increases attention to their individual identities. It also calls attention to the intervals between them and what, if any, variation there might be.

A change in weight among a group of lines, as well as a change in the intervals between them, creates the illusion of spatial depth. Lines that are closer together exert tension on each other and advance in space, while those further apart recede. If any of the lines are rotated to cross their counterparts, the perception of spatial depth is enhanced—and even more so if their weights also are differentiated.

Although a thin line generally will appear to recede against a thicker line, the mind is capable of being convinced that the thin line is crossing in front of the thick line. Two heavy lines that are very close together create a third—negative—line between them. The optical effect of the negative white line is that of a positive element on top of a single black element, even if the negative line joins open spaces at either end.
Two lines joining create an angle. The joint between two lines becomes a starting point for two directional movements, multiple joints between lines create a sense of altered direction in one movement. An extremely acute angle might also be perceived as a rapid movement from one direction to another.

Lines that both enter and leave a format reinforce the sense of their movement along the direction in which they do so. If the beginning or ending points of the lines are contained within the format, their directional movement is changed from continuous to specific; the result is that their tension with surrounding space or forms is increased greatly as the eye is able to focus on the point at which they start or stop.

White (negative) lines crossing in front of (and behind) black (positive) lines create increasingly complex spatial relationships.

Lines together produce rhythm. Equally spaced, a set of lines produces an even, relatively static tempo; differences in space produce a dynamic, syncopated tempo. The kind of spatial difference introduced between lines affects the perceived rhythm, and might create meanings progression, sequence, repetition, or system. Such rhythmic changes in interval create directional movement, the more complex the changes, and the more variation in line weights, the more complex the rhythm and movement become.
"...They acted as a sounding board for new strategies and opportunities and provided invaluable access to many resources."

Lines might break or join spaces within a format. In breaking or joining these spaces, lines might perform additional functions relative to other forms within the same format. (A) The line protects the circular form.

(B) The white line joins both forms across a barrier. (C) The line offers contrast to the form, but supports it. (D) The line joins two spaces.

ON THIS BROCHURE SPREAD, less distinct blue lines form a channel around images at the left while sharper yellow lines draw attention to the detail at the right and help to join the two pages into one composition. The staggered lines created by the text at the lower left, as well as the thin vertical lines used as dividers in the headline, bring type and image together with corresponding visual language.

C. Harvey Graphic Design
United States

BECAUSE LINES ARE rhythmic, they can be used to create or enhance meaning in images or compositions. Here, the idea of movement is imparted to the abstract bird by the progression of line weights from "tail" end to "beak."

Studio International Centre
Plane and Mass  A plane is simply just a big dot whose outer contour—the sense of its shape—becomes an important attribute: for example, that it may be angular, rather than round. Its dot-like quality becomes secondary the larger the plane object becomes. This change depends on the size of the plane relative to the space in which it exists; in a large poster, even a relatively large plane object—a square or a triangle, for example—will still act as a dot if the volume of space surrounding it is much larger than the plane object itself. At the

As a dot increases in size, its outer contour becomes noticeable as an important aspect of its form; eventually, appreciation of this contour supersedes that of its dot-like focal power, and it becomes a shape or plane. Compare the sequences of forms, each increasing in size from left to right. At what point does each form become less a dot and more a plane?

A plane surface will be more or less definable as a dot, depending on the volume of space surrounding it. The plane’s angular shape in the first example is unimportant because its shape is overwhelmed by the larger space and thus remains a dot.

In the second example, the format’s decrease in size, relative to the plane, causes its shape to become more important and thus is no longer simply a dot.
A plane with a simple contour (A) appears heavier (has more mass) than a plane with a complicated contour (B). Both planes appear even lighter when they take on surface texture. The simple plane with texture (C) appears lighter than the solid, more complicated plane; the textured, complicated plane (D) appears lighter still.

A plane whose mass is lightened by a consistent texture seems more active but appears flatter than an adjacent solid plane. The solid plane appears to advance, however, because of its perceived greater weight. Overlapping the solid plane with the textured plane creates an ambiguous tension between foreground and background. A plane whose texture emulates the effect of light and shade appears to have volume.

The various content areas of this website can be considered as a set of flat, rectangular planes in space. The images above and below the horizontal strip of navigation are two planes; the logo at the left is another; the navigation elements are additional planes; and the content area at the lower right is another. Color and textual changes help establish foreground and background presence, and affect the hierarchy of the page.
Geometric Form  As they do with all kinds of form, our brains try to establish meaning by identifying a shape's outer contour. There are two general categories of shape, each with its own formal and communicative characteristics that have an immediate effect on meaning: geometric form and organic form. A shape is considered geometric in nature if its contour is regularized—if its external measurements are mathematically similar in multiple directions—and, very generally, if it appears angular or hard-edged. It is essentially an ancient, ingrained expectation that anything irregular, soft, or textured is akin to things experienced in nature. Similarly, our expectation of geometry as unnatural is the result of learning that humans create it; hence, geometry must not be organic. The weird exception to this idea is the circle or dot, which, because of its elemental quality, might be recognized as either geometric or natural: earth, sun, moon, or pearl. Lines, too, might have a geometric or organic quality, depending on their specific qualities. Geometric forms might be arranged in extremely organic ways.

There are three essential types of geometric form: circle, polygon, and line. For polygons, the simplest are the square and the triangle, having four sides and three sides, respectively. The square is the most stable and presents the most mass; the triangle is the least stable polygon and induces a great deal of optical movement around its contour. The circle is nearly as stable as the square although its continuous curve hints at rotation; its curvy quality is completely opposite to that of the square. Lines that are straight, stepped, or configured as angles are also geometric.
creating tension between their mathematical qualities and the irregularity of movement. Although geometric shapes and relationships clearly occur in nature, the message a geometric shape conveys is that of something artificial, contrived, or synthetic.

Arrangements of geometric forms in geometric, or mathematical, spatial relationships (A1 and A2) are contrasted by the irregular, organic quality of their arrangements in irregular relationships (B1 and B2).

THE BLOCKS ON THIS page are purely geometric. The lighting that is used to change their color also affects their apparent dimensionality: the blue areas at the upper left sometimes appear to be flat.

Studie International Consta

BASIC GEOMETRIC FORMS—
the rectangular plane of the photographs, the circle of the teacup, and the triangle of the potting marker—provide a simple counterpart to the organic leaves and the scenes in the photographs themselves.

Red Carros United States
THE IRREGULAR, UNSTUDIED, constantly changing outer contour of flowers is a hallmark of organic form. These qualities contrast dynamically with the linear elements—including type, both sans serif and script—and create striking negative forms.

Pamela Ronze Lassen College of Art, United States

SOME LINES ARE ORGANIC rather than geometric. The loose brush drawing of the logo exaggerates the spontaneous motion of putting and alludes to its humanity and organic nature.

StressDesign United States

THE DRAWINGS AND TEXTURES that support the images of the dresses in this fashion catalog create a sense of the handmade, the delicate, and the personal.

SageMaker United States
Organic Form  Shapes that are irregular, complex, and highly differentiated are considered organic—this is what our brains tell us after millennia of seeing organic forms all around us in nature. As noted earlier, geometry exists in nature, but its occurrence happens in such a subtle way that it is generally overshadowed by our perception of overall irregularity. The structure of most branching plants, for example, is triangular and symmetrical. In the context of the whole plant, whose branches may grow at different rates and at irregular intervals, this intrinsic geometry is obscured. Conveying an "organic" message, therefore, means reinforcing these irregular aspects in a form, despite the underlying truth of geometry that actually might exist. Nature presents itself in terms of variation on essential structure, so a shape might appear organic if its outer contour is varied along a simple logic—many changing varieties of curve, for example. Nature also appears highly irregular or unexpected (again, the plant analogy is useful) so irregularity in measurement or interval similarly conveys an organic identity. Nature is unrefined, unstudied, textual, and complicated. Thus shapes that exhibit these traits will also carry an organic message.

Soft, textured forms appear organic compared to similar forms with hard edges, as do forms that are gestural, mostly curvilinear, or whose contours are constantly changing in rhythm, direction, and proportion.

The shapes shown here—one, with a relatively simple contour (left), and the other, with a highly differentiated contour—are organic, but to lesser and greater degrees. The first shape, despite changes in contour, retains an intrinsically circular or dot-like—and therefore, more geometric—identity; the shape adjacent, with a complex contour that is ever-changing in measurement and directional movement, is dramatically more organic.

Variation is an inherent aspect of organic form in nature. All these essentially similar shapes are varied slightly relative to each other and transmit an overall organic message, despite their structural similarity.

Geometry exists as a building block of natural, organic forms. In the photograph of the leaf, above, lines and dots—the leaf's veins and holes from insect activity or fungal degradation—are clearly apparent. The outer contour of the leaf also presents a symmetrical structure.

Distilled and stylized (A), this form retains its pictorial identity but loses its organic quality. Enforcing differentiated measurements between internal components (B) enhances its organic quality, while retaining its stylization.

A CURLING, ORGANIC shape forms integrates with the content, yet geometric, letterform in this logo.
**Surface Activity** The quality of surface activity helps in differentiating forms from each other, just as the identifiable contours of form itself does. Again, the dot is the building block of this formal quality. Groupings of dots, of varying sizes, shapes, and densities, create the perception of surface activity. There are two basic categories of surface activity: texture and pattern. The term “texture” applies to surfaces having irregular activity without apparent repetition. The sizes of the elements creating surface activity might change; the distance between the components might change; the relative number of components might change from one part of the surface to another. Because of this inherent randomness, texture generally is perceived as organic or natural. Clusters and overlaps of lines—dots in specific alignments—are also textural, but only if they are relatively random, that is, they are not running parallel, or appearing with varying intervals between, or in random, crisscrossing directions. “Pattern,” however, has a geometric quality—it is a specific kind of texture in which the components are arranged on a recognizable and repeated structure—for example, a grid of dots. The existence of a planned structure within patterns means they are understood to
WARPING THE PROPORTIONS

be something that is not organic: they are something synthetic, mechanical, mathematical, or mass produced. When considering texture, it's important to not overlook the selection and manipulation of paper stock—the, too, creates surface activity in a layout. A coated paper might be glossy and reflective, or matte and relatively non-reflective. Coated stocks are excellent for reproducing color and detail because ink sits up on their surfaces, rather than being partly absorbed by the fibers of the paper. The relative slickness of coated sheets, however, might come across as cold or impersonal but also as refined, luxurious, or modern. Uncoated stocks, on the other hand, show a range of textural qualities, from relatively smooth to very rough. Sometimes, flecks of other materials, such as wood chips, threads, or other fibers, are included for added effect. Uncoated stocks tend to feel organic, more personal or hand-made, and warmer. The weight or transparency of a paper also will influence the overall feel of a project. Exploiting a paper's physical properties through folding, cutting, short-sheeting, embossing, and testing creates surface activity in a three dimensional way. Special printing techniques, such as varnishes, metallic and opaque inks, or foil stamping, increase

Visual activity on a plane surface should be categorized as pattern if it exhibits some repeated consistent relationship, such as a grid structure, between its component elements. Shown clockwise from upper left are an engraving, a grid of square dots, pattern created by photographing architecture, and a simple herringbone.

Increasing the density of a pattern's components creates a change in darkness, or value. Changes in pattern density, or value, may be stepped, as in the example above (A), or continuous, as in the grid of dots, right (B).

While the continuous transition from lighter to darker values in the dot grid is smooth, and less geometric in appearance, the pattern still retains its mechanical quality in contrast to texture.

In a patterned surface, creating the perception of three-dimensionality and the play of light is also possible, but the geometric quality of the pattern presents a highly stylized version of volumetric appearance. Compare the patterned volume at top with the textured volume at bottom.

PATTERN IS CONSIDERED
decorative and man-made, and too much usually is a bad thing. In the case of this book on a trend in design called Maximation however, its use as an altered background treatment enhances the communication of excess.
surface activity by changing the tactile qualities of a paper stock's surface. Opaque inks, for example, will appear matte and viscous on a gloss-coated stock, creating surface contrast between printed and unprinted areas. Metallic ink printed on a rough, uncoated stock will add an appreciable amount of sheen, but not as much as would occur if printed on a smooth stock. Foil stamping, available in matte, metallic, pearlescent, and iridescent patterns, produces a slick surface whether used on coated or uncoated stock and has a slightly raised texture.

PRINTING THIS POSTER ON a translucent, handmade paper stock presents unusual textural potential for the typography and adds a distinctly organic quality to the piece.

Made In Space, Inc. United States

THE DELICATE GLOSS VARNISH
On the surface of this invitation, just enough surface activity to be appreciated by the viewer, and its slight enlargement over the original insignia image creates a sense of expansion.

There Annalisi
**Embossing Adds**

Subtle visual activity and tactile quality to this cover: white colored stickers, applied to the surface, introduce random variation to the layout of each copy, at the same time alluding to the subject matter.

Mutaber Germany

**This Set of Invitations**

Exploits the tactile surface quality of foil stamping and the interaction of colored inks. The foil stamp is pellucid and somewhat transparent; its refractive effect changes in color depending on the color of the surface onto which it is stamped.

Form United Kingdom
Breaking Space—space, the ground or field of a composition—is neutral and inactive until it is broken by form. But how does the designer break the space, and what happens as a result? Thoughtfully considering these fundamental questions gives the designer a powerful opportunity not only to engage a viewer but also to begin transmitting important messages, both literal and conceptual, before the viewer even gets the chance to assimilate the content. Space is defined and given meaning the instant a form appears within it, no matter how simple. The resulting breach of emptiness creates new space—the areas surrounding the form. Each element brought into the space adds complexity but also decreases the literal amount of space—even as it creates new kinds of space, forcing it into distinct shapes that fit around the forms like the pieces of a puzzle. These spaces shouldn’t be considered “empty” or “leftover;” they are integral to achieving flow around the form elements, as well as a sense of order and unity throughout the composition. When the shapes, sizes, proportions, and directional thrusts of these spaces...
exhibit clear relationships with the form elements they surround, they become resolved with the form and with the composition as a whole.

**Static and Dynamic** The proportions of positive and negative might be generally static or generally dynamic. Because the picture plane is already a flat environment where movement and depth must be created as an illusion, fighting the tendency of two-dimensional form to feel static is important. The spaces within a composition will generally appear static—in a state of rest or inertia—when they are optically equal to each other. Spaces need not be physically the same shape to appear equal in presence or “weight.” The surest way of avoiding a static composition is to force the proportions of the spaces between forms (as well as between forms and the format edges) to be as different as possible.

Changing any aspect of a form in space—its relative size, its shape, its orientation to horizontal or vertical—or adding an additional form, creates differentiated spaces with new, more complex relationships to each other.

Multiple forms situated around similar spatial intervals create static interaction. This composition—the arrangement of forms within space—seems restless, comfortable, and quiet, and exhibits a kind of stasis despite the irregularity and rotation of the forms.

Altering the intervals between form elements, or between elements and format edges, creates a dynamic composition. The movement of the eye is enhanced as these intervals exhibit more contrast with each other. Note the areas where the negative spaces become compressed or exhibit a directional thrust.
Arranging Form. Within a compositional format, a designer can apply several basic strategies to organizing forms. Each strategy a designer employs will create distinctly different relationships among the forms themselves and between the forms and the surrounding space. Just as the identities of selected forms begin to generate messages for the viewer, their relative positions within the format, the spaces created between them, and their relationships to each other all will contribute additional messages. Forms that are clustered together, for example, will suggest that they are related to each other, as will forms that appear to align with one another. Forms separated by different spatial intervals will imply a distinction in meaning.

Near and Far. In addition to side-by-side, or lateral, arrangements at the picture plane, a designer may also organize form in illusory dimensional space—that is, by defining elements as existing in the foreground, in the background, or somewhere in between. Usually, the field or ground is considered to be a background space and forms automatically appear in the foreground. Overlapping forms, however, optically positions them nearer or further.

Distinguishing. Forcing clear separation between individual formal elements—whether they have similar or different identities—enhances the sense of difference between them. Despite such distinction, forms that have similar identities will retain the sense that they are related. One result of distinguishing through spatial separation, however, is that intervals of negative space may become more regularized and, therefore, potentially static. Rotating elements to create directional movement will alleviate this quality somewhat.

Clustering. Grouping form elements together may simplify a composition overall as well as create a sense of relationship between clustered elements—and of difference between a cluster and a separate element or between several clusters. As a result of clustering, where the forms do not necessarily overlap but come into close proximity, a contrast arises between the smaller, intricate spaces among the clustered forms, and larger, simpler contours around the outer contour of the cluster. The greater the proportional changes in the outer contour of the cluster, the more dynamic it will appear, along with the spaces around the cluster.

Overlapping. Allowing one form to cross in front of another, even if both are the same color, will create the illusion of foreground and background. Introducing size changes among forms that overlap, as well as changes in their relative values—or, for that matter, placing negative forms on top of positive—will greatly enhance the illusion that the forms exist within three dimensional space.

Aligning. Creating edge relationships between form elements—aligning them to each other from top to bottom, left to right, making them parallel, and so on—might create geometric superstructures and rhythmic repetitions or systems.
away from the viewer. The designer may increase this sense of depth by changing the relative values of the forms by making them transparent and increasing the differences in their sizes. Placing forms that are reversed—made negative, or the same value as the field or format space—on top of positive forms, will similarly exaggerate the sense of spatial depth, as well as potentially create interesting reversals of figure and ground. The seeming nearness or distance of each form will also contribute to the viewer's sense of its importance and, therefore, its meaning relative to other forms presented within the same space. Movement Overlapping and bleeds, as well as the rotation of elements compared to others, may induce a feeling of kinetic movement. Elements perceived to occupy dimensional space often appear to be moving in one direction or another—receding or advancing. Juxtaposing a static form, such as a horizontal line, with a more active counterpart, such as a diagonal line, invites comparison and, oddly, the assumption that one is standing still while the other is moving. Changing the intervals between elements also invites comparison and, again, the odd conclusion that the changing spaces mean the forms are moving in relation to each other. The degree of motion created by such overlapping, bleeds, and rhythmic spatial separation will evoke varying degrees of energy or restfulness; the designer must control these messages as he or she does any other.

Layering: The use of transparency in a cluster enhances the illusion of their apparent existence in three dimensional space. Carefully considering which elements appear solidly positive or negative—and which appear transparent—can result in startling conflicts in apparent spatial position.

Kinetic Sequencing: Any element that is rotated away from orthogonal—horizontal and vertical—orientation will be perceived as moving, or kinetic, especially if it can be compared to any orthogonally-oriented forms. Introducing changes in size, rotation, and interval among elements, whether the same kind or not—and more so if such changes appear progressive from element to element—will create the impression of movement and progression—a kinetic sequence—among these particular elements.
Conservatoire National Supérieur d'Art Dramatique
Atelier de 3e année dirigé par Philippe Adrien
Eugène Ionesco
Jeux de massacre
Mardi 7, mercredi 8 et jeudi 9 février 2006 à 19h30

THIS POSTER PLAYS a dangerous game with symmetry. Without the dynamic optical "buzzing" and movement generated by the diagonal lines and their color relationships, the arrangement of the type would be quite static, and the proportions of all the spaces would be the same in all four directions.

Apoisag Design France

Department Store on Broadway

A symmetrical design configuration, even if it is broken up by a variety of color and texture, can give a feeling of order and predictability. The diagonal lines, broken up by the color and texture, can break the monotony of the grid and add a sense of movement to the design.

When the grid is used, the design becomes a series of rectangles, each with its own set of rules. The diagonal lines provide visual interest and break up the monotony of the grid. The color and texture add depth and dimension to the design.

CONTENT IS ALWAYS different and always changing, and an asymmetrical approach allows a designer to be flexible, to address the spatial needs of the content, and to create visual relationships between different items based on their spatial qualities. The horizon line in the room, the vertical column, the red headline, the text on the page, and the smaller inset photographs all respond to each other's sizes, color, and location: the negative spaces around them all talk to each other.

Think Studio United States
Symmetry and Asymmetry

The result of making all the proportions between and around form elements in a composition different is that the possibility of symmetry is minimized. Symmetry is a compositional state in which the arrangement of forms responds to the central axis of the format (either the horizontal axis or the vertical axis); the forms might also be arranged in relation to each other's central axes. Symmetrical arrangements mean that some set of spaces around the forms—or the contours of the forms around the axis—will be equal, which means that they are also static, or restful. The restfulness inherent in symmetry can be problematic relative to the goals of designed communication. Without differences in proportion to compare, the viewer is likely to gloss over material and come to an intellectual rest quickly, rather than investigate a work more intently. If the viewer loses interest because the visual presentation of the design isn't challenging enough, the viewer's attention might shift elsewhere before he or she has acquired the content of the message. A lack of visual, and thus cognitive, investigation is also likely to not make much of an impression on the viewer and, unfortunately, become difficult to recall later on. Asymmetrical arrangements provoke more rigorous involvement—they require the brain to assess differences in space and stimulate the eye to greater movement. From the standpoint of communication, asymmetrical arrangements might improve the ability to differentiate, catalog, and recall content because the viewer's investigation of spatial difference becomes tied to the ordering, or cognition, of the content itself.

Symmetrical spatial intervals are inherently static, and their static quality is greater the smaller (or fewer in number) the elements that separate them.

Form elements and spatial intervals that share a similar presence in volume or weight produce the most static configuration possible.

As the relative size or number of elements within a symmetrical arrangement increases, the static quality decreases but remains present.

When symmetrically organized forms become so large that they are clearly bigger than the remaining symmetrical spaces, their confrontation with the format becomes very tense, and their static quality is greatly reduced.

Asymmetry is inherently dynamic. The movement of the type, created by its repetition and rotation, creates strong diagonals and wildly varied angular negative shapes. The movement is enhanced greatly by the rhythmic linearity of the ultra-condensed sans serif type.

Stereotype Design United States
**Activating Space** During the process of composing form within a given space, portions of space might become disconnected from other portions. A section might be separated physically or blocked off by a larger element that crosses from one edge of the format to the other; or, it might be optically separated because of a set of forms aligning in such a way that the eye is discouraged from traveling past the alignment and entering into the space beyond. Focusing the majority of visual activity into one area of a composition—for example, by clustering—is an excellent way of creating emphasis and a contrasting area for rest. But this strategy might also result in spaces that feel empty or isolated from this activity. In all such cases, the

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**Compositional Strategies**

A Foundation for Meaning

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**Seeing**

**Form and Space**

**Categories of Form**

**Putting Stuff Into Space**

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The diagonal line in the upper composition separates a triangular space from the remainder of the format; this space disconnects from the composition and is deactivated. By ending the line short of the format edge, even minimally, the eye is encouraged to travel optically around its ending point and join the two spaces together, activating and relating them to each other.

In this example, a line once again intersects the format, but, because there is an overlap of shape connecting the spaces on either side of the line, both spaces are activated.

Because the arrangement of these forms creates an optical alignment that, while open to the space at the top of the composition, stops the movement of the eye, the lower part, this same space now appears inert. In contrast, a simple shift of one element beyond this invisible alignment invigorates the formerly inactive space.

The degree of spatial activation in various parts of this composition differs because of the changing proximity and tension between forms... as well as from differences in how the various forms confront each other—some overlapping and decreasing tension, some aggressively opposing each other in direction or contrasting curve and angle.

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**Billings Clinic**

www.billingclinic.com

2004 North Avenue

Tel: (406) 255-3427

Fax: (406) 255-8470

Kellie J. Fisk

Monagle Associates United States

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**Health Care Education Research**

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**ON THE TEXT SIDE** of this business card, the spaces are all activated with content. On the "animate" side, the light, transparent blue wave shape activates the space above the purple wave; the line of white type activates the spaces within the purple wave area.
space can be called "inert," or "inactive." An inert or inactive space will call attention to itself for this very reason: it doesn't communicate with the other spaces in the composition. To activate these spaces means to cause them to enter back into their dialogue with the other spaces in the composition.

**AS THE LINES OF TYPE** in the background drift left and right, they create movement, but they also create a separation of dead horizontal spaces above and below. The irregular contour of the background letterforms, however, breaks past the outer frames of type, activating both the upper and lower spaces.

C. Harvey Graphic Design
United States

**Appraisers Association of America**

**2006 Award Luncheon honoring**

**Christo and Jeanne-Claude**

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**TUESDAY, APRIL 4, 2006**
The University Club, New York City

**ALTHOUGH THE GIGANTIC**
pink exclamation point—created by the line and the letter K—is strong, it is surrounded by relatively static spaces of the same interval, value, and color. This static quality is broken by the brass ball, a dot, which very decisively is not centered and activates the space defined by the floor.

Matador Germany
In this composition, the edge relationships offer one kind of tension within the space, some more aggressive and others less so. At the same time, the edge relationships of angular forms create tension relative to the open, sweeping forms of the curved elements; a similar change in tension occurs between the line elements—which are themselves angular, but in the foreground—and the angular plane surface—which appears as a background element. Both angled plane and lines contrast with each other in identity and apparent spatial position, but complement each other's sharp, geometric qualities. This attribute is yet another type of tension.

The sensual pleasures of warmth and cleanliness seem to bring out the best in people: the Japanese respond with happy chatter and contented sighs. The smooth floors and walls of tile magnify the din of spirited conversation punctuated by splashes and the high-pitched laughter of children. The sounds of the bathhouse blend with the shifting needle of the daily clock, beginning to echo faintly with activity, which spreads through the bathhouse—sensuously, softly.

**PLEASURES OF THE JAPANESE BATH**

A black line dividing the spread contrasts with the loose texture of the type; the white type in the line creates spatial tension as one word breaks out of the line and another appears to recede into it. The two photographs have very different edge relationships to the format.

Cheng Design United States
Compositional Contrast. Creating areas of differing presence or quality—areas that contrast with each other—is inherent in designing a well-resolved, dynamic composition. While the term "contrast" applies to specific relationships (light versus dark, curve versus angle, and dynamic versus static), it also applies to the quality of difference in relationships among forms and spaces interacting within a format together. The confluence of varied states of contrast is sometimes referred to as "tension." A composition with strong contrast between round and sharp, angular forms in one area, opposed by another area where all the forms are similarly angular, could exhibit a tension in angularity; a composition that contrasts areas of dense, active line rhythms with areas that are generally more open and regular might be characterized as creating tension in rhythm. The term tension can be substituted for contrast when describing individual forms or areas that focus on particular kinds of contrast—for example, in a situation in which the corner of an angular plane comes into close contact with a format edge at one location, but is relatively free of the edge in another; the first location could exhibit more tension than that of the second location.
Proportional Systems

Controlling the eye’s movement through, and creating harmonic relationships among, form elements—whether pictorial or typographic (see page 202, Structure: The Grid System)—might be facilitated by creating a system of recognizable, repeated intervals to which both positive and negative elements adhere. A designer might approach devel-

I used to assume getting older meant becoming set in your ways. When I was in college I thought I was a vision of spontaneity, but really I wanted life to be predictable. Now, two decades later, I think I’m more flexible and open to change than ever. I’m comfortable with who I am and who I am, which makes me more comfortable collaborating with others. I’ve finally figured out that it’s not about age—it’s about the way you think, who you think with, and being open to the unexpected.

The Bottom Line of the colored type occurs at the lower third of the format in this ad. The white tagline, at the bottom, occurs at the lower third of that third.

Seeing
Form and Space
Categories
of Form
Putting Stuff
Into Space
Compositional
Strategies
A Foundation
for Meaning

Patterned Textiles create a system of mathematical proportions on this brochure spread.

The Break Between the photograph and colored field at the right defines the right-hand third, but the first two thirds are a square, indicating that the Golden Section might be playing a role in defining the proportions.

Adam Murioka United States

072
073
opposing these proportions in an intuitive way—moving material around within the space of the format or changing their relative sizes—to see at what point the spaces between elements and their widths or heights suddenly correspond or refer to each other. After this discovery, analyzing the proportions might yield a system of repeated intervals that the designer can apply as needed. Alternatively, the designer might begin with a mathematical, intellectualized approach that forces the material into particularly desirable relationships. The danger in this approach lies in the potential for some material to not fit so well—making it appear indecisive or disconnected from the remainder of the compositional logic—or, worse, creating static, rigid intervals between positive and negative that are too restful, stiff, awkward, or confining.

The Law of Thirds A simplified mathematical approach divides any format into thirds—left to right and top to bottom—under the assumption that the intersection of these axes will be points of focus by the brain. As a format’s horizontal and vertical measurements become more exaggerated relative to each other, the thirds that are produced become more exaggerated themselves but still present an overall proportional unity that a designer can use to map out major compositional arrangements. While dividing a format into thirds presents an intrinsically symmetrical relationship between the three spaces that are defined, the two axes that define these equal intervals also provide a very asymmetrical proportional system of one-third relative to two-thirds.

Musical Logic The intervals between musical notes or chords—the octave established by the seven unique tonal pitches in Western music—might also lend themselves to creating proportionally related spatial breaks. Since the late Middle Ages, in fact, book designers have been using these proportions to create relationships between page margins and blocks of text. Similarly to pitch intervals, the rhythmic or thematic structure attributed to structure musical compositions can be applied to the distances between elements in a layout: ABA, for example, or ABAC, in which “A” is one measurement, “B” another, and so on.

Mathematical Logic Creating intervals based on mathematical systems is another proportional strategy. Any numeric progression or fractional relationship can be a starting point—odd-number ratios (1:3:5:7), for example, or perhaps a system of halves (6:12:18:24). The first example shows this latter mathematical system as the basis for its spatial breaks. The grid system shown in the second example is a system based on repeated mathematical intervals with a common prime number, 3. A thirteenth-century Italian mathematician, Leonardo Fibonacci, discovered a natural progression of numbers in which each number is the sum of the preceding two—for example, 1, 1, 2, 3, 5, 8, 13, 21, and so on. Coincidentally, this same proportional relationship is what drives the Golden Section.

The Golden Section A proportional system first implemented in a design context by the Greek sculptors and architects Phidias and Elinus, the Golden Section focuses on the relationship of a square and a rectangle. Drawing a diagonal line from the square’s upper left corner to the midpoint of the bottom side—and then swinging it upward so that it is in line with that side—determines the width of a rectangle that is built off the square as a base. Oddly enough, dividing this new rectangular area by the width of its short side creates a new square and rectangle in the same proportions as the original square and rectangle. Dividing each new rectangle in the same way produces the same relationship over and over again in decreasing size. By connecting the corners of the squares with circular arcs, the spiral that is present in the formation of nautilus shells is magically revealed.
Seeing Is Believing: What is the result of all this form and space interacting? At this most fundamental level, the result is meaning. Abstract forms carry meaning because they are recognizably different from each other—whether line, dot, or plane (and, specifically, what kind of plane). As a beginning point in trying to understand what it's seeing, the mind makes comparisons between forms to see how they are different and whether this is important. Forms with similar shapes or sizes are linked by the mind as being related; if one form among a group is different, it must be unrelated, and the mind takes note.

By differentiating elements from others within an overall grouping, a designer creates a focus for consideration, allowing the viewer to identify one set of elements and compare them to another. This comparison elicits several questions: "What is the nature of each grouping? How are they different? What does this difference signify? Does the difference make one grouping clearly more important than the other?"

Shown here are a number of potential strategies for visually distinguishing groups and, therefore, creating meaning.

Distance | Isolation
---|---
Progressive Separation | Breaking out or leaving
Reordering | Disharmony or disorder
Size Change | Increased importance; implied relationship

Progressive size change | Increased importance, growth
Direction | Movement or energy
Differentiated Shape | Specificity
Contour complexity | Aggression or complication

Value Change | Confrontation
Movement Inward, Overlap | Interference; assembly
Interval change | Enclosure or protection
Interval change | Unity and opposition
Identity and Difference There are numerous strategies for creating comparisons between groupings of form or among parts within a group. The degree of difference between elements can be subtle or dramatic, and the designer can imply different degrees of meaning by isolating one group or part more subtly, while exaggerating the difference between others.

Because tiny adjustments in form are easily perceived, the difference between each group can be very precisely controlled. Of course, which strategy to employ will depend heavily on the kind of message the designer must convey as a result of such distinction; he or she will trigger very different perceptions of meaning by separating components spatially, as opposed to creating a sense of movement in components by rotating them or changing their size. In the first instance, the difference may be perceived as a message about isolation and may introduce anxiety; in the second instance, the change may be perceived as an indication of growth, a change in energy, or a focusing of strength.
COMBINING LINES WITH DOTS

Your premium brand had better be delivering something special, or it's not going to get the business.
— Warren Buffett

If you wish to persuade me, you must think my thoughts, feel my feelings, and speak my words.
— Albert Einstein

THE REPEITION OF linear hand forms, rotated around the circular element, creates the sense of movement in DJ scratching. The pattern in the background seems to vibrate.
— Thomas Edison

ECLIPSE

COMBINING LINES WITH DOTS offers a powerful visual contrast and, in this logo, creates meaning.
— LSD Space

Seeing
Form and Space
Categories of Form
Putting Stuff Into Space
Compositional Strategies
A Foundation for Meaning

Planning is bringing the future into the present so that you can do something about it now.
— Albert Einstein

This brochure uses very simple spatial and color interaction among dots and lines to communicate simple, but abstract, concepts expressed in large-size quotations. The first spread is about "delivering," the concentric dots create a target, and their colors act to enhance the feeling that the blue dot at the center is further back in space than the others (see Color: Form and Space on page 101). The second spread is concerned with persuasion, and so the dots overlap to share a common spatial area. In the third spread, the issue is planning: the green dot is "captured" by the horizontal line and appears to be pulled from right to left.
And Partners United States
Interplay Makes a Message  Forms acquire new meanings when they participate in spatial relationships; when they share or oppose each other's mass or textural characteristics; and when they have relationships because of their rotation, singularity or repetition, alignment, clustering, or separation from each other. Each state tells the viewer something new about the forms, adding to the meaning that they already might have established. Forms that appear to be moving, or energetic, because of the way they are rotated or overlapped, for example, mean something very different from forms that are staggered in a static space.  The simplicity of abstraction belies its profound capacity to transmit messages on a perceptual level that is very rarely acknowledged by viewers intellectually—flying below their radar—but which they feel and understand nonetheless. Manipulating such base perceptions—in concert with whatever representational or pictorial content might be included—offers the designer a powerful medium for communication.
THE ARGING STROKE of the Euro character, as it crosses the linear boundary created by the horizontal stroke of the character, seems to shoot into the future.

Studio International Cruise

LINE ELEMENTS clustered in an orthogonal configuration, with emphasis along a horizon, allude to the idea of architecture, while their lateral rhythm and the blurring of particular components create a sense of energy and movement.

Made in Space, Inc. United States

CENTER

MAK 6th anniversary

A Foundation for Meaning

REPEATED PATTERNS of lines create vibration and the illusion of three-dimensional planes which may be interpreted as printed surfaces, video texture, and ideas related to transmission associated with communication design.

Research Studies United Kingdom
PLANAR AND SPATIAL relationships between the images on this brochure cover create a rhythmic movement upward that helps convey the idea of achievement or personal improvement.

Metropolitan Group United States

The SEED Foundation

Dear Design,

I am Frosh and I am currently in the 7th grade at TNSP School. I belong to the student council and I am interested in the field of design. I am interested in how design can affect the way we perceive and interact with the world. I would like to design something that can improve the quality of life for others.

Yours sincerely,

John Doe

Design

DESIGN UK

Angled Geometric elements create a relatively literal representation of stairs, the progression in elevation between the shapes expands, moves upward, and overall can be interpreted as the feathers on a wing.

Design Design United States

NOT ONLY DO THE red lines in this poster communicate the idea of industrial design and the British flag, but their extreme perspective also creates a sense of energy and expansion.

Form United Kingdom

Tacoma Foursquare Church
If one says “red” and there are fifty people listening, it can be expected that there will be fifty reds in their minds. And… all these reds will be very different. Colors present themselves in continuous flux, constantly related to changing neighbors and changing conditions.

Josef Albers

Artist, visual theorist, and educator; from Interaction of Color, Yale University Press
COLOR PLAYS IMPORTANT,vey different, communicate roles in these five logotypes.
In the GEF logo, the dark blue of the color field feels stable and persuasive, the more vivid, lighter blue field in the Utopia logo is energetic and cool. The color-block in the GEF logo creates a recognizable flag, in the Utopia logo, the color-block indicates the aircraft quality of the D form.

A Made In Space, Inc.,
General Systems
B Ready Printing Group Lebanon

The Identity
of Color

Chromatic Interaction
Color Systems
Emotions and Messages

Hue: A distinction between color identities as defined by their wavelengths.

Saturation: The relative dullness or brightness of a color.

Temperature: A color's perceived warmth or coolness.

Value: Whether a color appears light or dark.

A single color is defined by four essential qualities related to our perception of its essential nature as waves of light.
There are few visual stimuli as powerful as color; it is a profoundly useful communication tool. But the meaning transmitted by color, because it results from reflected light waves transmitted through an imperfect organ—the eyes—to an imperfect interpreter—the brain—is also profoundly subjective. The mechanism of color perception is universal among humans. What we do with it once we see it is another thing altogether, and controlling it for the sake of communication depends on understanding how its optical qualities behave.
Hue  This term refers to the identity of a color—red, violet, orange, and so on. This identity is the result of how we perceive light being reflected from objects at particular frequencies. When we see a green car, what we’re seeing isn’t a car that is actually green; we’re seeing light waves reflected off the car at a very specific frequency while all other frequencies are absorbed. Of color’s four intrinsic attributes, the perception of hue is the

When light is split by a prism, the separate wavelengths are perceived as individual colors. The same is true of light that is reflected by an object: the material of the object absorbs some wavelengths and reflects others; the reflected wavelengths are what cause us to understand an object to have a particular hue.

Most days I can’t tell where my life ends and my work begins. I dream about my projects while I’m sleeping and get some of my best ideas while I’m walking the dog. But I don’t feel all like my life is overshadowed. Instead it feels like balance—like I’m the same person all day, no matter where I am, rather than a person divided between the worlds of office and home. That’s the only way I could work without feeling like I was living a double life, a contradiction.

THE PRIMARY TEXT in this ad changes in hue but generally maintains similar value and intensity. Since hue is tied intrinsically to the perception of temperature, that variable also changes.

BBK Studio United States
most absolute: we see a color as red or blue, for example. But all color perception is relative, meaning that a color's identity is really knowable only when there's another color adjacent with which it can be compared. Some hues we are able to perceive are absolutes of a sort, what we call the primary colors. These colors—red, blue, and yellow—are as different from each other in terms of their frequency as can be perceived by the human eye. Even a slight change in frequency in any one of the primary colors will cause the eye to perceive that it has shifted slightly toward one of the other primary colors.

When we are presented with a light frequency between those of two primary colors, we perceive a hue that evenly mixes them. These hues are the secondary colors: between red and yellow is the frequency perceived as orange; between yellow and blue, green; and between blue and red, violet. Further intermixing produces the tertiary hues: red orange, orange-yellow, yellow-green, blue-green, blue-violet, and violet-red.

The primary colors of an additive system (in which all colors mix together to create white) are red, blue, and green. These wavelengths are as different from each other in frequency as can be discerned by the rods and cones in the human optical system. The secondary colors in an additive system—orange, green, and violet—represent shifts in frequency toward one primary color or another. The tertiary colors are still smaller shifts perceptible between the secondary colors and their parent primaries.
Saturation The color's saturation describes its intensity, or brilliance. A saturated color is very intense or vibrant. Colors that are dull are said to be desaturated; colors in which almost no hue is visible—such as a warm gray or a very dull brown—are said to be neutral. As with hue, the apparent saturation of a color will change if it can be compared to an adjacent color.

Bringing together hues that are as different from each other in frequency as possible, meaning closer to either of the opposing primaries, will cause the intensity of both colors to increase dramatically.

This effect is even more pronounced if the amount of the two colors is very different; the color present in a smaller amount will become much more intense against a large field of the second color. Interestingly, a small amount of a desaturated—even neutral—color, presented against a large field of another color, will appear to gain in intensity and shift hue toward the opposite end of the spectrum.

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**FiscAlert**

**Bespaar op uw verzekeringen** 13

**Betaal minder belasting door slim te schuiven** 14

**Alles over de bijeenregeling** 17

**Hoe dichten we ons pensioengat?** 22

**Ontslagen. Wat nu!?** 23

**Geef lijfrentetermijnen aan uw kinderen** 27

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_Highly saturated_ bands of color help advance the idea of "alert" in this newsletter cover.

Martin Oosten Hetherbrand.
On a white background, primary yellow will appear somewhat less intense—white is the ultimate in saturation—but on a black background, the same yellow will become extremely intense. Against a middle value of gray, the yellow decreases in saturation unless the surrounding value (darkness or lightness) is similar.

The same violet is presented against three fields of varied intensity. Against a similarly intense violet of slightly different hue, the base color appears desaturated. Against a neutral gray, the base violet appears moderately intense.

Juxtaposing the base violet with a field of a very different hue, but one that is of similar value, again increases the base violet's apparent saturation.

DESATURATED: colors, all of a similar temperature, create a feeling of sophistication and inform in the splash page of this website.

El Milano Real

Aquí, debajo del planco de los milanos...
My beloved,
I have failed to express myself. I am sorry about it.

So little that can be expressed in words... so may frustrations in them... I wanted to say...

I love you. I would say it, but there it is.

Jealous but dazzling pain.
My frustrations came out in harsh words.

That would be intended to anybody. Unbearable mental pain and worry yesterday.

LIKE A PHOTOGRAPH that is considered "good," this drawing exhibits a great deal of value change - a full range from deep shadows, through a generous number of middle tones, up through a bright highlight or white. However, the values are not distributed evenly across the format; they progress from one side to another, and they are concentrated in specific places to create contrast.

Raidy Printing Group Lebanon

The Identity of Color
Chromatic Interaction
Color Systems
Emotions and Messages

As the value of a single hue changes, either darker or lighter, its intensity decreases.
Value  A color’s value is its intrinsic darkness or lightness. Yellow is perceived as being light; violet is perceived as being dark. Again, it’s all relative. One color can be considered darker or lighter only compared to another. Yellow, even, appears darker than white, which has the lightest possible value of any color. An extremely deep blue or violet appears quite luminous against a maximal black, which has the darkest value of any color (black being technically the absence of any reflected light). Lightening the value of an intensely saturated hue tends to desaturate it.

Darkening the value of a moderately to intensely saturated hue will initially intensify its saturation, but if the value is darkened too much, the hue will become less vibrant. Placing any color on a darker color will make it seem lighter, as will increasing the amount of a color. If you’ve ever had the unfortunate experience of picking out a paint swatch for your living room only to find that it’s three or four values too light once you paint an entire wall, you already know this to be true. Bringing two hues of the same value together, regardless of their relative intensities, creates an odd “bleeding” effect that messes with our ability to see a sharp, distinct boundary between the two. The more different the two hues, or the more similar they are in intensity, the more pronounced this effect becomes; at some magical intersection of hue and saturation, the boundary between two colors of the same value will be nearly impossible to see.
Temperature  The temperature of a color is a subjective quality that is related to experiences. Colors considered "warm," such as red or orange, remind us of heat; cool colors, such as green or blue, remind us of cold objects or environments, such as ice. Colors of a particular temperature remind us of these specific kinds of objects or substances because those substances reflect similar wavelengths of light. The temperature of any color will be thrown in one direction or another if compared to any other color. Placing a hot red near an even hotter orange will make that red seem cool; conversely, placing a slightly cooler magenta next to the same hot red will simply enhance the perception of its intrinsic temperature.

The colors generally attributed to be cool are green, blue, and violet. The colors usually perceived as warm are red, yellow, and orange.

A color's perceived temperature is subjective, like all color relationships, to relativity. Even colors that are commonly experienced as cool or warm will demonstrate a shift in temperature when placed adjacent to another, similar hue that is also intrinsically cool or warm—one will always appear cooler or warmer than the other. In this example, a very cool green—cool, that is, when next to a warm orange—becomes unusually hot when next to an icy cool blue.
Color Relationships  Since the fifteenth century, artists and scientists have been creating methods for organizing color perception in visual models. A color model helps a designer see these relationships for planning color ideas. Of these, the most common is the color wheel, developed by Albert Munsell, a British painter and scientist. Munsell's color wheel is a circular representation of hue—the differences in wavelength that distinguish blue from yellow from red—modified along two axes that describe the color's darkness or lightness (its value) and its relative brilliance (its saturation). Johannes Itten, a Bauhaus master at Weimar, Germany, in the 1920s, posited a color sphere—a three-dimensional model that integrates the value scale of Munsell's color wheel into a globe—in his landmark book The Art of Color, published
in 1961. Both models focus on hue as color's defining aspect, radiating at full intensity around the outside of a circular form and decreasing in intensity toward the center. In Itten's sphere, the decrease in intensity toward the center of the solid glob is the result of mixing hues that are situated opposite each other (as they are on Munsell's color wheel) and results in a cancelling out toward a neutral. These color models were developed to describe how color works with refracted light, but, for the most part, graphic designers work with color derived from mixing chemical pigments—paint or inks. The relative color relationships described by these models, however, work in much the same way with mixed pigments; the difference is simply how these relationships are achieved in a physical sense. When working with inks (see page 108), the type of ink being used contributes to the designer's consideration of color relationships. If the inks being combined are solids, the beginning color relationships are much more direct and have a more aggressive effect on each other when added together; they will define the secondary and tertiary colors by virtue of their printing on top of each other. If color is being produced by a buildup of primary colors—as in process, or CMYK printing—a wider range of colors is possible.

**THIS COLOR STUDY** is interesting for its examination of relationships between warmer and cooler colors as well as between analogous and complementary colors.

Diana Hard Carnegie Mellon University, United States

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The color sphere, developed from earlier models by Swiss artist and theorist, Johannes Itten, extrapolates the color wheel into a three-dimensional model. Shown here are (A) the warm hemisphere of the sphere; (B) the cool hemisphere; (C) a cross-section of the sphere, cut vertically between warm and cool hemispheres; and (D) a cross-section cut horizontally, separating the top (lighter) half from the lower (darker) half—In this cross-section, we're looking down at the bottom half.

In a subtractive color model, such as that which defines ink mixtures for printing shown above, successive layers of ink result in darker, more saturated colors, to a point. Once the ink layers no longer permit a substantial amount of light to reflect from the printed surface, the combined colors become less saturated and eventually neutral and black. Subtractive color is also altered by the chemical makeup of the pigments used to color the inks.
Hue Relationships: Designers can create interaction between different hues, independent of their saturation or value, according to where they lie on the color wheel. The closer together the colors appear on the wheel, the more similar their optical qualities and, hence, the more harmonious or related. The further apart colors are on the wheel, the more their optical qualities contrast.

**THE YELLOW—ORANGE** Background of the Web page is complementary to the blue-violet area images, and is analogous to the two colors wrapped around the central figure.

Sub Communication Cereno

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The Identity of Color

Chromatic Interaction

Color Systems

Emotions and Messages

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**Analogous** Colors adjacent to each other on the color wheel are said to be analogous. Although noticeably different from one another, the relationship becomes more about temperature difference. Above, for example, a viewer will note a collection of green hues of varying warmth.

**Complementary** Two colors appearing opposite each other on the color wheel are complements of each other. Their mixture results in a neutral tone, or neutral. With light, the neutral is a medium gray; with ink it's a dull brown.

**Triadic** Sometimes referred to as split complements, a color triad involves three colors at 120° intervals from each other on the color wheel. One color is complementing the two colors equidistant from its true complement.
Extension The relative volume of one color to another, so that each seems to have the same presence, is a relationship of extension. The volume of a given color needed to support another color as equal in presence depends on its wavelength and intensity; nearly twice the volume of violet is required to optically satisfy the presence of a given amount of yellow.

Simultaneous Contrast This optical illusion results in a perceived change of one color's identity when it comes into contact with other colors. In this example, the same blue appears surrounded by fields of different colors, but its apparent hue is different in each case.
"So what happened to the bitching that gots conscience? The underclass bitches, the overclass pitter, the wanna-saft bitches... What about all them then? Not a one of them would march for me?"

STONING MARY

1-23 APRIL

THE ROYAL COURT THEATRE

A child soldier comes home.
And Mary faces her last request.

SUPPORTED BY

A CHANGE IN VALUE: from dark to light among the type elements, culminating in the reversed white title, correspond to the value changes in the woman's head in the photograph.

Research Studies United Kingdom

The Identity of Color

Chromatic Interaction

Color Systems

Emotions and Messages
Value Relationships  Regardless of their specific hues, the colors selected for a palette will have relationships of darkness or lightness. By varying the number of jumps from value to value, or by how dramatically the values among the colors change, a designer can create contrast and rhythm among darker and lighter areas—even if the number of hues used, or how different they are, is limited.

Rhythmic Extension  A series of values, lighter and darker, is considered rhythmic if there are recognizable jumps between shades, relative to the extension or volume of each shade.

The result is an optical proportioning of value similar to a spatial proportion system, but dependent on dark-to-light difference.

Analogous  In a scale from lightest to darkest, two colors are considered to have analogous value if they exhibit the same (or very similar) darkness or lightness, relative to each other—regardless of saturation or hue. As colors approach each other in value, the ability to distinguish their boundary is diminished.

Progressive  A sequence of values among colors—in either optically even steps or optically geometric steps—is considered progressive if the overall effect is perceived as one of continual lightening or darkening within a given palette.

Simultaneous Contrast  This optical illusion results in a perceived change of one color's value when it comes into contact with colors of differing value. The effect in this case is that one color appears to be lighter or darker depending on the values of colors surrounding it. In this example, a blue of the same value appears surrounded by fields of different value, causing it to appear lighter or darker in turn.
Analogous Any colors, regardless of hue, temperature, or value, that exhibit the same intensity or brilliance, are said to exhibit analogous saturation.

Diametric Opposition Similar to hue complements, but expressed in terms of saturation, this relationship concerns the juxtaposition of the most intense and almost completely desaturated versions of the same hue. The result of this kind of pairing is that while the desaturated component retains its base hue, its complement appears to be present because of what is called the "after-image" effect—an optical illusion in which the eye is stimulated by the saturated color so much that it triggers the perception of a "phantom" of its complement.

Split Opposition The most intense version of a given color in relation to the nearly desaturated versions of its split complements creates a relationship of split opposition.

The split relationship can also occur between the desaturated hue and the most intense versions of its split complements.

Extension Juxtapositions of two or more colors of similar intensity, but in different volumes, create effects of simultaneous contrast and after-image. Juxtaposing a small volume of a desaturated color with a large volume of an intensely saturated color creates hue-shifting, the intense volume acts on the desaturated color to skew it toward the intense color's complement.

THE IDEA OF EXTENSION is manipulated in this book cover. The background yellow is relatively intense, more so than the medium gray of the title type, the effect of extension renders the type slightly bluish or violet, the complement of yellow. At the same time, the red elements are intensified through their analogous relationship in hue and saturation with the background.
Saturation Relationships: Saturation relationships may occur independently of hue relationships, but will usually have an effect on value or temperature. As a hue is desaturated, it may appear to become darker adjacent to a different hue of greater saturation, but it may also appear to become cooler if the adjacent hue is a warm color. Grouping analogous hues of similar intensity, but changing the intensity of one, will create a rich, intimately harmonious palette. Grouping complementary hues, or split complements, all with similar values but different saturations, will create a rich color experience.

Simultaneous Contrast: With regard to saturation, this optical illusion results in the perceived change of a color's intensity when it appears adjacent to colors whose intensity changes. In this example, the same blue-green appears surrounded by fields of different saturation, appearing more saturated in some contexts and less saturated in others.
The Identity of Color

Chromatic Interaction

Color Systems

Emotions and Messages

Looks

Under the sun?
Chill out

There's a new reason to relax when the boat is on. Now, there's a way to have the best of both worlds. A boat and a beach! A unique combination of water and land. A perfect day for a fun-filled adventure. Just imagine: your own private beach right in the heart of the action!" "A unique combination of the serene and the exciting. The perfect place for a day of relaxation and adventure."

Analogous Any sequence of colors that are adjacent on the color wheel so long as they are similarly warm or cool: red/orange/yellow, for example, or yellow/yellow-green/green, but not orange/yellow/green.

Progressive An analogous grouping in which temperature makes a transition, color by color, from cooler to warmer or vice versa.

LOOK UP

STUDY IN NORWAY.

The Analogous shift in temperature—a blend of warmth that transforms a blue-green into green—not only adds visual interest, but evokes a sense of sky and landscape.

Cobra Norway
Temperature Relationships

Designers can establish relationships within a color palette based on relative temperature. Grouping colors with similar temperature, together with one or two variations on the same hues that are warmer or cooler—for example, a cool green, blue, and violet with a warmer green—can generate enormous possibilities for combining the colors while maintaining a tightly-controlled color environment.

Extension Between two colors sharing intensity and value, differences in volume will have the effect of changing the perception of their relative temperature. If two colors are both relatively close to each other in temperature, the one given in smaller volume will appear to shift temperature away from that given in greater volume.

Simultaneous Contrast: This optical illusion affects the apparent temperature of a color in much the same way it affects its hue, value, or saturation. A given color will appear warmer when situated against cooler colors, but cooler when against warmer colors. In this example, the same green appears surrounded by fields of different warmth and coolness; the result is a corresponding change in the green's perceived warmth or coolness in turn.

A close-in progression on temperature is the most important aspect of this logo, although value also plays a role. The light element in the M symbol is the warmest, being closer to the yellow range of greens. Each stroke of the M becomes progressively cooler; the full logotype is the coolest. As green becomes cooler and deeper, it communicates less about refreshment and more about economic growth and stability.
Color: Form and Space

Color exhibits a number of spatial properties. Cool colors appear to recede while warm colors appear to advance. Of the primary colors, blue appears to recede and yellow to advance, but red appears to sit statically at a middle depth within space. Applying color to a composition will have an immediate effect on hierarchy, the relative order of importance of the forms in space. The intrinsic relationships in a black and white composition might be exaggerated through the application of chromatic color, or made purposely ambiguous. Color distinctions can greatly enhance the perception of spatial depth and force greater separation between the hierarchic levels. For example, if an element at the top of a hierarchy is set in a deep, vibrant orange-red, while secondary forms are colored a cool gray, these two levels of the hierarchy will be separated visually to a much greater degree. Although the values of the colors are similar, the saturated orange form will advance in space, and the cool gray one will recede. The application of color to

Our optical system (eyes and brain) perceive the three primary colors as existing at different depths in space, a function of how our brains interpret the wavelengths of these colors. Red appears stationary at a middle distance and seems to sit on the surface of the picture plane, neither in front of nor behind it. Blue appears to recede behind the picture plane, while yellow appears to advance.

The Identity of Color

Chromatic Interaction

Color Systems

Emotions and Messages
the ground within a composition can further enhance the hierarchy. A form in one color, set on a field of another color, will join closely with it or separate aggressively, depending on their color relationship. If the colors of foreground and background elements are related, the elements will occupy a similar spatial depth. If they are complementary in nature, the two will occupy very different spatial depths.

**THE SPATIAL DIFFERENCE**

between the squares in this website creates hierarchy: the lighter squares advance and so become the more important, or sequentially primary, elements in the navigation.

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Studio Blue United States

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The result of color’s appearance at different planar locations can have a tremendous impact on the perceived depth of forms in space and, consequently, on the order in which each form presents itself: the visual hierarchy. In this study, each form element—regardless of size or arrangement—is made to register in the foreground, then the middle ground, and then the background of the composition, merely by alternating the element to which each color is applied. The effect becomes even more dramatic when the background also participates in the color swap.

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The amount of color that can be perceived—and its intensity and value—are all affected by volume. The orange of the narrow line appears darker and less intense against the white field of the page than either the thicker line or the larger square. The opposite is true when the same elements cross over a dark field.
Color Stories: Coding with Color

Within a complex visual environment, color can help distinguish different kinds of information, as well as create relationships among components or editions of a publication. A designer might develop, for example, a palette for graphic and typographic elements that helps readers distinguish between specific text components (headlines, subheads, and body) or between sections of information. Or, a designer might use a general palette for all elements that is based on the color or thematic content of photographs. Perhaps this palette has a consistent base, like a selection of warm neutrals that remains constant, while accent colors change.

The use of colors can be coded—assigning colors to identify sections or components—or not. Color coding is one option for using color as a system. To be effective, color coding must be relatively simple and must...

COLOR ACTS AS INFORMATION

in these book spreads about New York City neighborhoods. In the overview map, each location’s color is made different enough to clearly separate them; in subsequent detail maps, the specific coloration of a location indicates that this is the subject currently in focus. Color connects map locations with associated text, as well as the time of a visit to that location displayed in the chronological list at the right.

Myung Ho Chang School of Visual Arts, United States
be easily identifiable. Using more colors for coding creates confusion, as the viewer is forced to try to remember which color relates to which information. Color coding within a related set of hues—a deep blue, an aqua blue, and a green, for example—can help distinguish subcategories of information within an overall grouping, but ensure that the viewer is able to perceive the differences between the colors. Pushing the colors further apart in relation to each other might help—for example, the deep blue might be skewed toward the violet while yellow is added to the green.

IN ADDITION TO the optical game created by the super-coarse dot screen, color relationships are used as part of the identity system in these business cards.

Sagmeister United States

EACH SERIES OF BOOKLETS is grouped in terms of a color relationship. At the upper left, the grouping is by intensity and temperature; at the right, by value and temperature; and in the foreground, as complements.

Leonardo Sozanni Italy

THIS SERIES DISTINGUISHES products with a hue change but maintains a similar saturation among the colors.

AdamsMorioka United States
Color Proportioning: Establishing some flexibility in a system is always important. For one thing, the components in a system—such as a family of brochures—might change over time, or new ones might be added to the system that weren't accounted for during initial planning. Furthermore, the various parts of the system need to be distinguishable from each other while maintaining a clear family appearance; in this way, the color coding not only helps a viewer separate the components from each other quickly, but also continues to enhance the unity of the system. One possibility to investigate is to develop a family of few colors, along with several formal elements, and swap the colors among those elements. The colors could all be the same hue but occur in differing values and intensities; or, there could be a selection of intense hues that are split complements of each other. The number of colors selected, and how closely they are related, will have to be determined by evaluating how many components within the system must be delineated.

COLOR STUDIES improve understanding of color in a deeper way than simply selecting colors strictly for a project. Each study plots relationships of value (A) or intensity (B) against the extension of color of varying temperatures.

The Identity of Color
Chromatic Interaction
Color Systems
Emotions and Messages

GROUPINGS OF ANALOGOUS colors can provide a flexible, yet very consistent, system for color coding, as seen in this packaging system. Each wrapper uses two analogous colors to identify its specific product in the system: blue-violet and green, red and yellow-orange, violet-red and orange—and each item's base color is also analogous in relation to each other.

A3U Design (106)
A simple proportional system is shown here as the basis for different color-coding relationships. The intervals within the composition remain the same throughout; the criteria for the coding system changes from series to series while, within a single series, the color components alternate position among the proportional intervals.
Limited Color Systems

While a great number of projects call for full-color process, or CMYK—imagery, choosing to use specific colored inks instead—called “spot” color—offers exciting possibilities. Spot color need not be limited to small-run or low-budget projects; a palette of even two thoughtfully-selected colors may communicate just as powerfully and further unify materials. This approach is particularly useful for branding, where the interrelation of inks can be used to clarify different publications in a literature system while reinforcing the identity of the brand. When a designer is working with only two or three ink colors, choosing colors with dynamic chromatic interaction is of greatest concern. Printing a job with

Simply replacing black ink with ink of another color—even in a one-color job—can give an extra punch to an otherwise mundane project.

Choose two (or three) colors with value and saturation as considerations. The deeper, overall, and the closer the inks are in value, as well as saturation, the wider the range of possible combinations, and the greater their potential contrast.

**Color Systems**

The Identity of Color

Chromatic Interaction

**Emotions and Messages**

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**OVERLAPPING SPOT COLORS**

create rich color interaction among typographic and graphic elements in this detail of a financial report.

UMA (Amsterdam) Designers
Netherlands

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Two different combinations of orange with another color create different tinting and surprinting possibilities. Remember that ink is a subtractive color system; the darker or greater the density of ink combinations, the darker and less saturated the resulting surprints will be.
two complements as counterparts, for example, is an intuitive first possibility. Their complementary nature need not be exact, that is, as with blue and orange; skewing this relationship can create interesting combinations but retain their inherent contrast: a blue-violet and orange, for example. Most printing inks are translucent, so a designer has the option not only to print each ink at full strength—"tinting" them to lighten their values—but also to print the inks on top of each other, either at full strength or in combinations of tints. Printing one ink on top of another is called "surprinting," and creates new colors because of their overlap. Such new colors will vary in hue, saturation, and value, depending on the base ink colors selected; usually the resulting third color (and tinted variations) will be darker and less saturated. If the base inks are very intense or pure, however, the surprint color will also be relatively intense. Photographic images, or illustrations with varied tonality, are excellent material with which to explore ink coloration: an image might be printed in one, two, three, or more spot colors, with different portions of the image's tonal range acted upon by the inks at different levels. Such options give the designer an opportunity to customize images for a client, enrich the dialogue of color among images, type, and other graphic elements, and to bring images into closer visual alignment with brand-related color messages.
Color Psychology

With color comes a variety of psychological messages that can be used to influence content—both imagery and the verbal meaning of typography. This emotional component of color is deeply connected to human experience at an instinctual and biological level. Colors of varying wavelengths have different effects on the autonomic nervous system—warmer colors, such as red and yellows, have long wavelengths, and so more energy is needed to process them as they enter the eye and brain. The accompanying rise in energy level and metabolic rate translates as arousal. Conversely, the shorter wavelengths of cooler colors—such as blue, green, and violet—require far less energy to process, resulting in the slowing

Deep olives and browns evoke a sense of history, especially in the context of photographs, which were tinted brownish and sometimes olive in the early stages of photography.

Studio Blue United States

This vibrant color is among the most noticeable. Red stimulates the autonomic nervous system to the highest degree, invoking the “fight or flight” adrenaline response, causing us to salivate with hunger, or causing us to feel impulsive. Red evokes feelings of passion and arousal.

The power of blue to calm and create a sense of protection or safety results from its short wavelength, its association with the ocean and sky, and its perception as solid and dependable. Statistically, blue is the best-liked of all the colors.

Associated with the sun and warmth, yellow stimulates a sense of happiness. It appears to advance spatially in relation to other colors and also helps to enliven surrounding colors. Yellow encourages clear thinking and memory retention. A brighter, greener yellow can cause anxiety; deeper yellows evoke wealth.

The association of brown with earth and wood creates a sense of comfort and safety. The solidity of the color, because of its organic connotation, evokes feelings of timeliness and lasting value. Brown’s natural qualities are perceived as rugged, ecological, and hardworking; its earthy connotation connotes trustworthiness and durability.

The rooster appears in a field of friendly, summer orange.

Angel Design France

Violet is sometimes perceived as compromising—but also as mysterious and elusive. The value and hue of violet greatly affect its communication: deep violets, approaching black, connote death; pale, cooler violets, such as lavender, are dreamy and nostalgic; red-handed violets, such as fuchsia, are dramatic and energetic, plum-like hues are magical.

With the shortest wavelength, green is the most relaxing color of the spectrum. Its association with nature and vegetation makes it feel safe. The brighter the green, the more youthful and energetic. Deeper greens suggest reliable economic growth. More neutral greens, such as olive, evoke earthiness. However, green, in the right context, can connote illness or decay.

A mixture of red and yellow, orange evokes feelings similar to that of its parent colors—vitality and arousal (red) and warmth and friendliness (yellow). Orange appears outgoing and adventurous but may be perceived as slightly irresponsible. Deeper orange evokes wealth. Brighter orange connotes health, freshness, quality, and strength. As orange becomes more neutral, its activity decreases, but it retains a certain sophistication, becoming exotic.

The ultimate neutral, gray may be perceived as noncommittal, but can be formal, dignified, and authoritative. Lacking the emotion that chroma carries, it may seem aloof or suggest untouchable wealth. Gray may be associated with technology, especially when presented as silver. It suggests precision, control, competence, sophistication, and industry.
In a subtractive color model, white represents the presence of all color wavelengths; in an additive model, it is the absence of color. Both of these models help form the basis for white's authoritative, pure, and all-encompassing power. As the mixture of all colors of light, it connotes spiritual wholeness and power. Areas around color activity in a composition—especially around black, its ultimate contrast—white appears restful, stately, and pure.
Changing Color, Changing Meaning
Because color so strongly evokes emotional response, its effect on imagery—both abstract and representational—is of great concern to the designer. First, the issue of "local color" in subject matter—the empirical color of objects—comes into play, influencing emotional responses in the viewer. For example, a corporate executive in a blue suit is approachable, but in a dark gray suit, possibly arrogant or shady; wearing a striped green tie, inexperienced, but wearing a solid red one, commanding and assured. Second, manipulation of the overall tonal balance of an image—warm or cool, intense or dull, greenish or blueish—will usually skew an image's feeling in one direction or another. Last, in considering color application to typography or abstract form elements, the designer must anticipate the powerful directness of any associations created as the color is embodied by forms that the mind is attempting to interpret.

RICH SEPIA COLORATION
Augments the fragmented, historical quality of this treated photograph, the deeper values add a somber, reflective note.

Thomas Etano Cusano

In attempting to identify a form and thereby assign it some meaning, viewers will focus on color after they appreciate the form's shape—but the two messages are nearly simultaneous. As a result, the color message will exert tremendous force on perception. Comparing the dots above, guess which is being presented as a sun, and which the earth.

PINK WAS ONCE associated strictly with femininity. This book uses that color to evoke the time period in which that idea was prevalent.

Red Cusano United States
Manipulating the overall color or color balance of an image will change a viewer’s feeling about the image’s content. When the original image (A) is presented in black and white (B), it becomes more documentary. Printed in a duotone of intense colors (C), the image takes on a surreal and illustrative quality, skewing the image’s color balance makes it refreshing (D) or somber (E).

This image has been manipulated on press by raising and lowering the density of the four process inks to correct and enhance the color balance and saturation: original image, cyan decreased and yellow increased; cyan increased again, yellow decreased, and magenta increased, yellow increased slightly, black increased.

Similar to dodotoning or tri-toning in spot color printing, an image might be colorized or toned overall in four-color process, or CMYK, printing—called quadtoning.

Because the image is being produced using the four process colors (cyan, magenta, yellow, and black), the possible color variation within a single image is endless, as indicated in this example. Further, different images within the same project can be quadtoned in different ways.

When altering the color in images that include people, considering the effect on skin tones becomes extremely important. While some color alterations will add energy or seem fun, others may unintentionally add negative connotations; in this example, the greenish toning produces a sickly feeling, while the blueish toning makes the people seem cold and dead.

A greenish-blue haze transforms the upside-down figure into one that appears to be floating in water.

Frost Design Australia
CHOOSING AND USING

Typography is what language looks like.

Ellen Lupton
Graphic designer and director of the MFA program in design at Maryland State University

Chapter 3
The typographer’s one essential task is to interpret and communicate the text. Its tone, its tempo, its logical structure, its physical size, all determine the possibilities of its typographic form.

The typographer is to the text as the theatrical director to the script, or the musician to the score.

Robert Bringhurst
Typographer and poet; from his book, The Elements of Typographic Style, Version 3.1
Hartley & Marks Publishers, 2005
The Nuts and Bolts  The letters of the Western alphabet are built from a system of lines with intricate visual relationships that are nearly invisible. With letters at a standard reading size, the eye perceives letters to be all the same weight, height, and width. This is the most critical aspect of type: stylistic uniformity discourages distraction during the reading process.

When the same type is enlarged, minute changes in character height, stroke width, and shape become apparent. Becoming sensitive to these optical issues and understanding their effect on spacing, organization, stylistic communication, legibility, and composition is crucial.
Enlarging letters reveals the tiny adjustments made by their designers to overcome optical characteristics and unify them. Differing angles, stroke shapes, and overall size changes, evident in a large setting, disappear in a text-sized setting. The same is true of corrections for weight and width in a family of typefaces.

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THE INTERRELATIONSHIP of detail is apparent in these letterform studies for a custom, corporate typeface. Note the comparisons of crossbars, letter widths, and terminal shapes.

E. Typos Denmark

DESIGN ELEMENTS: Choosing and Using Type.
Form and Counterform: The Optics of Spacing. The spacing of letters in words, sentences, and paragraphs is vital to create a uniform gray value for minimal reader distraction. Every typeface has a distinct rhythm of strokes and spaces. This relationship between form and counterform defines the optimal spacing of that particular typeface and therefore of the overall spacing between words, between lines of type, and among paragraphs. Looking at letters set together as a word offers a clue as to how they should be spaced in that particular typeface and size. Creating a consistent gray value in text depends on setting the letters so that there is even alternation of solid and void—within and between the letters. A series of letters that are set too tightly, so that the counterforms within the letters are optically bigger than those between letters, creates noticeable dark spots in the line; the exterior strokes of the letters bond to each other visually where they come together.

Optical spacing for the Univers regular weight is shown, compared to mathematically spaced or overly tight or loose spacing. The optimally spaced lines (second line) show a consistent rhythmic alternation between dark (the strokes) and light (the counterforms), both within characters and between them. Dark spots are evident in the examples spaced too tightly, where the strokes are closer together between letters than within them. Compare the normal spacing of these faces to those of the bold condensed style of Univers (A), the italic serif (B), and the high-contrast modern serif (C); note how the internal logic of the stroke-to-counter relationship in each provides the clues to their optimal spacing.
At the other extreme, letters that are set too loosely become singular elements, divorced from the line and recognizable as individual forms, making the appraisal of words difficult. Evenly set sequences of letters show a consistent, rhythmic alternation of black and white—form and counterform repeating at the same rate from left to right. The primary difficulty in achieving evenly spaced type is that the letters are of different densities. Some letters are lighter or darker than others. Added to this phenomenon are the directional thrusts of different strokes and the varied sizes and shapes of the counterforms. Some are very open, some are closed, and some are decidedly uneven in relation to the distribution of strokes in a given letter. To correct for these disparities, digital typefaces are programmed to add and subtract space from between different pairs of letters, depending on what the combinations are. These sets of letters, called “kerning pairs,” provide for most circumstances of letterform combination, but not all. Invariably, a designer will need to correct unusual spacing that the computer’s software is unable to address.
The same word is set here in three faces at 36 points. The oldstyle serif appears smallest; its lowercase letters have a proportionally small x-height. Because the sans-serif lowercase letters are larger in proportion to the cap height, they appear larger; the same is true of the modern serif to the right.

Spacing must change at different sizes.

The same words, set first at 14 points in size and again at 6 points. Uncorrected, the spacing in the smaller type is inadequate for good character recognition. Adding space between letters greatly improves their legibility and their look.

Type changes when printed positive or reversed from color.

Use a face with uniform stroke weights for knockouts if possible.

Especially if it's small, you might also want to beef up the weight of small, knockout text elements.

The strength of a typeface's stroke weights, at any size, will present optical size disparities between type printed positive, on a light background, and in reverse, on a dark background.

Generally, a typeface will appear smaller and denser if reversed from a solid field. Typefaces with small x-heights, extreme contrast, or extremely thin strokes overall usually need to be enlarged slightly to ensure their strokes are robust enough to hold up against ink gain that might threaten their legibility.

Printing exacerbates the issue of space between letters, especially at smaller sizes. Ink bleeds when it hits paper; as a result, the space between letters is made smaller.

Trying to judge proper spacing on a monitor, with its coarse resolution, is nearly impossible; a laser printer or an inkjet printer creates some floating in the type but not nearly as much as will happen on press. A designer's prior printing experience will help him or her judge these spacing issues.
Type Sizes and Spacing The drawing of a typeface has an impact on the perception of its size. A sentence set in an oldstyle serif and a similar-weight sans serif at the same point size will appear to be two different sizes. The discrepancy results from the sans serif's larger x-height; its lowercase letters are larger in relation to the cap height than those of the serif. The difference in set size and apparent size can vary as much as two or three points, depending on the face. A sans-serif face such as Univers might be perfectly comfortable to read at a size of 9 points, but an oldstyle such as Garamond Three at that size will appear tiny and difficult to read. Setting the Garamond at 11 or 12 points will make it more legible as well as make it appear the same size as the Univers. Setting type smaller or larger than the optimal reading size for text also has an impact on spacing. Comfortable and efficient reading of long texts, such as books, newspapers, or journals, takes place when the type size ranges between 9 points and 14 points—the texture of the type is a uniform gray and the letterforms are small enough that their details are not perceived as distinct visual elements. Optimal spacing at reading size means that the strokes and counterforms are evenly alternating. As type is decreased in size, the letterspace must be increased to allow the eye to separate the letters for clarity. At the other extreme, the space between letters must be decreased as the type size increases beyond reading size.

TO OUR STOCKHOLDERS:

Last year at this time, we talked about our expectations for another record year in 2004, and projected a 5% increase in both sales and earnings. I'm pleased to report that we had a banner year, substantially exceeding those projections. In 2004 sales jumped 16%, topping the $6 billion mark for the first time in VF's history. Earnings increased 17% to a record $4.21 per share. Sales benefited from growth across most of our core businesses, plus the addition of three terrific new brands: Vans, Napapijri™ and Kipling™.

DESIGN ELEMENTS

Choosing and Using Type
**Case** Every letter in the Western alphabet occurs in a large form—the capitals, or uppercase—and a small, more casual form—lowercase. The uppercase requires added space between letters to permit easier reading. The lowercase is more varied and more quickly recognized in text.

**Weight** The overall thickness of the strokes, relative to the height of the uppercase, might change. Light, regular, bold, and black weights—increasing in stroke thickness for a single type style—define a type family. Variation in weight helps to add visual contrast as well as to distinguish between informational components within a hierarchy.

**Contrast** The strokes within the letters of a typeface may be uniform in weight or may vary significantly; the more they do so, the more contrast the face is said to exhibit. Contrast within a stroke—such as flaring from thin to thick—is called modulation; the rate at which this occurs is referred to as the typeface’s ductus.
Visual Variations. The letterforms in all typefaces vary from their archetypal in only six aspects: case, weight, contrast, width, posture, and style. Type designers, referring to historical models, subtly alter and combine the variables in these six aspects to create individual type styles that, although appearing remarkably different, all convey the same information about the letterforms in the alphabet. Different approaches to the drawing of typefaces have evolved, become popular, or been discarded over time; as a result, the formal aspects of particular typefaces often carry associations with specific periods in history, cultural movements, and geographic location—some typefaces feel "modern" or "classical," while others feel "French" or "English." More important, the drawing of a typeface will often exhibit a particular kind of rhythm, or cadence, as well as provide a distinct physical presence in a design that may connote feelings—fast or slow, aggressive or elegant, cheap or reliable. Consider that not all viewers will perceive the same associations in a given typeface; the designer must carefully evaluate his or her typeface selection in the context of the audience for a particular piece. Additionally, mixing typefaces that are incongruous with the subject matter—for example, using an archaic Roman capital in a flyer promoting a concert of electronics—will often add surprising layers of communication.

Further, the drawing characteristics of typefaces affect their functional qualities, making some more legible at certain sizes, or affected by color in particular ways. Recognizing and understanding the six fundamental aspects of alphabet variation is an important first step in being able to select and combine appropriate typefaces for a project.

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**Width** The proportional width of the letters in a typeface is based on the width of the uppercase M. Faces that are narrower are said to be condensed, while wider ones are said to be extended or expanded.

**Posture** Roman letters are those whose vertical axis is 90° to the baseline; they stand upright. Italic letters, developed by humanist scholars during the Renaissance, slant 15° to 18° to the right, mimicking the slant of handwriting.

**Style** This term is used to describe (1) the two major classes of type—serif (having little feet at the ends of the strokes) and sans serif (having no such feet); (2) the historical period in which the typeface was drawn; and (3) the relative neutrality or decorative quality of a typeface. Typefaces that are neutral are closest to the basic structure while those with exaggerated characteristics are said to be stylized, idiosyncratic, or decorative.
Oldstyle x-height for comparison with later typefaces
Oldstyle. Characterized by organic contrast of weight in the strokes—from brush or pen drawing, an angled, or oblique, axis in the curved forms, and a notably small x-height defining the lowercase letters. The terminals are pear-shaped and the apertures in the lowercase letters are small.

 Transitional. These types show an evolution in structure. Stroke contrast is greatly increased and more rationally applied—its rhythm is greatly pronounced. The x-height of the lowercase is larger; the axis is more upright; and the serifs are sharper and more defined, their brackets curving quickly into the stems.

 Modern. Stroke contrast is extreme—the thin strokes are reduced to hairlines, and the thick strokes made bolder. The axis of the curved forms is completely upright, and the brackets connecting the serifs to the stems have been removed, creating a stark and elegant juncture. The serifs in a number of the lowercase characters have become completely rounded, reflecting the logic of contrast and circularity.

 Sans Serif. These typefaces are an outgrowth of “display types” of the nineteenth century, designed to be bold and stripped of nonessential details. They are defined by a lack of serifs, the terminals end sharply without adornment. Their stroke weight is uniform, and their axis is completely upright. Sans-serif types set tighter in text and are legible at small sizes; during the past fifty years, they have become acceptable for extended reading.

 Slab Serif. Another outgrowth of display types, slab serif faces hydridize the bold presentation of a sans-serif and the horizontal stress of a serif face, characterized by an overall consistency in stroke weight. The serifs are the same weight as the stems, hence “slabs,” the body of the slab serif is often wider than what is considered normal.

Graphic. These typefaces are the experimental, decorative, children of the display types. Their visual qualities are expressive but not conducive to reading in a long text. This category includes specimens such as script faces, fancy and complex forms inspired by handwriting, and idiosyncratic faces that are illustrative or conceptual.

Style Classifications. Classifying type helps a designer grasp the subtle differences among styles, organizing them in a general way and further helping to select an appropriate typeface for a particular project; sometimes the historical or cultural context of a particular style will add relevant communication to a typographic design. Classification is by no means easy, however, especially as our typographic tradition becomes increasingly self-referential and incorporates historical formal ideas into modern ones. The typeface Meta, for example, drawn in 1994 by the German designer Erik Spiekermann, is a modern sans-serif face sharing characteristics associated with old-style serif types: contrast in the stroke weights, modulation of weight within major strokes, an oblique axis, and a bowl-formed lowercase g.

A number of systems for classifying type have been developed during the past several decades. Today, as then, these classifications often change—but a few basic categories remain constant.
Body Width and X-Height Variation away from the regular proportional width established by the uppercase M results in a perceived change in rhythm. The counters in condensed typefaces become similar or equal to the weight of the strokes as the overall letter width decreases, creating a more rapid alternation of positive and negative that may seem to "speed up" the reading rhythm or add a perception of increased energy or tension. Conversely, the counters in extended faces tend to slow the reading rhythm. The ratio of the lowercase letters to the uppercase letters—the x-height—is an important factor in considering not only feeling but also legibility. The larger the x-height is in relation to the cap-height, the more open and inviting the counters of the lowercase letters will be, increasing their legibility, as well as the density of the line, and affecting the face's apparent size. An oldstyle serif set at 14 points, for example, will appear much smaller than a sans serif set at the same size, simply because its lowercase letters are much smaller compared to the uppercase letters.

Stroke Contrast, Modulation, and Ductus The amount of contrast between thick and thin, or the lack thereof, also contributes to the rhythmic motion of a typeface. A line of type whose letters have strokes of the same weight produces an even, regular rhythm that remains consistent, while a face whose strokes vary in weight will seem to pulse or move across the line. Some faces show contrast within a single stroke—usually a flaring in thickness from the midpoint of the stem outward to the terminals. This feature, called "modulation," usually is indicative of older type styles, referring to the changes in pressure of a brush in delivering ink to the drawing surface. The degree of modulation, or the "speed" of the transitions between thicker and thinner strokes, is called the face's "ductus." The slower such transitions are—the more passive the ductus—the less vigorous or energetic the face will feel. As the ductus becomes more aggressive, the face will begin to feel more active. The same is true with modulation and contrast in general.

Terminals, Spurs, and Serifs The shapes that the terminals of the letters within a typeface exhibit contribute to the typeface's apparent sharpness and rigidity, which may have implications for its perception as being more casual or rigorous, older or newer, or more comforting or more austere. Terminals might end in a cut-off that is perpendicular to the angle of the stroke, or the cut-off itself might be angled against it. As the angle between cut-off and stroke becomes more acute, the terminal becomes sharper; in the curved forms of sans serif faces, this sharpness is especially pronounced, while in serif forms, the terminal's serif hides this sharpness to some degree. Among serif faces, the serifs themselves might be angled or more perpendicular, softer or more geometrically cut, and sometimes even rounded, as in the ball serif of a neoclassical lowercase A. Spurs—terminals that extend away from a stroke's expected cut-off near a baseline to form a kind of "kickstand" for the letter—are more evidence of the brush, being the point where the bristles lift off the drawing surface and leave a short mark in doing so. Spurs are often found in sans serif faces, even though they are less derivative of brush-drawn letters. The lowercase A, again, is often the site of a spur, as is the lowercase G—the spur in this case is the "ear."
Know What and Why: The Details Selecting a typeface for its feeling or mood is a tricky endeavor that often comes down to a designer's gut reaction to the rhythm or shapes inherent in a particular style. Some typefaces, for example, feel fast or slow, heavy or light; these qualities can be quickly attributed to the interplay of counterspaces, stroke weights and contrasts, joints, and so on. Many typefaces also conjure associations with cultural motifs because of their common use in advertising or other pop-culture venues for specific kinds of subject matter: gothic blackletters or texture faces, for example, commonly evoke horror or fantasy because they are tied to certain historical time periods and because they have been used widely in posters and advertising for movies and books in this genre. However, the intrinsic drawing of a typeface may involve shapes that can be read as other shapes that are found in our environments. Sinewy, curved shoulders that seem to sprout from the vertical stems of letters, or leafy terminals, allude clearly to natural forms such as plants or animals. When thinking about choosing an appropriate typeface, look at the images that accompany the text or think about objects or places related to the subject matter of the text as inspiration.

Logo development often demands that the structural and stylistic details of the type forms in the client's corporate name be altered—sometimes to visually correspond better with a symbol and sometimes simply to make the letters more custom or more specific. Pay close attention to the various details in each example, and try to describe what alteration has been made.
Rows, Shoulders, Apertures, and Eyes. The characteristics of these details vary tremendously among typefaces. Rows—the lower part of the large circular forms Q, Q, D, G, and so on—and shoulders—the upper part of such curves, as well as the upper curves on forms such as the uppercase R, the lowercase p, f, and g—might be rounded or more elliptical, fluid, or somewhat squared-off. Looking closely at these forms within a single typeface will reveal some variation as well. Optical compensations the designer has made in response to how they join with other strokes. But they will share a basic logic in their curves that will be very different compared to another typeface, even within the same class or style. The axis of the curved forms changes also, being slanted in older styles and completely upright in more modern ones.

Apertures, the entry into the counters of letters such as the lowercase e and a, for example, may be tight or more open. Small, closed-off counters, called "eyes," appearing in letters such as the lowercase e and g, also vary considerably in shape and proportion in relation to the lower counters of these letters among typefaces.

Joints, Branches, Ascenders, and Descenders. A great deal of a typeface's character is found where the strokes come together—the joints. Sometimes these joints are smooth, with curves flowing into the stems with slow ductus; in other cases, the transition is more abrupt. Looking at the insides of the strokes in forms where bows meet stems to see how the joint varies is an excellent way to compare typefaces. Where the joints and branches are abrupt, the typeface might feel more geometric, more energetic or more formal; where they are softer, the face might correspondingly feel more organic, more relaxed, or more casual. In addition, the movement and height or depth of the ascenders and descenders above and below the body of the lowercase, respectively, are details worth considering. Some ascenders strike the capline, while others extend above it; similarly, the descenders might be deep or shallow compared to the body of the text. The larger the x-height, usually, the more shallow the ascenders and descenders are, meaning those characters will be more dense in a given typeface than in others. The height and depth of these strokes have an impact on how tightly lines of a given typeface might be leaded, as well as the character of the face.

Graphic Details. Many faces are easily distinguished by the existence of stylistic or decorative details that might be strictly textual or might carry very specific associations. There's no way to compare these typefaces since they vary so much, other than to appraise the effect of the graphic details, in combination with other attributes—overall weight, width, contrast, and posture—on legibility and rhythm. The degree to which graphic inclinations, such as inclines or textures, interfere with character recognition, is an issue that must be addressed in the context of the face's use. If the interference is extreme in most of the characters, the face is likely useful only for larger-sized display applications, rather than in running text. It's important to judge such faces, however, on their ability to visually relate to other kinds of elements in a layout, such as subject matter in photographs, illustrative textures, or abstract forms.
gantly
gantly
gantly
GANTLY
Combining Type Styles

The conventional wisdom for mixing typefaces is to select two type families for a given job. As a basic bit of advice, this is a good start; it provides a framework for finding a maximum amount of contrast, and it forces a designer to exercise some restraint. In one sense, this rule is predicated on the notion of establishing clear hierarchy; the greater the variety of typefaces, the more difficult it will be for a reader to categorize and remember the meanings of different treatments among informational components. As with all typographic rules, of course, context plays an important role in deciding whether or not to adhere to such a limitation. The complexity of the information being presented is one variable; the overall neutrality, consistency, and expressiveness are others to consider. If a job requires seven or eight typefaces to communicate the appropriate message, so be it—but choose wisely.

- Contrast among typefaces that are juxtaposed is critical. The only reason to change a typeface is to gain an effect of contrast, and so the contrast achieved by the combination should be clearly recognizable. Otherwise, why bother? Opposing the extremes of weight (light against bold), of width (regular against condensed or expanded), or style (neutral sans serif against slab serif or script) is a natural starting point. But somewhere in the mix, even among extremes of this nature, some formal relationship must exist between the selected fonts to enrich their visual dialogue. Choosing a sans serif and a serif that are about the same weight or width, for example, creates a tension of similarity and difference that can be quite sophisticated. Selecting two serif faces that are similar in weight, but very different in width or contrast, achieves another tension. Sometimes this choice is functional; for example, if the difference between the face selected for text and its bold counterpart in the same family is not particularly pronounced (meaning the use of the bold doesn’t achieve the desired emphasis), a similarly shaped bold style...
may be substituted. Recognizing the differences in the details among a selection of faces from which to choose is an important step in making a choice for a clear combination. Generally, avoid combining two faces of a similar style unless the difference is pronounced enough for the average reader to notice. Combining Caslon and Baskerville, for example, two transitional serifs with similar axis, weight, width, and terminal shapes—isn't such a great idea. But combining Bodoni—a modern serif of extreme contrast—with Glypha—a slab serif of uniform stroke weight but similar width and axis—might be effective. As another possibility, similar faces set at dramatically different scales might be unified by the weight of their strokes at these different sizes. For example, 7-point Futura Heavy capitals, which are very dot-like, might correspond in overall weight to the strokes of Univers 45 at 13 points in size on the same page. Both are sans serif; their different sizes create contrast in their counters and linearity even as the overall weight of the smaller Futura begins to approach the stroke weight of the larger Univers 45.

The historical quality of typefaces may also play a role in how they are combined. Since the average reader usually associates certain qualities with a given typeface because of its classical or modern drawing qualities, mixing typefaces from related—

Fred

Fredator
1440 BROADWAY
21ST FLOOR
NEW YORK CITY
10018-2301

Fact One:

Many students pay less than the published tuition at private colleges and universities.

Fact Two:

Colleges and universities do not fully cover the book and

equipment costs in the tuition.

At least five different display typefaces, all typical of early twentieth-century newspaper and advertising design, rhythmically contrast each other in weight, stroke contrast, width, and style. The size and spacing changes between each item allow each face to be appreciated and create rhythmic visual intervals.

Adams,Murick United States
Assessing Character Count, Leading, and Paragraph Width

The width of a paragraph depends heavily on the size of type being used and therefore how many characters can be fit onto a single line. Regardless of the type size or the reader’s maturity, between fifty and eighty characters (including spaces) can be processed before a line return. With words averaging between five and ten letters, that means approximately eight to twelve words per line. Achieving this character count determines the width of a paragraph. The proportions of the page format—and how much text must be made to fit overall—might affect paragraph width, but character count is the best starting point for defining an optimal width. The leading of the lines, as noted, depends somewhat on the width of the paragraph, the type size, and its spacing. The space between lines should be noticeably larger than the optical height of the lines, but not so much that it becomes pronounced. Similarly, the leading must not be so tight that the reader locates the beginning of the same line after the return and begins reading it again. As paragraph width increases, so must the leading, so that the beginnings of the lines are more easily distinguished. Oddly, as the width of a paragraph narrows, the leading must also be increased: otherwise, the reader might grab several lines together because the snapshots he or she takes while scanning encompass the full paragraph width.
Une pièce gentille sur
des gens sympathiques
Alignment Logic  Type can be set in several different configurations called alignments. It can be set so that every line begins at the same left-hand starting point (flush-left) or right-hand starting point (flush-right), or with an axis centered on the paragraph width (centered). In this case, there are two options: in centered type, the lines are different lengths and are centered over each other on the width’s vertical axis; in justified type, the lines are the same length, aligning on both the left and the right sides. Justified text is the only setting in which the lines are the same length.

Alignment structures  

<table>
<thead>
<tr>
<th>Flush-Left/Ragged Right</th>
<th>Flush-Right/Ragged Left</th>
<th>Centered Axis</th>
<th>Justified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think of the blank page as a plain meadow, or as the purity of undifferentiated being. The typographer enters this space and must change it. The reader will enter it later, to see what the typographer has done there. The underlying truth of the blank page must be infringed, but it must never altogether disappear.</td>
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</tr>
</tbody>
</table>

The Prince  

The Prince was the first novel in the format of the modern novel. It was written by Cesare Borgia, a notorious figure in the Italian Renaissance. The novel tells the story of a young prince, later to be named the Duke of Urbino, as he navigates the political landscape of his time. The novel was written in a style that is both modern and classical, blending elements of the Renaissance with the conventions of the novel form. The novel was a great success and became one of the most influential works of literature of the 16th century.
must align on both sides—no matter how many words or how long they are. In justified text, wordspacing variation is the single most difficult issue to overcome. The result of poorly justified text in which the wordspace constantly changes is a preponderance of rivers—chains of white negative space that visually join each other from line to line. In particularly bad justified setting, the rivers are even more apparent than the interline space, causing the paragraph to become a jumble of strange word clusters. One method of minimizing this problem is to find the optimal flush-left paragraph width for the size of the type before justifying—and then to widen the paragraph slightly or shrink the type size by a half-point or a point. This adjustment can result in an optimal number of characters and words that comfortably fit upon justification and can compensate for the potential of long words to create undesirable spacing. A slightly wider paragraph also allows some flexibility in how words are broken from line to line and gives the designer more options for re-breaking text to make it fit with good spacing. Ragged paragraphs offer the opportunity to avoid the spacing issues inherent in justified text. The word spaces in these kinds of paragraphs remain constant. Ragged setting also introduces the pronounced textual effect of an organic edge whose opposition to the hard edge of the alignment imparts an immediate visual contrast to the page, as well as provides optical separation between horizontally arranged paragraphs. Changing line lengths within the ragged edge helps the reader establish breaks more easily and therefore differentiate individual lines on the return.

**EVERY DAY IS VIA DAY**

Welcome to a visually stunning, stunningly visual world: a world of information, design, and craft. In this world the visual weight of a page is determined by the choices of information, design, and craft, and the interaction of all three. This world is not only visually stunning but also heightens the reader's experience. In this world, visual weight is determined by the choices of information, design, and craft, and the interaction of all three. This world is not only visually stunning but also heightens the reader's experience.

Adams-Morrisey United States

**A Centered-Axis**

Think of the blank page as an alphabetic reading, or as the purity of undifferentiated being. The typographer enters this space and must change it. The reader will not sit still to see what the typographer has done there. The underlying truth of the blank page must be infringed, but it must never altogether disappear.

**B Justified**

Think of the blank page as alphabetic reading, or as the purity of undifferentiated being. The typographer enters this space and must change it. The reader will not sit still to see what the typographer has done there. The underlying truth of the blank page must be infringed, but it must never altogether disappear.

Symmetrical text arrangements—type centered on an axis with rags both left and right (series A), as well as justified blocks (series B)—are intrinsically difficult to work with. Center-axis text logically implies a symmetrical, and therefore static, relationship with the surrounding space of the format. To create tension and contrast, the designer is left to consider only the relative size of the overall text mass and its internal spacing and color. Additionally, the exterior shape of center-axis configurations dominates the linearity of the lines and impairs readability. In this study, these issues are addressed sequentially. Poorly justified text displays wildly varied word spaces and rivers, as well as extensive hyphenation. To justify text on optimal width—and avoid rivers and hyphens—first find "optimal" in a flush-left setting and then widen the text box slightly or scale the type down a half-point upon justifying. Correcting spacing and hyphenation line by line creates other worries—lines that are exceptionally open and others that are extremely dense. The variations in width and size here show gains and losses in desirable spacing, text size, and hyphenation.
Think of the blank page as a dynamic interface, or as the space that is colonized by the text. This space is defined by the margins and the lines that separate the paragraphs, but it is also contained by the page itself. The page is a boundary that defines the space for the text, and the text is the content that fills that space. The margins provide a visual separation between the text and the page, and the lines between paragraphs create a visual rhythm that guides the reader's eye through the document.

The rag of a paragraph is the unevenness or irregularity of the line spacing. A rag is considered good if it is neither too regular nor too irregular. A rag that is too regular can make the text look stiff and lifeless, while a rag that is too irregular can make the text look disjointed and difficult to read. The perfect rag is one that is consistent and balanced, with the spacing between lines creating a natural rhythm that guides the reader through the text.

The rag of a page is the unevenness or irregularity of the page layout. A page with a good rag will have a balanced and harmonious layout, with the text and other elements of the page arranged in a way that is pleasing to the eye. The rag of a page can be influenced by the size of the type, the amount of white space, and the placement of other elements on the page.

The rag of a paragraph is considered good if it is consistent and balanced, with the spacing between lines creating a natural rhythm that guides the reader through the text. A rag that is too regular or too irregular can make the text look stiff or disjointed, respectively. The perfect rag is one that is consistent and balanced, with the spacing between lines creating a natural rhythm that guides the reader through the text.
Exploring the Ragged Edge

The rag of a paragraph might range from deep to shallow and active to subtle, but its uniformity and consistency from the top of a paragraph to the bottom are what make it desirable. The ragged line endings are considered optimal if they create an organic, unforced "ripple" down the edge of the paragraph, without pronounced indents or bulges. In an optimally ragged paragraph, the rag becomes invisible: the reader is never aware that the lines are ending at their natural conclusion. If the alternating lines end short and very long, the rag becomes active and calls attention to itself, distracting the reader from following the content of the text. That said, a deep rag is acceptable if it remains consistent throughout the text. A designer might opt to mitigate a deep rag by introducing more interline space. What is never desirable, however, is a rag that begins at the outset of a paragraph guided by one kind of logic but transforms into another kind of logic as the paragraph progresses in depth; a rag that shows excessive indenting from the right; or sharp, angular inclinations of space created by lines that become sequentially shorter. The overall unity of a rag can be easily compromised by the single occurrence of two short lines that create a boxy hole. In an optimal rag, the depth hovers between one-fifth and one-seventh of the paragraph's width.

Word order and word breaks across lines also affect the rag. Problems in ragged-right setting commonly arise when a series of short words—of, at, it, to, we, us—are broken to align at the left edge, creating a vertical river running parallel to the aligned edge; and when short words appear at the end of a long line between two shorter lines, appearing to break off and float. In such cases, the designer must weigh the consequences of re-breaking the lines to prevent these problems against their effect on the rag as a whole. Similarly, the breaking of words across lines by using a hyphen can also be problematic if left untreated. From an editorial perspective, two successive lines ending with hyphens is undesirable. If a text is hyphenating excessively—more than once every ten lines or so—the problem lies in the relationship between the text's point size and the width of the paragraph; one or the other must be adjusted to correct the problem. Although a text free of hyphens would be best, this state of perfection is rarely possible; indeed, some designers argue that hyphenating words here and there helps contribute to the uniformity of the rag by allowing lines to remain similar in length.
The Switch

One morning, a woman wakes to find she's dreaming the life of her number one nemesis. Her nemesis has become her as well; at least for the day. They witness themselves in other, in each other, in all the rest. At least, these switches have occurred all over the world.

The Switch chronicles the day in the lives of six sets of switched neighbors: three pairs who are face to face everywhere, and three pairs who are never seen but experience the very thought of all the other.

The Optimal Paragraph

A desirable paragraph setting is one in which a constellation of variables achieves a harmonic balance. Since extended running text is such an important consideration for a publication, finding the optimal paragraph is one way to begin developing overall typographic structure. A designer might first make some assumptions about the text typeface, based on his or her sense of its appropriateness from a conceptual standpoint and in consideration of its visual attributes—the relative height of the lowercase letters, the general weight of the strokes and any contrast within them, the height of the ascenders and descenders—and set a text paragraph at an arbitrary width and arbitrary text size. Judging from this first attempt, a designer might opt to adjust the size of the text, loosen or tighten its overall spacing, open and close up the leading, and change the width in successive studies. By comparing the results of these variations, a designer will be able to determine the most comfortable text setting for extended reading. At what point is the type size too small—or uncomfortably large? Are the lines relatively even in length or varying a lot? Is excessive hyphenation occurring, meaning that the paragraph is too narrow to allow a useful character count? Is the leading creating too dense a field of text to feel comfortable? During this study, it might become clear that several options for width and leading are optimal, but a designer will need to choose one as a standard for the publication. The choice that the designer makes has implications for the page size, the number of columns of text that might fit on it, and optimal sizes for other text groupings, such as captions, callouts, introductory paragraphs, and so on.

The Switch...
Think of the blank page as alpine meadow, or as the purity of undifferentiated being. The typographer enters this space and must change it. The reader will enter it later, to see what the typographer has done. The underlying truth of the blank page must be infringed, but it must never altogether disappear—and whatever displaces it might well aim to be as lively and peaceful as it is. It is not enough, when building a title page, merely to unload some big, prefabricated letters into the center of the space, nor to dig a few holes in the silence with typographic heavy machinery and move on. Big type, even huge type, can be beautiful and useful.

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Three Styles of Text

Set on different widths are also set in three different sizes to achieve a near to optimal relationship between type size and columns. As possible, approximately 30 characters per line for short bursts of reading, up to 70 characters for extended reading. The middle is primary text column, likely too wide to be optimal, but the designer has increased the leading, relative to the point size, to make it more comfortable.

In this study of a paragraph, the variables of type size, spacing, leading, and paragraph width are tested to arrive at a text setting that results in the most comfortable spacing, the least hyphenation, and a decisive rag.

Text excerpted from The Elements of Typographic Style by Robert Bringhurst.
Think of the blank page as alpine or as the purity of undifferentiated b
The typographer enters this space an change it. The reader will enter it lat
see what the typographer has done. The underlying truth of the blank page m
infringed, but it must never altogether and whatever displaces it might well

A single hard return between paragraphs is a common approach to separating paragraphs by using space.

The hanging indent of starting lines of paragraphs in this example creates a beautiful, as well as informational, detail that will influence the structure of the page, requiring larger gutter spaces between columns.

Shown here is an interesting approach in which the first few words of the paragraph are shifted above the baseline and set in a style that contrasts with the text.
**Separating Paragraphs**  As recently as the fifteenth century, text was set continuously without breaks; the definition of the paragraph as an informational nugget emerged in the 1500s as a way of helping readers navigate text. Initially, a paragraph change was indicated by a larger space after the period following the last sentence of one paragraph; a later evolution introduced graphic elements, such as squares or bullets, as paragraph separators—but still there was no break in the text, such as a line return. Eventually, columns were set with a line return, but without space between paragraphs; instead, the beginning of a new paragraph was indicated by an indent—where the first line of a new paragraph starts a few character-widths in from the left alignment. This treatment works particularly well in justified setting. The depth of the indent is subjective but must be noticeable. The indent must be deeper if the leading is loose; more inter-line space normalizes the perception of the column’s width and a bigger “hole” must be cut into the paragraph.

- Sometimes a designer will exaggerate the indent for visual effect. If the paragraphs are long and set in relatively wide columns, this treatment often will help to break up the wall of text by introducing a rhythm of cuts into the columns. Indents are usually not a great idea if the text is set ragged right. Since the rag is already changing the line lengths on the right edge of the column, the indent on the left side loses some of its visual power, appearing somewhat sloppy or causing the top lines of the columns to appear as though they are changing alignment.
OK, Now Deal With It: The Finer Points of Text Typography

Very little attention is paid to the crafting of type beyond composition and style. The tiny details of text setting are equally, if not more, important to ensure smooth reading and grammatical correctness, and are often overlooked. Knowing these fundamental rules for clean text setting keeps the designer alert to potential spacing problems and helps improve the look and readability of running text.

"Hey!" Dad's
"Hey!" Dad’s

HEY, YEAH, YOU USE THE RIGHT MARKS? There is no quicker giveaway that the designer of a text is a total amateur than the use of prime marks (or “hatch marks” as they’re sometimes called) in place of the punctuation that’s supposed to be there. Prime marks are used to indicate foot and inch measures. The most egregious error—and, oddly, the most ubiquitous—is the substitution of a prime mark for an apostrophe. Just don’t do it. Second in line: substituting prime marks for quotation marks. There are two versions of quotation marks: an open quote and a closed quote. One is used to indicate the beginning of a quotation (the ones called “66” because of their shape), and the other is used to end a quotation (the ones called “93”). Please use accordingly.

In the year 1254 before moving on to
the year 1254 before moving on to

10,336.00  10,336.00
135.36  135.36

LOOK AT THE FIGURES. Numerals always need spacing adjustments, especially in sequences. Lining numerals, which extend from baseline to cap height, usually require extra letter space, even though they’re more varied in form than uppercase letters. Numerals in complex arrangements, such as tables, are generally tabulated—arranged flush right or around a decimal point in vertical arrangements of figures. In such situations, the lining figures are preferred to ensure vertical alignment for making calculations.

(by listening to the sea) will be determined, and thought it
“Think carefully,” he said, “foremost a kind of singular

• Optional leather seats and dash board
• Five-speed transmission
• ABS braking system with traction discs
• Power steering and automatic mirrors

HANG YOUR PUNCTUATION. Most punctuation marks—especially quotations—should hang outside the aligned text if they occur at the beginning of a line. This rule sometimes applies to bullets as well: a designer might opt to maintain the alignment of the bulleted text and hang the bullets in the margin or gutter.

ize; however these
ize; however these
you say? That’s pr
you say? That’s pr

PUSH AND PULL. Colon and semicolons need additional space preceding them and less space following them. Exclamation points and question marks often benefit from being separated from their sentences by an extra bit of space. A full word space is too much, as is half a word space, but 20/00 of an em (set-em), or +20 tracking, is usually sufficient.

Avoid a serious crash. The content within parentheses and brackets usually will benefit from additional space to separate it from these marks, especially italic forms with ascenders that are likely to crash into the marks if left at the default spacing. In particular, lowercase italic i, j, l, k, h, and many of the uppercase letters will need this adjustment.
The new AIGA building

The new AIGA building

as Thoreau said, the
arently CH₂-O₃ will ca

the final chap
earing and/or verti

ina@rockpub.com
in-depth look

100–200 pages

6:00–9:00pm

beware—it is the

KNOW YOUR DASHES. There are three horizontal punctuation lines—the hyphen, the en dash, and the em dash. Use the correct one for its intended function, and adjust the spaces around them so that they flow optically within text. A full word space on either side is too much, although there are times when this might be appropriate. The default length and baseline orientation of each mark might need to be altered to improve their relationship to surrounding text; the hyphen often sits low, and the em dash is sometimes too long.

TO INDENT OR NOT TO INDENT? In setting text in which paragraphs run together, separated by indenting the first line, the first paragraph on the page should have no indent. Every paragraph thereafter is then indented—until the next major sequential break or subhead paragraph, which should not be indented.

N

OTHER THAN THE DASHES described in the previous section, columnar and multigraphics text may be separated by light pauses between text and illustrations, within lines, or between paragraphs on both the first and last pages in a column.

ITALIC TYPE NEEDS SPACING, too. Italic used for emphasis within text sometimes appears smaller and tighter than its roman counterpart. Always evaluate the italic and adjust its size or spacing to fit most seamlessly with its surrounding text.

most delicious cakes for

most delicious cakes for

whenever she seems tired

period (let's face it) or

whenever she seems tired

period (let's face it) or

KEEP 'EM UPRIGHT. Use upright parentheses and brackets, even if the text in which they appear is italic. These marks, in their sloped versions, appear weak and usually exacerbate the spacing problems associated with them.

and whatever displaces it might well aim to be as lively and peaceful as it is. It is not enough, when building a title page, merely to upload some big, prefabricated letters into the center of the space, nor to dig a few holes in the silence with typographic heavy machinery and move on. Big type, even huge type, can be beautiful and useful.

CARE FOR THE WIDOWS. Never allow a single word (a widow) to end a paragraph. If widows constantly appear in the rough setting of a body of text, the column width should be adjusted. Ideally, the last line of a paragraph should be more than half the paragraph's width, but three words (no matter their length) are acceptable.
The visual quality of type is recognizable when it's further abstracted into its base components: dots, lines, planes, and masses. The freedom that simplicity implies—the liberty to move type around as freely as one might move the lines of a drawing around—becomes even more dramatic in the example in which type is related to image: see how each pictorial element and each type element play off the other, responding to their individual compositional qualities. The type isn't on top of the layout or next to the picture. The picture and the type take on the same value.

The new time sense of typographic man is cinematic, sequential, pictorial.

Marshak McLuhan
The Medium is the Message
Publisher Name, 1967

The same text information is treated differently in each composition—first, in a static and relatively neutral way, without much color; and second, with great variation in letter spacing, line spacing, width, size, and weight. Note how the negative spaces created by the type participate in the composition—some engaged as active players in the type treatments themselves, and others creating a proportional counterpoint to the type's rhythm and texture.

EVERY TYPE ELEMENT in this page spread participates in visually resolving the composition and activating space. The size of the dot-like chart weights it in relation to the texture of the column and the vertical motion of the large, rotated headline; the rhythm of positive and negative from left to right uses repetitions of specific intervals; and the type elements have a decisive up-and-down motion relative to each other.

Cobra Norway
Type is Visual, Too  Design students and novices often make the mistake of ignoring the abstract visual nature of type and, as a result, use type in a heavy-handed way that doesn't correspond with image material—in effect, separating the two things completely. Type is visual; in space, it acts the same way that dots, lines, squares, fields of texture, and patterns do in any composition. Recognizing this truth about type, understanding it and feeling it intuitively, gives the designer a tremendous advantage in being able to make type and pictures become equal players.

Typographic Color  In addition to how type is placed within a format, its rhythmic, spatial, and textual qualities are important considerations. The term for these qualities, as a whole, is “typographic color.” Typographic color is similar to chromatic color—like red, blue, or orange—but deals only with changes in lightness and darkness, or value. Moreover, it is different from the qualities of chromatic color in that it describes changes in rhythm and texture. Changing the typographic color of typographic components separates them from the surface and introduces the illusion of spatial depth and a sense of changing rhythm. A larger chunk of type, for example, appears closer than a smaller one, while a lighter element appears to recede into the distance. A texture appears to flatten out because perception of its shape and uniform value determines its spatial depth more so than its components. A line appears to come forward regardless of its weight, although a heavier line comes farther forward than a narrow line.

Although all of the typographic elements on this page are printed in the same ink color, changes in size, weight, density, and spacing create what is considered a very “colorful” example of typographic composition.

Voice Austria

This webpage is typographically very colorful, even though it uses only black and tints of gray. The color of the word “One,” by setting it in solid black, reinforces the brand image and sense of singularity. The deeper density of the second paragraph makes the call to action more pronounced; secondary information is set smaller and in lighter tints of gray to help clarify the hierarchy.

Research Studios United Kingdom

Design Elements  Choosing and Using Type
Because the continuous value of text has the potential to be overwhelming—creating a kind of gray "wall" that can be very daunting to look at (never mind dull and lifeless)—and because each specific thought, or informational component, within a text will benefit from a visual change, typographic color, composition, and verbal clarity are inseparable: a change of color automatically alters not only the spatial and textural quality of the type, but its meaning. A typographic color change allows a designer to highlight structure and invigorate a page.

"Communism with a human face." The Russians didn't like it, but after Czechoslovakia and Hungary, they didn't want another war. So Gorbachev opened things up for us enough to get passports.

I thought hmm, what an interesting parallel. I'd put on a mask and all of a sudden borderline aspects of my personality would come out. Then I started researching what masks were all about—Venezuelan and Japanese and then the Romanian masks. I put on the old man mask or the goat or the demon elk and it's like we're reclaiming all the characters from Romanian folk heritage. And when we perform, each mask is tied into the songs. There are so many songs about goats and sheep and all the other mountain gods. I'm interested in how through these songs, ancient practices can be carried into the present. My father respects all my digging around in a scholarly way, but when it comes to actually putting it into practice, that's another thing.

Ira and I met as music students and we both ended up assistant professors at the conservatory in Bucharest. After first semester, I said to Ira, "If we ever get a passport, I want to get out." And she said, "Yes." We were both broke to go. So we bit our tongues and joined the Communist Party to get our passports, but we still couldn't go anywhere other than Bulgaria, Hungary or Russia. Until one day in 1980, I saw

THE DESIGNERS OF THE DECOUVERTE PROJECT HAVE USED COLOR AS AN ARTICULATE CHANGE IN SCALE, SPACING, AND PARAGRAPH WIDTH TO INCREASE THE VISUAL ACTIVITY OF THE TYPE ELEMENTS AND THEIR RHYTHM UP AND DOWN MOVEMENT. THE TEXTUAL AND TECHNICAL QUALITIES OF THE TYPE ARE A STRONG CONTRAST TO THE GIANT IMAGE DOTS.

LSD SPARE

THE CHANGING ALIGNMENTS OF THE PARAGRAPHS, ALONG WITH SMALL TEXT DETAIL AND COMPLEX NEGATIVE SPACES, CREATE A GEOMETRIC AND RHYTHMIC COLOR IN THIS PAGE FROM A BOOK SPREAD.

EARSAY UNITED STATES.
Changes in size among type elements create differences in perceived density (larger forms are more open, smaller forms seem to cluster together more tightly) — as well as the perception of weight change within the composition, even though all the elements are the same, regular weight.

The same size change strategy is enhanced by changing the weights of selected type elements as well.

While the size of each element remains the same, the application of bold weight has been swapped among the various components to produce a different spatial effect.

The same composition as C, but further changed using tints.

This example shows very tight leading; the space between lines appears the same as the spaces between words. The type is more texture than line, and appears optically the darkest of the examples.

This example shows normal leading. Its texture and linearity are evenly balanced, and it appears lighter than the previous example, receding slightly in space.

In this example of loose leading, linearity dominates; the text has the lightest value.

The same treatments as above are repeated in bold weight.

This example shows very tight spacing, and the resulting overlap of strokes, creates pronounced dark spots; the individuality of the letters is compromised in favor of overall linearity and mass.

In a wide paragraph, horizontal emphasis, or movement, dominates the vertical.

Although physically wider than deep, the optimal paragraph's width-to-depth ratio results in a type of comfortable stance.

In this deep, extremely narrow paragraph, the vertical emphasis dominates the horizontal. Consequently, the paragraph takes on a linear quality, as opposed to that of a mass.

The word, set all in a condensed face, contracts inward.

The same word, now set in an extended face of the same weight, expands outward — and more so when set in a bold extended face.

Dramatic compression and expansion in visual density (and enhanced communication) are achieved by combining varying widths and weights of text within the same line.
The Texture of Language  More than simply a tool for clarifying hierarchy, the variation of typographic texture—changes in boldness, size, linearity, texture, and rhythm—is an outgrowth of the way we speak or write... and the way we speak or write is a source for typographic color. Slowly spoken phrases contrast with sharp, abrupt outbursts. Long, contemplative soliloquies provide rest against erratic, fractured thoughts. These qualities of spoken and written language can be made visual, not just to provide intriguing eye-candy, but to help an audience feel the author and the emotional import of his or her words.

Changing sizes, weight, or posture within lines of running text, even within individual words, can make a dramatic, evocative statement without sacrificing clarity. It might even improve readability—the quality of and the degree to which the type engages its readers and leads them through the experience of the content. Bolding a subhead that begins a paragraph accomplishes this—making it seem louder and, therefore, a point of focus—but in an almost
Our time is a time
for crossing barriers,
for erasing old categories—
for probing around.

When two seemingly
disparate elements are imaginatively poised,
put in apposition
in new and unique ways,
starting discoveries
often result.

The sound and the meaning of words are often connected; in these examples, sound and meaning are linked through visual expression.

A Christian Chen Carnegie Mellon University, United States
B Michael Suil Carnegie Mellon University, United States
C Tammy Chang Carnegie Mellon University, United States
Alignments, Masses, and Voids: Dividing space creates structure, which unifies disparate elements in a composition. Several lines of type together create a different kind of structural relationship to the format than a single line of type; the grouping relates to the single line but visually contrasts with it. This mass of texture further defines the space around it into channels that correspond to its height and depth and between itself and the format in all directions. Separating elements within a group maintains a sense of the mass; it also introduces a greater complexity of structure by further subdividing the space. Visual structure must evolve out of the verbal structure of language. The verbal sense helps define what material within it might be mass or line. A continuous sequence of thoughts likely will be clarified if they cluster together; a distinct thought might benefit from being separated from the others. Both kinds of type elements are positive forms: the figures within the composition. They are in contrast with each other, as well as to the spaces, or voids, around them. The relationship of the typographic mass to the voids within the format is essential to defining typographic space in composition, just
as it is in defining the rhythm of letter spacing and the space within a paragraph. Regular intervals between masses and voids—unlike in letter spacing, word spacing, and leading—are undesirable because regularity implies sameness, and not all the type elements are the same; they mean different things. Smaller spaces between masses of text help improve the understanding that they are related, while greater spaces between or within typographic masses indicate that the masses are different in meaning. On a visual level, the designer creates contrast and rhythm within the composition by changing the proportional relationships between solids and voids. As type elements divide space in proximity, their points of alignment become important. Aligning elements augments the sense of a relationship between them. Further, alignments between elements help create directional movement through the elements in the format.
Establishing Hierarchy. Information is systematic. Most often, it appears as a collection of parts, each having a different function: for example, callouts, captions, and sidebars in magazine articles; or primary content, supporting content, and menus on a Web page. These various parts often repeat, appear within the same space, and support each other. One of the designer's most important tasks is to give information an order that allows the viewer to navigate it. This order, called the information's "hierarchy," is based on the level of importance the designer assigns to each part of the text. "Importance" means "the part that should be read first, second, third..." and so on; it also refers to the "distinction of function" among the parts running text (the body of a writing), as measured against other elements such as page folios, titles and subheads, captions, and similar items. Determining hierarchy results from reading the text and asking some simple questions: What are the distinguishable parts of the information to be designed? What should be the main focus of the reader's attention? How do the parts that are not the main focus relate to each other? Does the viewer need to see a certain grouping of words before they begin to focus on the main part? The answers to these questions are often common sense. On a publication's cover, for example, the masthead or title is most

**The Cranes Avants Pioneer Medal**

The late George Avants made many notable contributions to Syracuse University. He served as director of the Board of Trustees from 1820 until his death in 1939; he was elected vice chairman in 1930, chairman in 1930, and chairman emeritus in 1930. His contributions to the University, its faculty, and students include the Jane R. Avants Rare Book Room, exceptional book collections, and the establishment of an annual award for the member of the graduating class who has assembled the most interesting collection of books.

In 1939, George Avants endowed a faculty professorship actually the Avants Pioneer Medal. Only alumni of Syracuse University are eligible for the award, which is based on excellence in their field of endeavor. Those to be honored are selected by a committee of the Alumni Board of Directors and approved by the Chancellor and the Executive Committee of the Board of Trustees. The first presentation of the medals was made in 1939; since then, 223 alumni have received the award. This is the statement on which Syracuse University honors its alumni for extraordinary achievement.

**Syracuse University Salutes**

*Albert Maysles '49*
The designer has, at his or her disposal, a great variety of approaches for establishing the relative importance of typographic elements to each other. As can be seen here, even type that is all one color—and even the same weight or size—can be effectively differentiated using extremely simple means.
Es geht um ganz einfache Dinge, wie etwa Zuhören, verstehen lernen was mein Gesprächspartner am Herzen hat und erkennen, wo ich einen Nutzen bringen kann. Es geht um die persönliche, Gefühlvolle Auseinandersetzung mit Menschen.
Distinction and Unity  The visual and perceptual aspects of grouping and differentiating, discussed in a formal context in Chapter 1 (page 74), are therefore extremely important considerations when developing a typographic hierarchy. Just as viewers will assume that abstract shapes that share similar attributes are related to each other, viewers will also assume text elements with similar treatment to be related. At the same time, all the components within a hierarchy must respond to each other’s visual qualities. Readers acknowledge minute changes in typographic quality—hence, the focus on achieving a uniform texture in running text to avoid optical fixation—but too much difference among hierarchic levels creates a visual disconnect: the danger of pushing stylistic differences between informational components is that, as a totality, the typography—indeed, the entire project—will appear busy and lack a fundamental cohesion or “visual voice.” This is one reason why designers are admonished to employ only two or three type styles in a project and, as often as possible, to combine styles that share qualities such as proportion, weight, terminal shape, and so on. The reader need not be hit over the head with an optical baseball bat every time the content requires differentiation. Because minute changes in type layout are so easily recognized, the reader need only be shown an appreciable, yet decisive, difference among hierarchic components to clue them in. Limiting the degree of stylistic difference to just what is needed to signal a change in information allows the reader to understand such changes while maintaining visual unity and more clearly creating interrelationships within the content.
Structure, Detail, and Navigation

As noted previously, horizontal and vertical type alignments create channels of positive and negative space that the designer can use to create hierarchical interrelationships—helping readers locate, separate, or connect pieces of information... or, more simply, to "navigate" them. Aligning shallow columns of text horizontally across a format, for example, will indicate that they share some verbal relationship and may indicate a temporal sequence—a series of steps that builds in meaning. Creating a band of space between one horizontal text alignment and another will keep the two sequences clearly defined, but the fact of their similar horizontal structure may indicate that they are interrelated—or perhaps they communicate two sequential processes for launching a software program. Running text vertically in columns enhances the sense of continuity between paragraphs. Grouping several vertical columns together, while introducing a space to separate this grouping from another, may imply that the two groups are unrelated, or it may signal a pause for the reader to assimilate the content of one group before proceeding to the next.

Keeping consistent spaces between groups that are related in meaning, and increasing the space between groups

In this version of a menu, dots perform a variety of functions. The large dot acts as a focal point, bringing its associated type element to the top of the hierarchy. A system of smaller dots is used to highlight structural alignments and to denote a specific sublevel in the hierarchy. Still other dots activate negative spaces in the format.

Lines, which share an inherent visual quality with typography, offer an immediate formal relationship in addition to whatever functions they serve. In this version of the menu, heavy lines separate clusters of information that are unrelated, while lighter lines help distinguish clusters that share a relationship. In addition, the lines also activate space and help add movement to the composition.
that are unrelated in meaning, is an easy way of helping readers navigate among more general sections of information and among subgroups of information within those sections. Sometimes it is difficult to remember that type is just a collection of lines, dots and shapes, and that they behave in the same way their simplified components do. Integrating such visual forms can also enhance hierarchy and clarify navigation through text. The focal power of a dot, which defines a location in space, can indicate the beginning or ending point of a text element (for example, using bullets to call out items in a list), correspond to alignments, activate spaces within a composition, and separate informational material linguistically, like an exaggerated form of punctuation. Lines, too, can perform a variety of useful functions to enhance hierarchy and navigation: separating, enclosing, emphasizing, creating, or augmenting structural relationships, and activating space. Lines themselves are visually similar to lines of type, and relationships of contrast—in weight, solidity, relative length, and so on—operate the same way between them as they do among lines of type. Horizontal and vertical line configurations visually correspond to this intrinsic quality of text. Lines that are angled, curved, or wavy starkly contrast this "orthogonal" logic. Geometric shapes, whose hard-edged quality can be visually similar to that of letters, can act as inclusions or details among letters or words—as well as supports for clusters of text, operating as fields upon which the type lies or passes between. Because geometric shapes integrate so well with type forms, but retain their identity as images, they can also be used to create visual links between type and other pictorial elements.

Planar geometric forms relate visually to the geometry of letterforms, but contrast with the texture and linearity of type. As fields or containers for informational elements, they can help reinforce hierarchic distinctions among groupings of content; in this particular case, they also create a visual link between the type and the imagery while honoring the layout structure.
Itanium 2 presents lucrative opportunities for those organisations that offer it, but as with any new technology, customers will have questions and even objections. Here we give you the answers – and the chance to take advantage of the surging momentum in this market.

We bring you a clear view of Itanium 2 today, what’s on the horizon and what the analysts are saying.
What Happens Now? Type in Color

Chromatic color—differences in hues, such as red, orange, and violet—has a dynamic effect on typography. Chromatic color can greatly enhance the textural qualities of type—its boldness, lightness, openness, density, and apparent location in “three-dimensional” space (called “typographic color”)—reinforcing these qualities as they already exist in black and white by adding the optical effect of a true color. As we have seen, different hues appear at different locations in space; cool colors appear to recede, while warmer colors appear to advance. Applying a warm color to a type element that is large and important will enhance its contrast against other type elements. The relative value of colors, their darkness or lightness, is an aspect of chromatic color that demands great care in regard to how it affects type—especially its legibility—for example, when colored type sits on a colored background. As their values approach each other, the contrast between type and background diminishes, and the type becomes less legible. All the qualities of chromatic color have a pronounced effect on hierarchy because of the way they affect the apparent spatial depth and prominence of the typographic elements to which colors are applied. Color presents the possibility of altering the meaning or psychological effect of words by introducing a layer of meaning that is independent of—and becomes integral to—the words themselves.
Color and Hierarchy Applying color to a black-and-white typographic composition will have an immediate effect on hierarchy. For this reason, it's often a good idea to understand how the hierarchy works in black and white first, separating the typographic components through their typographic color—their density and rhythm, linearity and mass. Consider chromatic color as an added bonus, but make sure the hierarchy is clear by virtue of size changes, changes in weight, spacing, and so on. If the different levels of importance in the hierarchy are clearly established, further distinguishing each level with a difference in color can force greater...
separation between them. For example, if the information at the top of a hierarchy is set in a deep, vibrant orange-red, while the secondary information is set in a cool gray, the two levels of the hierarchy will be separated visually to a much greater degree. Although the values of the colors are similar, the saturated orange type will advance in space, and the cool gray type will recede.

The application of color to the ground within a composition can further enhance the hierarchy. Type of one color, set on a field of another color, will join closely with it or separate aggressively, depending on their color relationship. If the colors of type and background are related, the two elements will occupy a similar spatial depth. If they are complementary in nature, the two will occupy very different spatial depths. It is important to maintain considerable contrast between the type color and the background color so that the type remains visible. Color can also be used to link related informational components within a composition. In a poster for an event, for example, all the information related to the time and place of the event might be assigned a particular color, which may relate to the color assigned to the title of the event. The color relationship of the two components creates a meaningful link for the viewer and serves to clarify the information.
Images are no longer just representations or interpreters of human actions. They have become central to every action that connects humans to each other... as much reference points for information and knowledge as visualizations of human creativity.

Ron Burnett
Design educator and author; from How Images Think
THE WORLD OF GE
What Images Are

Image making is perhaps one of the most complex and ecstatically human activities. An image is a powerful experience that is far from being inert—a simple depicter of objects or places or people. It is a symbolic, emotional space that replaces physical experience (or the memory of it) in the viewer's mind during the time it's being seen. This is true of images that are strictly representative of a real place, people, or objects, as well as of images that are artificial—either contrived representations or abstract configurations of shapes. In the hands of a designer who knows how to command composition on a purely visual level, and who can conceptually select and manipulate content, an image is by far the most profound communication tool available. In graphic design, there are myriad image possibilities—symbols and photomontage, drawing and painting, and even type—that perform different functions. Images provide a visual counterpoint to text, helping to engage the audience. Images also offer a visceral connection to experiences described by written language. They can help clarify very complex information—especially conceptual, abstract, or process-oriented information—by displaying it concisely: “at a glance.” They can add interpretive overlay in juxtaposition with literal text or images. It's foolish to think that simply picking a photograph of a particular object will alone solve a communication problem in its entirety. The relevance of an image to a design solution isn't simply wrapped up in its subject matter. An image becomes relevant when its compo...

Real, Unreal, and Otherwise

Media and Methods

Presentation Options

Content and Concept

The presentation of images falls on a spectrum defined at one end by representation and at the other by abstraction. Images that lie closer to the representational end of the continuum are more literal; images that approach abstraction are more interpretive.

Clever Use of Letterpress

Elements and punctuation to create the gun icon evoke potential conceptual ideas about language and violence.

Rodez United States

THINK

OF DESIGN

Crystal-clear photography is documentary and credible, considered “real” by the average viewer. These qualities are both appropriate and highly desirable when displaying products.

Rodez United States
sition and production technique, as well as its subject matter, are working in concert with other material to create an integrated message.

**Abstraction and Representation** An image might be mostly representational or mostly abstract, but it always will be a mixture of the two. Purely visual, abstract images (as we have seen) communicate ideas that are grounded in the human experience. In the right context, a yellow circle becomes a sun. A composition of lines in dynamic rhythms might communicate a subtler message about movement or energy, not necessarily referring to some literal object or experience. Even a photograph that purports to represent something real is an abstraction on some level—it depicts a state of activity that is no longer happening and flattens it into a two-dimensional form. Portions of it might not even be real, but instead, contrivances set up by the photographer or by the designer directing the creation of the photograph. Using the intrinsic messaging of abstract form described in Chapter 1 to influence a photograph’s composition will enhance its messaging potential.

Similarly, suggesting concrete, literal experience within an abstract composition will help ground the message in reality for a viewer, making it more accessible without sacrificing the abstraction’s simplicity and visceral evocative power.

**A LIVELY DIALOGUE** between abstract gestural mark and figural representation lends humanity and depth to the illustration.

VCU Qatar Qatar

**A STYLIZED TRANSLATION** of an eye approaches the lower end of the image spectrum. Added graphic elements bring symbolic meaning to the form.

Troy Abel Iowa State University
United States

**OUR BRAINS ARE** hypersensitive to forms that create images of humanity. Note how little information is needed for this image to clearly represent a human face.

TeaZo I Love Japan

**THE ABSTRACT FORMS** in this book spread are prompted by the concrete quality of the letterforms, whose style begins to skew the reading of the abstraction toward an environment that might be urban and gritty in character.

Andreas Ortig Austin

**ICONIC**
Image Modes and Mediation

Regardless of an image's degree of literal representation or abstraction, a designer might choose to represent an idea by using photographs, illustrations (drawings or paintings), or a hybrid: manipulated photographs or drawn images in combination. How a designer decides to involve image results from evaluating the content and its conceptual functions. The images must provide informational clarity, but they must do so in a way that resonates and delivers secondary and tertiary messages—associational or branded messages—as well.

The form of an image's representation is called its "mode," and this includes not only its degree of simplicity and abstraction but also its medium. A designer must consider a number of things in choosing the right image mode, or modalities, to use. Among these are the evocative, emotional qualities of the project's content; the number of different modes needed to differentiate specific messages; the expectations of the viewing audience for certain image experiences over others, because of

SYMBOLS ARE highly mediated forms of image, drawing on common understanding and cultural contexts that elevate them beyond mere representation. Consider these two sets of symbols, used as signage to indicate which restroom to use.

Art: Tetsuji Shikama

Real, Unreal, and Otherwise

Media and
Methods
Presentation
Options
Content
and Concept

All these images depict the same subject—a figure—but using different modes. The modes range between literal and stylized, and each mode intrinsically mediates the image to varying degrees. The "pure" photographic image is the least mediated in this study. The two drawn images are inherently more mediated than the photographic image—the designer has invented his or her own depiction of the subject—but between the two, the naturalistic drawing is less mediated than the other.
their demographic makeup or the social and historical context of the project's content; and production issues, including such technicalities as budget, lead time, and fabrication concerns. How far from its "natural" state the image gets (how much the "pure" depiction of the subject gets altered by the designer) is described as how "mediated" it is. The level of an image's mediation can be evaluated in a couple of ways. First, it can be considered in terms of its physical expression, or how it's made; for example, a realistic drawing shows a greater level of mediation than a photograph of the same subject. Second, an image's level of mediation can be considered in how complex the messaging in the image is—a somewhat literal drawing of an image is less mediated than a highly contrived photograph or collage. The way an image refers to its subject is also an aspect of its form that must be considered by the designer, who might choose to represent, or signify, particular subjects by using images that are realistic or representational but not pictures of the subject itself. This kind of image is called an "index" and refers to its subject through association; an image of an egg, for example, "indexes" a bird.

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**THE CHOICE OF IMAGE**

Used for one of several wall panels in a French cultural center: Gargamel, a puppet character from a child's story, is symbolic of French culture. The historical station is altered through mediation: representing the image in a digital pixel pattern that makes it contemporary.

Apealog Design France

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**THE QUESTION OF MEDIATION**

And credibility comes to the fore in comparing these two illustrations. Both are fabric images, but which one seems more real? If you decided that the corn cob person does, you're probably not alone. Despite the impossibility of this subject matter, it has been rendered in a photographic style that makes it seem more believable as "real" than the abstract, invented space and patterned textile of the shown image on the right.

A Christopher Short United States

B Cyrb Studio United States
Semiaology and Stylization. A designer might often need to represent ideas in a stylized way, selecting the most important elements from a subject and arranging them in as concise and simplified a message as possible. The most common occurrence of this kind of image is a logo—an image that is used to identify an organization and differentiate it from competing groups. The purpose of such a distilled, elemental form is quick recognition and easy recall; the more information that can be packed into the shape of the mark, the better. Stylizing an image emphasizes its nature as a "sign"—a visual representation of an idea. The study of relationships between signs and what they represent or "signify" is called "semiology," a branch of anthropology developed in the 1800s. In selecting the details of the idea or subject to be represented, the designer looks for elements that are the most universally recognizable—for example, the fundamental shapes and qualities of a cat (ears, tail, a common posture, whiskers, paws, and so on)—rather than those that are specific—
particular ear shapes, markings, or short or long hair. In arranging the elements, even for that of a recognizable object, the designer's goal is to invent a specific graphic language—an internal logic of positive and negative relationships, an emphasis on curved or angular forms, and an integration of line and mass—that will make the mark live as its own, unified image, rather than simply reproducing the likeness of the object. In one sense, the distilled, stylized mark is neutral because it seeks to communicate on an objective, universal level; simultaneously, however, it must have its own identity as a form. In giving the form its own identity, the designer is selectively interpreting particular aspects of the message and skewing the communication in one direction or another. Following the cat example above, the designer might emphasize a crouching position, possibly communicating readiness for action, or might emphasize the cat's claws, a message that might mean power or aggression. The angularity of the drawing, or how weight is distributed, might add interpretation, such as restful and contemplative, or quick and agile qualities. The universality of a mark, along with its particular degree of invented stylization, will place the image at different points along the continuum of representation and abstraction. Further, the very selection of the image's subject might involve overlays of meaning that involve conceptual, cultural, or emotional issues.

Icon A visual sign that shares a structural similarity with the object it signifies is called an icon. Usually, icons are devoid of detail and are literal representations of their signified object. In these examples, note which elements have been selected and which have been edited out.

Symbol A representational or abstract image whose form is physically unrelated to its signified object or idea is a symbol; it derives its power from the arbitrary agreement of the culture that uses the symbol. A dove, for example, is a symbol of peace in Western culture. The context in which a symbol appears might alter its symbolic meaning: consider the difference in meaning between the same symbol element in these three environments.

Indexical Sign This kind of visual sign points to its signified object indirectly, or "indexes" it—for example, a nest indexes a bird.

Supersign This is a complex sign that superimposes more than one sign (and often more than one type of sign) in a single gestalt combination in which all the signs included are visible and accessible immediately; a logo is a good example. A supersign might involve an icon, symbol, index, word, and representation in any combination. The more complicated the supersign, the less effective it is. These three examples show how a particular component might combine with others and thereby take on different functions and meanings.
THE VISUAL QUALITY of linear, drawn imagery corresponds closely to the linear quality of typography, especially in the case where the type has been outlined as well.

Finnish Magna Germany

In this study, the same subject is presented in varying degrees of realism and stylization. Toward the realistic end of the spectrum, the subject's literal meaning takes on more importance; as it becomes more stylized, its literal meaning becomes less important, while the gesture, the quality of the marks, and associations or symbolic messaging that these impart become more important.

ILLUSTRATION ALLOWS FOR
Varying degrees of abstraction and complexity, involved spatial arrangements. The flat, hard-edged style of the illustrated elements creates a modern, industrial feel appropriate to the city, while using a map and coat of arms figure adds historical messaging.

Otschdesign Germany

AGAIN, ILLUSTRATION doesn't limit the designer in terms of inventing space and combining disparate elements that would otherwise be empirically impossible. In contrast to the Munich poster [left], the style is painterly and representational, but the space is less abstract.

Cyr Studio United States
Illustration  The choice of illustration over photography opens up tremendous possibility for transmitting information. The designer is not only unencumbered by the limitations of real-world objects and environment but also given the potential to introduce conceptual overlay, increased selectivity of detail, and the personal, interpretive aspect of the designer's visualization—through choice of medium, composition, and gestural qualities. As with all types of images, an illustration can be concrete, objective, or realistic in how it presents its subject, or it can become abstracted and symbolic; the designer can add details that normally would not exist in a real scene or can exaggerate movement, texture, arrangement, space, and lighting. Choosing illustration for image presentation, however, means potentially sacrificing a kind of credibility or real-world connection for the viewer. Despite the fact that most audiences realize that a photograph might just as easily be manipulated and therefore made misleading, the audiences will still instinctively respond to a photograph as though it were "reality." The power of illustration over photography, however, is to communicate with a visual sensitivity that is emotional, poetic, organic, and innately human. An illustration can also integrate with other visual material, such as type, abstract graphic elements, and even the paper stock or other finishing techniques, on a textual level that is impossible with a conventional photograph. The designer must weigh these aspects carefully and select which mode of representation will best suit the communication.

Drawing and Painting  The directness of hand-generated images is universally appealing. Through a drawn or painted image, the designer taps into a viewer's own sense of creativity and connects on an extremely personal level—there is a genuine, honest, and warm quality to an illustration that might be lacking in the slick and seamless realism of a photograph. An illustration's success lies in the appropriateness of its style to the subject matter at hand. The majority of illustration is contracted from specialists, who cultivate a particular style to find a niche in the market, but this doesn't preclude designers themselves from taking on the role of

THE SCRAGGLY OUTLINE and cancellation forms of this illustration are human and playful.
illustrator. A designer wanting to illustrate will be intimate with the subject matter of the project and other relevant graphic elements—including type and finishing techniques. As a result, the designer might be able to build images that are even more appropriate and integrated with other elements than would be likely if working through an outside source.

**Realism and Beyond**  
An illustration might be a concrete depiction that calls upon the traditions of classical drawing and painting—its goal being to reproduce the empirical world in a way that responds to actual conditions of light, form, and perspective. Alternatively, an illustration might be a graphically stylized image that approaches abstraction, referring to the real world as a grounding point but favoring the expressive qualities of gesture, ambiguous space, and the process of making the image. Between these two extremes lie the possibilities of mixing elements of each state.

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*Scratch, Almost Distraught*  
Cross-hatching, produced with pen and ink, enhances the mysterious and slightly ominous quality of the image.

Amos Borg. United States

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*The Rich, Almost Collage-like Mixture of Tools Used to Create This Image—Airbrush, Pen, Digital Images, Ink—Contributes Textural Contrast and Multiple Layers of Meaning to Consider.*

Matej Hajanich Polanski
The Medium Is a Message

A line is a line... or not. Every drawing and painting tool makes characteristic marks and affords a designer a specific kind of visual language. The language of the tool has a powerful effect on an illustration's communicative value, not just on its visual qualities relative to other elements in a design solution. Above and beyond the fundamental selection of subject matter components, composition, and degree of stylization, the medium a designer chooses with which to create the illustration carries meaning—in terms of feeling (softness, hardness, fluidity, and stiffness) and, sometimes, conceptually (for example, using a drawing tool native to a certain region or historical period for a project related to that region or period).

Experimenting with the mark-making possibilities intrinsic to different tools shows the endless possibilities of, as well as the opportunities for controlling, the expression of an illustrated image. Here, the same subject is illustrated using different tools to show how powerful the effect of the medium is on communication.
**Graphic Translation** One particular kind of stylized illustration—known as graphic translation—evolved from the poster tradition of Switzerland and Germany in the early part of the twentieth century. Graphic translation combines some attributes of both icon and symbol. It depicts subjects in a literal way, like an icon, but also in a self-consciously abstract way that takes on symbolic qualities. A translation attempts to convey the concrete, fundamental "truth" of a subject, without details that are specific to that one particular instance of it; for example, a translation of a cat strives to be about the idea "cat," but not about a specific cat; that is, how long its hair is or the markings of its particular breed. Unlike an icon, however, which is strictly about shape, the textural and volumetric qualities of the subject are important considerations in finding an appropriate language with which to
translate it: the cat translation must indicate that cats, in general, are soft or furred, that they are sleek and athletic, and so on. A translation might be simple and stylized, or it might be relatively naturalistic, taking on characteristics such as surface detail or effects of light. ■ Graphic translation differs from conventional illustration in that its visual language, or "form language"—the marks used to make the drawing—is reduced to the point that there's nothing extra, only the shapes and marks needed to describe the subject. ■ The medium used for the drawing is important only if its characteristic marks help describe the subject's form or feeling. A scratchy texture made by charcoal, for example, might be appropriate in describing the fragility or dryness of an autumn leaf, but the texture does not exist for its own sake. ■ Most often, a translation is developed simultaneously with other visual material in a layout— the designer chooses translation as the illustrative option in advance—so that its shape, details, and textural qualities are dynamically integrated with photographs, typeface selection, abstract elements, and their positioning, in combination with the qualities of the translation. 

THE REPETITION of concentric black arcs used to describe the butterfly's wings alludes to the movement.

Sohyun Kim Iowan State University, United States

THE ICONIC OUTER FORM of the light bulb is essential to translation status by virtue of its indistinct, sparkling inner contour—a formal adjustment that suggests the bulb's function. The filament is made symbolic through translation into circuits that also appear to represent leafy branches.

Temple Print Design, United States

EXBERLINER 21
THE SOCIAL-MAGAZINE-OF-ONLY

IN A NOD TO Illustration styles of the end-twentieth century, this translation focuses on a simplified breakdown of light and shadow to clarify the form, while specific details—the bright buttons and the shine of the boot—add information.

Research Studios, United Kingdom
Collage: Old and New Assembling graphic elements in a free pictorial composition, called “collage,” is a relatively recent development in illustration. It derives from the evolution of representation in fine art from depicting a strictly singular viewpoint through the construction of multiple viewpoints, or cubism, into incorporating multiple viewpoints of several, possibly physically unrelated, scenes or references. Collage was initially used to add two-dimensional printed or found material—labels, fabric, bits of newspaper, flat pieces

Collage offers the designer of the book tremendous variety in formal qualities that add contrast and vitality to simple shapes. Typography, found engraving, paint marks, transparent overlays, and embossed texture all combine to resolve the movement and spatial integration of the composition.

Andreas Orag-Arie

The cut-out letters of the word “democracy” hint at the political dialogue inherent in that social system. The addition of the scissors and the work gloves gives evidence to democracy’s constructive nature and creates ambiguous scale and spatial relationships.

Stefko International Center

NOVI ljudi za novu, civiliziranu HRVATSKU.

DEMOKRACIJA

Examples of collage show the varied possibilities in combining material: cut and torn paper; found text and images; three-dimensional material.

Digital collage allows for photographic effects—transparency, blending, blurring, intricate silhouetting, and masking not possible with conventional cut-and-paste techniques.
of wood, and so on—into paintings, but, with the rise of photography as a medium, it quickly incorporated photographic images. Collaging photographic images, rather than illustrative images, is usually called "photomontage" and has been a popular method of illustration since the 1920s. Collage is a highly intuitive illustrative approach that takes into account not only the possibility of disparate subjects appearing in one space but also the nature of the combined elements—meaning how exactly they were made. Drawn and painted components can coexist with cut or torn pieces of textured paper, cropped images, scraps of fabric, parts of actual objects, and other drawn, painted, or printed material. Given that the pictorial space in a collage is abstract because of its fragmented construction, the designer must resolve compositional issues similar to those in any other image; but he or she must also address each item's internal visual qualities—overall visual activity, flatness of color relative to texture, and recognizability of the source material (such as printed words or cropings of image). In particular, because the source components of a collage might be recognizable, the conceptual relationship between abstract and representational elements is extremely important. Integrating recognizable imagery, with its own subjects and messages, helps direct the message and adds degrees of meaning. Collage is still a common approach to illustration and page layout in the digital environment, where not only scanned images of found or hand-generated material can be combined with photographic material, but also where photographic effects such as transparency, multiple exposure, blurring, and silhouetting—techniques made possible only by the computer—can be investigated.

THE MEANING OF: The elements brought together in a collage is important—and not just what the images portray, but how the meaning of the entire collage as well. In these two posters for a film festival, the film reel is iconic and modern, and both themes are portrayed in an apple whose symbolic meaning is one of knowledge. The juxtaposition of images creates a connection to history, and the photographic transparency and gold leafing suggest the element of light.

Benjamin Myers, Laramie College of Art and Design, United States

In this study, the message changes as the content of the collage's components are changed. As the content becomes more recognizable, the collage transmits a more literal—and, therefore, more specific—message.
Photography  The "pure" photographic image has become the preeminent form of illustration in recent years. One reason for this might be the speed at which photographs transmit information—their realism and directness allow a viewer to enter the image and process it very quickly, rather than get distracted by abstract pictorial issues such as texture, medium, and composition. Access speed in imagery has become important because the flood of visual messages encountered by the average viewer requires images to compete robustly for attention.  ■  While composition plays an important role in the quality of the photographic image and its messaging potential, its presence as a mediating phenomenon is much harder to recognize and, therefore, is often overlooked on a conscious level by the viewer. This suggests another reason for the primacy of photographs as communicators: the fact of the image's mediation (or manipulation)—through composition, selective focus, lighting, cropping, and other techniques—is secondary to the acceptance of photographic images as "real." This provides the designer with an upper hand in persuasion, on behalf of a client, because the work of convincing a viewer that he or she can believe or trust the image is already well on its way to being achieved: "I saw it

Because photographic images are so readily perceived as depictions of reality, the designer has incredible leeway in manipulating them without sacrificing believability. Despite the surreal situation depicted in the top image (A), for example, viewers will find it easy to accept the scene as credible. Further, this automatic assumption about the veracity of a photograph permits designers to evoke sensory experiences through their manipulation. Presenting a graphically exaggerated photograph of an object, as seen in the lower example (B), trades on its believability and the corollary common understanding of its function to create an immediately recognizable aural experience.
Today’s average viewer, although much more sophisticated and attuned to the deceptive potential of photography than viewers in previous generations—who were unfamiliar with photography’s use to disguise, manipulate, or enhance—is still much more likely to accept the content of a photograph as truth than that of an illustration, simply because the illustration is obviously contrived; the contrivance possible in a photograph is not so readily appreciated.

As with any other imagery, photographic content must be decisively composed. The photographer has two opportunities to control the image’s composition, however: first, within the frame of the camera’s viewfinder; and second, during the printing process in the darkroom (or in cropping a digital photograph using software). In this study, a minor shift in camera angle produces a variation on an already decisive composition of elements (B). Radically changing the viewpoint (C) creates a very different composition while retaining the identity of the content.

In photography, tonal range—the number and depth of gray values—is of particular concern. Traditionally, a “good-quality” photograph includes a clean, bright white, deep black, detail present within shadow areas; and a fluid range of grays in between. This same range, from darkest shadow to brightest highlight, also is desirable in color photographs. Pushing the tonal range toward generally brighter values decreases the contrast in the image and, to some degree, flattens it out; pushing the tonal range toward the shadow end also tends to flatten the image but increases contrast and causes highlight areas to become brighter and more pronounced. These effects of tonality shift are shown in the accompanying images, in both black-and-white and color. Note the contrast differences between corresponding images.

*A PHOTOGRAPH IS considered wellshot and compelling when it exhibits a strong and varied tonal range—from deep shadow areas, into rich middle tones, and into bright highlights.*

Martin Oestra Netherlands
Pictorialization When type becomes a representation of a real-world object, or takes on the qualities of something from actual experience, it has been pictorialized. In illustrative pictorialization, forms are drawn to appear to be made out of a recognizable material or to form part of a recognizable object.

Form Alteration Changing the structural characteristics of type elements to communicate a non-literal idea is another strategy. Distorting letter shapes or proportions in an adjective, for example, can change the quality of its description. Such alteration may have a syntactic quality as well; setting the word “exaggerated” with distorted, oversized Gs exploits their sound and the word’s meaning.

Pictorial Inclusion Illustrative elements brought into the type forms so that they interact with its strokes or counterforms are said to be included. The type retains its essential form, but the pictorial matter is integrated by reversing out of the type or by replacing the counterforms within or between the letters.

Form Substitution Replacing a type form with a recognizable object or another symbol is referred to as a substitution. Many real-world objects share visual structure with letters. Circular objects are often substituted for a letter O, for example. Images aren’t the only elements that may be substituted for a type form—replacing a letter with another character is also a common strategy for substitution.
Type as Image

When a letter or word takes on pictorial qualities beyond those that define their form, they become images in their own right, and their semantic potential is enormous. Words that are also pictures fuse several kinds of understanding together: they are supersigns. As their meaning is assimilated through each perceptual filter—visual, emotional, intellectual—they assume the evocative stature of a symbol. Understanding on each level is immediate, and a viewer's capacity to recall images makes such word-pictures highly effective in recalling the verbal content associated with them. As is true with so many aspects of strong typographic design, making type into an image means defining a simple relationship between the intrinsic form of the letters and some other visual idea. It is easy to get lost in the endless possibilities of type manipulation and obscure the visual message or dilute it. A viewer is likely to perceive and easily remember one strong message over five weaker ones—complexity is desirable, whereas complication is not. Type can be transformed into an image by using a variety of approaches. Each provides a different avenue of exploration, and several might be appropriate both to the desired communication and to the formal aspects of the type itself.

Ornamentation

Typography can be transformed with ornaments—borders, dingbats, dots, lines, and geometric shapes—either structural or purely decorative. If the ornaments are symbolic in nature, they might take on the aspect of an inclusion and therefore be more strongly connected to the meaning of the word. An ornament's style might affect the viewer's sense of the historical context of the type, for example, a flourish or antique dingbat from a particular period.

Syntactic Deconstruction

Changing the visual relationships between the parts of a word or a phrase is a deconstruction—the inherent structure of the word is called out or changed by being deformed—and the fact that it is related to the nature of meaning makes it a syntactic deconstruction. The cadence of the spoken word, the word's syllables, the prefix, the suffix, and individual letters are all sources for deconstruction.
The meaning and emotionally evocative aspects of the subject change as a result of the variations' respective compositions. When the figure is presented full-on and positioned with relatively even space around it (A), it is somewhat neutral, or more descriptive; the viewer is looking at the figure. Positioning the figure off center (B), so that the space around it is more dynamic, creates a sense of movement, but also anxiety. Composing the figure as an extremely small element within the format (C) isolates it, increases the viewer's anxiety, and evokes a sense of alienation. Re-cropping the figure (D) so that it extends beyond all sides of the format makes it feel confrontational.

MASSING THE COLLAGED elements along a horizon lends concrete spatial realism to the scene despite its textural and abstract surface qualities. The massing of dark areas also forces a sense of perspective that draws the viewer inward; this triangulated movement is counteracted by the circular title cluster at the top.

*Fresh Turkey*
Strategies for Composition

Composition in an illustrated image is of great concern. In creating a drawn image—especially one that is naturalistic—designers sometimes forget that they are not bound by the realities of arrangement imposed by the scene they are rendering. Using the formal relationships of figure and ground (see Chapter 1, page 37) on an abstract level—particularly within a realistic representation—contributes to the illustration’s power to communicate beyond the literal as well as helps engage the viewer and direct the eye. To simply place the subject in the central area of the illustration, without regard to the subject’s outer contour, tension, and contrast of negative space, and so on, prevents the illustration from being resolved and creates a static presentation. Just as cropping, position, relative sizes of elements, and contrast between linearity, mass, angles, and curves are intrinsic to the decisive layout of graphic elements and typography in a page environment, so too is their refinement within an illustrated image of utmost importance—and such considerations apply equally to photographed images.

A representational image is deconstructed here to show the various compositional strategies—beyond the selection of subject and drawing medium—that the designer has considered in creating a well-resolved image. Each aspect of the composition reinforces the others.

- Positive and Negative Shapes
- Contrast Between Mass and Line
- Color Relationships
- Directional Movement
- Optical Weight Distribution
- Gesture and Mark Quality
- Value Distribution
- Perspective and Spatial Depth
Mixing Image Styles As with all compositional strategies, creating contrast among visual elements is key to surprising, refreshing, and enlivening layouts—and this is no less true for imagery. Aside from the big-picture contrasts afforded by changing sizes, shapes, color, and spatial arrangement, combining different modes of image offers an important and highly effective method for introducing contrast. Very textual, linear illustration, for instance, will contrast richly with photography—which tends to be continuous in tone—as well as with flat, solid graphic elements. It's important that, while the different styles being combined contrast the most contrast? Then consider which combinations might also be the most useful for comparing related concepts, and which offer the richest interplay of concept.
with each other decisively, they also share some visual qualities. Similar to how these other decisions radically affect communication (as well as compositional quality), the decisions a designer makes regarding image types—icon, symbol, textual drawing, lush photograph—affect communication as well. Each kind of image brings certain associations with it. Photographs are associated with documentation or assumed to represent reality. They are concrete, pure, environmental, and reliable. Illustrations are perceived as "created" and personal, readily showing their method of creation; they evoke fantasy, display impossible or ideal situations, and portray their content in a subjective way—even if they are realistic. Icons, symbols, and translations distill and simplify complicated, abstract ideas; they are most often associated with diagrams, navigation, and identification. The designer must combine image styles selectively to support a given purpose, using the qualities of each to appropriately convey intended messages and interact with each other in a unified visual language that assimilates their differences as part of their logic.

"We have homework this year. That's different from last year.

Children Become Students at Birth
We're doing a lot of cut-out pages...and CSMP; that's the way we do math. I like that.”

—Debra Smith, Teacher

THE DECISION TO Present
The first element in illustrative form stems from the need to solve two problems. First, the designer wanted to avoid visual conflict between two photographs; the blushing of the illustration style visually separates it from the photographs and casts it to recede into the background. Second, the illustration enhances the temporal metaphor created by the two images—two stages in a historical stage of cultural development, the other showing a developmental stage in education.

STIM Visual Communication
United States
Selecting and Manipulating Content

A picture, as the saying goes, is worth a thousand words. Which words those are, however, is influenced by the designer and the photographer. The choice of the pictorial elements contained or not within a photograph, regardless of subject matter, has tremendous implications for meaning. Product catalogs—clothing catalogs, for example—often use imagery as a primary means of conveying concepts about lifestyle by showing people wearing the clothes in particular locations or situations. These images serve two purposes: they demonstrate the look of the clothes on real people, and they position the clothes relative to a lifestyle. Similarly, leaving certain facts out of a photograph might be just as influential as choosing what to include.

In this study of an image for a mystery novel's cover, the information conveyed by the image is altered—sometimes subtly, and sometimes dramatically—as a result of changes in content and composition. In the first version of the image (A), the content and lighting provide neutral facts: the viewer is in a bathroom, probably at a hotel. In version (B), this content is clarified by the addition of a hotel key—but altered through the addition of the knife and money, signifying foul play. The dramatic change in lighting, from even to more extreme, as well as the unusual direction of the light, enhances the sinister mood and further hints that something is wrong: why is the light on the floor? In the final version (C), a closer viewpoint helps create
Beresford Wines are handcrafted to capture the 'essence of McLaren Vale', catering for all levels of consumer preference.

From the entry level to the full range, through to the flagship icon brands and reserves, every wine has been crafted with the same attention to detail, representing great value for money and exceptional taste.

A feeling of paranoia—what's happening beyond the frame is unknown—and focuses attention on specific details: the time on the clock, the point of the knife, the money, and the hotel key. The manipulation of the light, as well as selective focus, helps draw attention to elements that may be relevant to the story.

The artifice of hanging an award medal around the neck of the bottle dramatizes the quality of the wine and personifies the bottle.

Voice Australia
In addition to whatever semantic content an image offers, viewers will project meaning on the image themselves, based on personal, as well as cultural, experience. In the current American cultural context, viewers are likely to project meaning related to "illegal drug use," even though the image doesn't offer any explicit reason for doing so.

The same image changes semantically—in varying degrees—each time it's paired with an image carrying its own semantic meaning. In the first pair, the semantic gap is quite small and the resulting narrative subtle. In the second pair, the semantic gap creates the same narrative but dramatically alters some assumptions about the meaning of the base image.

The third pair offers a semantic gap that forces the narrative in a completely unrelated—and unexpected—direction.
Narrative Interplay A single photograph delivers a powerful punch of "semantic" content—conceptual, verbal, and emotional meaning that likely includes messages that are not literally represented in its subject. Putting photographs together increases their semantic power and creates narrative, or storytelling; the instant two images can be compared, whether juxtaposed or arranged in sequence, a viewer will try to establish meaningful connections between them. Every photograph will influence any others around it, changing their individual meanings and contributing to a progression in narrative as a result. For example, a viewer might see an image of a biker and a second image of a man in a hospital bed and construct a story about a hiking accident. Neither image represents this idea; the narrative occurs in the viewer's mind. Even concluding that the man in the hospital bed is the same biker is an assumption the viewer creates. This distance between what is shown in two images and what the viewer makes happen internally is a kind of "semantic gap." Substituting the hospital image for one that shows a biker at the finish line of a race changes the narrative. The semantic gap is smaller and therefore a more literal progression, but the gap exists because the viewer still assumes the two bikers are the same person. As more images are juxtaposed or added in sequence, their narrative reinforces itself based on the increasingly compounded assumptions initially made by viewers. By the time viewers have seen three or four images in a sequence, their capacity to avoid making assumptions decreases and they begin to look for meaning that completes the narrative they have constructed. This "narrative momentum" increases exponentially to the point that viewers will assume the semantic content of any image appearing later in the sequence must be related to that delivered earlier, even if details in the later image empirically contradict those of the first images.
Word and Image: Brainwashing the Narrative

Pictures greatly influence each other's meaning... and words, even more so. As soon as words—concrete, accessible, seductive—appear next to an image, the image's meaning is altered forever. Just as there is a semantic gap between images that are juxtaposed, so too is there such a gap between words and pictures. The gap might be relatively small, created by a direct, literal relationship between the two players. Or, the gap may be enormous, allowing the viewer to construct a narrative that is not readily apparent in the image when it appears by itself. The word "death," placed next to an image of a skull, for example, produces a relatively small semantic gap—although not as small a gap as the word "skull" would produce.

Consider, however, the same skull image adjacent to the word "love," the tremendous distance between what is shown and what is told, in this case, presents a world of narrative possibility. Every image is susceptible to change when words appear next to it—so much so that a designer can easily alter the meaning of the same image over and over again by replacing the words that accompany it. In a sequential arrangement in which the same image is repeated in subsequent page spreads but is accompanied each time by a new word or phrase,

Everything about is fleeting, and once it has passed

Although the difference between the sharp photograph of the television and the blurred image that follows it creates a sense that the blurred image is a televised image, the juxtaposition of the words creates a different—and possibly related—meaning for the viewer.

Brett Vasko, United States
new experience and knowledge about the image are introduced to the viewer. Once this knowledge is introduced, the viewer will no longer be able to consider the image in its original context. The meaning of the image, as far as the viewer is concerned, will be the composite meaning that includes all the information acquired through the sequence. Not surprisingly, the ability of images to change the meanings of words is equally profound. This mutual brainwashing effected by words and images depends a great deal on the simultaneity of their presentation—that is, whether the two are shown together, at once, or in succession. If seen simultaneously, word and image will create a single message in which each reciprocally advances the message and neither is truly changed in the viewer's mind—the message is a gestalt. However, if one is seen first and the other second, the viewer has a chance to construct meaning before being influenced. In such cases, the semantic gap is greatly widened and the impact of the change is more dramatic: the viewer, in the short time given to assimilate and become comfortable with the meaning of the first word or image he or she has seen, must give up his or her assumptions and alter his or her mindset.
Ever Metaphor? In writing and speech, a metaphor is an expression—a word or phrase—that refers to an unrelated idea, creating additional meaning. Images can be used in much the same way: a designer may present an image that means something else entirely, refers to a much broader concept, or combines concepts to evoke a third concept that is not explicit in either of the combinants. A symbol is a simple example (see page 171), but visual "visual metaphors" may be very complex in their associations. One option for creat-
ing a visual metaphor is to use an object to define the form of something else—for example, laying out an invitation to a travel-themed fundraising event to look like an airline ticket, using the type styles, colors, and other visual details of such tickets as a source. Another option is to depict one thing behaving, pictorially, like another—presenting products in an urban cosmetics brochure, for instance, configured as a city skyline. Yet another possibility is to combine two or more seemingly unrelated images to suggest another form with its own meaning, implying some narrative connection between ideas—showing a corn cob with wheels to suggest the idea of plant-based auto fuel. A designer may also consider altering one image by having another act upon it—chopping the first image up, mixing it into a texture, pushing it out of the way, making it vibrate, and so on. There are as many ways to create metaphors as there are ideas and images—in short, an endless array limited only by imagination. While the literal content of images provides a baseline communication, a thoughtful designer can use images to evoke higher-level concepts above and beyond what they merely show. The result is a richer, more inventive, and more memorable and meaningful experience for the audience.

**THE GRAPHIC SHAPE** of the cigarette creates a focus of attention, reflecting the action in the sequence of frames from a public service commercial. It also surrounds and traps the people, and then metaphorically burns them to ash.

**IN THIS CONCEPTUAL** process, design, small rules of sugar are wrapped in typography that expresses ideas about “sweetness” from a survey and packages them together. 

Connie Bilterandi

**THE PLACEMENT** of the separated, green logo type at floor level along the glass wall creates a gritty environment, bringing the outdoors inside and vice versa.

NBK Studio Limited States
There is no recipe for a good layout. What must be maintained is a feeling of change and contrast.

Alexey Brodovitch
Graphic designer and art director
Begin with the end in mind.

Lana Rigsby
Principal, Rigsby Design
Visual Logic: How Everything Talks to Each Other Design solutions really come together when all the components are clearly interrelated. First off, a format’s proportions should begin to evoke appropriate feelings in the viewer—intimate, expansive, or confrontational—right from the moment they come in contact with the work. Content organization should respond to the format, as well as the requirements of the information presented; the selection of images and type styles should support each other stylistically, reciprocally reinforcing mood and concept. The arrangement of type and images should respond to each other visually, and their composition within the format space should again augment the emotions or associations that are more literally apparent in the content of both images and writing. Furthermore, the pacing and sequencing of the content should respond to emphases within the content and create visual highs and lows—alternations of sequences that are dramatic and sedate—to continually refresh the viewer. Thoughtful consideration of typographic and abstract details should be apparent in the way they refer to large-scale compositional elements or spatial interaction.

A Visual Logic Checklist It’s important to consider the big picture of a design solution—the concept and overall layout—in light of its internal components to ensure all of its aspects are interrelated in supporting that concept. At each stage of development, evaluate each aspect in combination.

- Does the typographic detail visually relate to image styles, as well as convey messages appropriate to the text?

- Does the form of graphic elements communicate with images?

- Do the images play off each other to enhance intended messages, and does any image or combination thereof deliver unintended messages?

- Does the color system add to the concept?

- What about print techniques, paper, and binding details?
Organizational Strategies: Structure and Intuition

Figuring out what goes where, in what order, and how it should be arranged from a compositional standpoint demands a lot from a designer. A client might supply some content in a particular order, but the designer really has to understand the content and, potentially, reorder it when necessary to improve its clarity or enhance its conceptual aspects. On a visual level, how much appears at any given time and the actual arrangement are decisions a designer alone must make. As the sequence and pacing of the content is being planned, the designer must also address the specific visual relationships of text and image.

How structured, neutral, or documentary does the presentation need to be? What happens if the material is organized in a less structured way? How are the images and the text visually related, and how do they interact within the format? Answering these questions might involve both analytical and intuitive study of the content to see how different methods help or hinder the presentation. A designer must often switch between these two extremes—

**By Kind** Content ordered by differences in meaning

**By Specificity** Content categorized from more general to more detailed

**By Complexity** Content sequentially ordered from least complex to most complex

**Chronologically** Content ordered as part of a process, or in terms of historical context

**By Relevance** Content organized according to which information is most important

Strategies for organizing content involve sorting the material into manageable parts that are related to each other: by kind; by part to whole; by frequency; by complexity; chronologically; and by relevance. Some strategies are often applied to particular kinds of publications because of convention—usually driven by the expectations of the audience. Newspapers, for example, exhibit an organizational strategy of part to whole based on local relevance. Packaging divides information among its sides based on complexity.
messing around with the material to see what's possible, analyzing the visual and conceptual clarity of the results, and then returning to freer exploration to test whether the analysis is accurate or useful. Some basic organizational methods have become common in graphic design practice, especially in regard to typography; some are structurally based, and others respond more intuitively to conceptual and tactile qualities.

Introduction

Esther Gerritsen

L'index

Une pièce gentille sur des gens sympathiques

PALAZZO GIGLIO

Experience the Luxury

Introductory text about hotel environment. Direct link to virtual tour and description of amenities.
Structure: The Grid System

All design work involves problem solving on both visual and organizational levels. Pictures, fields of text, headlines, and tabular data: all these pieces must come together to communicate. A grid is simply one approach to achieving this goal. Grids can be loose and organic, or they can be rigorous and mechanical. To some designers, the grid represents an inherent part of the craft of designing, the same way joinery in furniture making is a part of that.

1. Define the points of structure.
2. Plan the blocks, margins, and dividers of the page.
3. Choose the type of content and the kind of organization.
4. Plan the content and visual relationships.
5. Finalize the layout with print material.
6. Review the layout for consistency and clarity.
7. Adjust the layout to improve the overall appearance.

The benefits of working with a grid are simple clarity, efficiency, economy, and continuity. Before anything else, a grid introduces systematic order to a layout, helps distinguish between various types of information, and eases a user's navigation through them. Using a grid permits a designer to lay out enor-
Margins are the negative spaces between the format edge and the content, which surround and define the live area where type and images will be arranged. The proportions of the margins bear a great deal of consideration, as they help establish the overall tension within the composition. Margins can be used to focus attention, serve as a resting place for the eye, or act as an area for subordinate information.

Flowlines are alignments that break the space into horizontal bands. Flowlines help guide the eye across the format and can be used to impose additional stopping and starting points for text or images. There may be a flowline, or there may be several. If there are numerous flowlines at regular intervals, breaking the page top to bottom in a repeated proportion, a system of rows is created that intersects the vertical columns.

Spatial zones are groups of modules that form distinct fields. Each field can be assigned a specific role for displaying information; for example, one horizontal field might be reserved for images, and the field below it might be reserved for a series of text columns.

Columns are vertical alignments of type that create horizontal divisions between the margins. There can be any number of columns; sometimes they are all the same width, and sometimes they are different widths, corresponding to specific information. The page diagrammed here shows four columns of even width.

Markers are placement indicators for subordinate or consistently appearing text, such as running heads, section titles, folios, or any other element that occupies only one location in any layout.

Modules are individual units of space separated by regular intervals that, when repeated across the page format, create columns and rows.

Grid Anatomy: A grid consists of a distinct set of alignment-based relationships that serve as guides for distributing elements across a format. Every grid contains the same basic parts, no matter how complex the grid becomes. These parts can be combined as needed or omitted from the overall structure at the designer's discretion, and the proportions of the parts is similarly dependent on the designer's needs. This book, for example, is structured on a 17-column grid to address several issues: an optimal column width for running text and captions; a static navigation system at the far left; consistent proportions between diagrams and captions; text widths; and flexibility to size and arrange contributor design projects. While text and diagram widths necessitate a greater number of columns left-to-right, the need for flexibility in positioning dictates that no flowlines be established top-to-bottom.
Column Grid  Information that is discontinuous benefits from being organized into an arrangement of vertical columns. Because the columns can be dependent on each other for running text, independent for small blocks of text, or crossed over to make wider columns, the column grid is very flexible. For example, some columns might be reserved for running text and large images, while captions might be placed in an adjacent column. This arrangement clearly separates the captions from the primary material but maintains them in a direct relationship. The width of the columns depends, as noted, on the size of the running text type. If the column is too narrow, excessive hyphenation is likely, and a uniform rag will be difficult to achieve. At the other extreme, a column that is too wide will make it difficult for

Any number of columns can be used, depending on the format size and the complexity of the content. Flowlines define horizontal alignments in increments from the top of the page. Within a column grid, a designer has a great deal of flexibility for arranging type and image material. Two- and three-column grids, among the most common used in designing publications, provide great potential for varying typographic width across the columns, integrating images, and differentiating columns with color. Regardless of the number of columns, the body and margins may be related asymmetrically or symmetrically (mirrored), as seen in the fourth column of examples.
the reader to find the beginnings of sequential lines. By studying the effects of changing the type size, leading, and spacing, the designer will be able to find a comfortable column width. Traditionally, the gutter between columns is given a measure, x, and the margins are usually assigned a width of twice the gutter measure, or 2x. Margins wider than the column gutters focus the eye inward, easing tension between the column edge and the edge of the format. This is simply a guide, however, and designers are free to adjust the column-to-margin ratio as they see fit. In a column grid, there is also a subordinate structure. These are the flowlines: vertical intervals that allow the designer to accommodate unusual breaks in text or images on the page and create horizontal bands across the format. The hangline is one kind of flowline; it defines the vertical distance from the top of the format at which column text will always start. A flowline near the top of the page might establish a position for running headers, pagination, or section dividers. Additional flowlines might designate areas for images (specifically) or different kinds of concurrent running text, such as a timeline, a sidebar, or a callout.
Most Newspapers, including this one from Denmark, are constructed on a precise modular grid, which allows for rapid and aligned changes in content layout. The text is often situated across multiple columns, depending on the size and importance of the story; the underlying column width can be found at the bottom of the page, between the text and the page number. The depth of the module is defined by the height of the module. Here, the proportion repeats in various instances further down the page.

E. Types of Grids


det forenede europa

Det Europæiske Fællesskab

Europas Forenede Stater

den europæiske union

Det Europæiske Konvent sørger for første gang ord på tankerne om en stærk

EU-fortækning og fremskriver mange års taler om en eur. Men faldet af den forsigtige

cunne forenede stater i form af en europæisk samarbejd

trængt medicinalbranche sender færre lægemidler på gaden

Avsgøende om gældende af fortsatte lægemidler på husholdningsstørrelse af

here, a variety of modular grid structures show a range of proportions and precision. The greater the number of modules, the more precise the layout might be; but too many increments become redundant. Variations on the number and stress of the module achieve different kinds of presence for the typographic and image content.
clarity. Designers who embrace these ideals sometimes use modular grids to convey this additional meaning. How does a designer determine the module's proportions? The module could be the width and depth of one average paragraph of the primary text at a given size. Modules can be vertical or horizontal in proportion, and this decision can be related to the kinds of images being organized or to the desired stress the designer feels is appropriate.

The margin proportions must be considered simultaneously in relation to the modules and the gutters that separate them. Modular grids are often used to coordinate extensive publication systems. If the designer has the opportunity to consider all the materials that are to be produced within a system, the formats can become an outgrowth of the module or vice versa. By regulating the proportions of the formats and the module in relation to each other, the designer might simultaneously be able to harmonize the formats and ensure they are produced most economically.

The increased potential for arranging and proportioning content in a modular grid is seen here. Combining modules into zones for images (the gray areas) ensures variety as well as a unified relationship with text.

A six-column modular grid helps integrate text and images of varying sizes to provide contrast and variation without sacrificing the harmonious proportionality of the panels.

Clemens Hensel-Benzheider

A six-column modular grid helps integrate text and images of varying sizes to provide contrast and variation without sacrificing the harmonious proportionality of the panels.

Clemens Hensel-Benzheider

Putting It All Together
TWO OPPOSING GRIDS ... combined in the task to create conflict between text and image areas. The overlap of text and the pushing and pulling of image proportions create a col-
lege-like atmosphere that is edgy and intuitive in feeling.

Connie Hesterland.
Grid Hybrids and Combinations

Depending on the complexity of the publication, a designer might find that multiple grids are needed to organize the content, within sections or even a single page spread.

- Working with several grids together can take several directions. First, a grid with a large number of precise intervals might be developed as a basis for a variety of grids used for particular information. For example, a grid with twenty columns to a page might be used to order a five-column, four-column, two-column, and three-column grid with a larger margin for captions in a specific section. In this kind of approach, all the column widths will share a proportional relationship that will also be noticeable in how images relate to text set in these various widths.

- Another option is simply to use two, three, or more different grids that share outer margins, allowing them to be relatively arbitrary in their relationship to each other. In this approach, the alternation of the grids will be pronounced, since their internal proportions are unrelated; the resulting differences in visual logic between layouts using different grids can make very clear distinctions between sections or types of content.

- A third option is to combine grids on a single page but to separate them into different areas. For example, primary text or images might occupy a three-column grid in the upper two-thirds of the page, but a four-column grid might hold captions or other secondary content in the lower third of the page.
Grid Development

Building an appropriate grid for a publication involves assessing
the shape and volume of the content, rather
than trying to assign grid spaces arbitrarily.
The shape of the content, whether text or
image, is particularly important—its pro-
portions become the source for defining
the grid spaces. When considering text as
the essential building block, the designer
must look at variations in the text setting.

- Considering image as a source for the
grid spaces is another option. If the publi-
cation is driven by its image content, this
might be a more appropriate direction.
The proportions of the images, if they are

In this hypothetical study, several
source images, each with differ-
ent proportions, are positioned
relative to each other to help
determine where their depths
and widths might correspond.

Shifting the images around
each other creates a number of
possibilities for distilling a grid
that will accommodate them all
without having to crop them—
a hypothetical "client request."
known, can be used to determine the proportions of columns and modules. The result of both approaches is that the structure of the page develops naturally from the needs of the content, presenting an overall organic, unified sense of space.

**Grid by Image** A grid might be defined by image content through comparison of its proportions. Beginning with a universal height or depth for the images, and a consistent alignment among them, will allow the designer to assess how varied they are in format—squares, verticals, and horizontal. The designer must then decide how the images are to be displayed in terms of their size relationship to each other: will the images be shown in sizes that are relative to each other, or will they be allowed to appear at any size? If all the images hang from a particular flowline, their depth varying, the designer will need to address the images with both the shortest and deepest depths to determine what is possible for text or other elements below these variations. From these major divisions in space and the logic that the designer uses to govern them, a series of intervals might be structured for the images and for text areas surrounding them. It is also possible to structure the grid based on how images will be sized in succession. Perhaps the designer envisions sequencing the images in a particular way: first bleeding full off one page, then a half-page vertical, then inset, and then a three-quarter bleed. In this case, the proportions of the images as they relate to the format will define a series of intervals.
Grid by Text: Alternatively, the designer might approach the grid from the perspective of the text shape and volume. The sheer amount of text that the publication must accommodate is an important consideration; if each page spread must carry a particular word count to fit a prescribed number of pages, the designer will have some sense of how many lines of type must appear on each page. This variable might eventually affect the column width or depth, but the optimal setting is a good starting point. Achieving an optimal setting for text at a given size and in a given face will indicate a width for columns, and, from there, the designer can explore how many columns will fit side by side on a single page. Adjusting the size of the text, its internal spacing, and the gutters between columns will allow the designer to create a preliminary structure that ensures optimal text setting throughout. From this point, the designer must evaluate the resulting margins—head, sides, and foot—and determine whether there is enough space surrounding the body to keep it away from the edges of the format. Since optimal width can vary a little with the same text setting, the designer has some leeway in forcing the columns to be wider or more narrow, closer or further away from each other, until the structure sits comfortably on the page.
Column Logic and Rhythm on a Grid

The way in which columns of text interact with negative space is an important aspect of how a grid is articulated. The spaces above and below columns play an active part in giving the columns a rhythm as they relate to each other across pages and spreads. The options available to a designer are endless but can be described as fitting into three basic categories: columns that justify top and bottom; columns that align vertically at top or bottom and rag at the other end; and columns that rag top and bottom. Each kind of logic has a dramatic impact on the overall rhythm of the pages within a publication, ranging from austere and geometric to wildly organic in feeling—all the while ordered by the underlying grid. Changing the column logic from section to section provides yet another method of differentiating informational areas. The designer, however, must carefully consider the rhythm of that change.

Columns justified to the head and foot margins, or to a specific module depth, create a rigidly geometric band of text. Hanging columns provide a measure of consistency, balanced by their changing depth.

Columns that change hangline and depth offer the most organic (and flexible) option for arranging text, especially in terms of integrating images.

The differences in interval between column beginnings and endings must be decisive and considered for their rhythm. The heads and feet of the columns might be decided spontaneously or determined by the existence of flowlines or modules in the columns.
Some regularity or system must clearly exist in the alternation of column logic to be meaningful; otherwise, the audience simply recognizes the change but not its significance. When columns begin to separate vertically, shifting up and down past one another—or dropping to different depths while adhering to a single hangline above—consider the relationship between lines of text across the gutter separating the columns.

In a grouping of columns set justified, with no line breaks (or a hard return of the same leading) between paragraphs, the baselines between columns will align. Any other situation, and the baselines between columns will not align. In hanging columns, text will align between columns until a paragraph change. Because the depth of the hanging columns changes, this might feel appropriate. A problem will occur in a page spread set with columns justifying top and bottom, however, if the paragraph space introduces an uneven line: the lines of text at the foot margin will be noticeably off.
**Variation and Violation** A grid is truly successful only if, after all the problems have been solved, the designer rises above the uniformity implied by its structure and uses it to create a dynamic visual narrative of parts that will sustain interest from page to page. The greatest danger in using a grid is to succumb to its regularity. Remember that the grid is an invisible guide existing on the bottommost level of the layout; the content happens on the surface, either constrained or sometimes free. Grids do not make dull layouts—designers do. Once a grid is in place, it is a good idea to sort all the project's material spread by spread to see how much will be appearing in each. A storyboard of thumbnails for each spread in the publication can be very helpful. Here, the designer can test layout variations on the grid and see the result in terms of pacing—the rhythm of the layouts. Can there be a visual logic to how elements interact with the grid from page to page? Do pictorial elements alternate in position from one spread to another? Perhaps the sizes of the images change from spread to spread, or the ratio of text to image changes sequentially. Even simply placing images toward the top of the pages in one spread and then toward the bottom can make a difference.

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**Visual Logic**

**Structuring the Page**

**Intuitive Arrangement**

**Integrating Type and Image**

**Layout Systems**

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A simple trick to achieving layout variation is to arbitrarily cluster images toward the top of a spread and then toward the bottom on the spread following:

- Small images:
- Medium images:
- Large images:

Often, one may become a bit predictable, so it is good to vary the size of images to keep the viewer interested. The following examples show how images can be placed in different ways:

1. Small images:
2. Medium images:
3. Large images:

Occasionally ignoring a rigorous grid has a dramatic effect on pacing and hierarchy. In this study, just such an instance stands out among a series of layouts that are heavily structured. The resultant surprise breathes life into the pacing among pages and highlights the content that is off the grid.
bottom of the pages in the next achieves a powerful sense of difference while still ensuring overall visual unity. Violating the grid is a necessity of designing, sometimes because circumstance dictates it—content that must occupy a specific spread won't quite fit—or because it is visually necessary to call attention to some feature of the content, or to create some surprise for the reader. Within a rigorous grid structure, violations must be relatively infrequent or relatively small, or they begin to undermine the reader's sense of the grid's consistency. Any specific item or general layout that violates the grid will be very dramatic. Disturbing the regularity of a column of text by allowing an element to jut out past the alignment not only will be instantly noticeable but also will cause the wayward element to shift to the top of the hierarchy; it becomes the most important item in the layout because it is clearly the only thing out of order. Designing a two-page spread that ignores the grid established for the remaining pages of a publication ensures that spread will be memorable. The problem facing the designer in making such a dramatic decision is that of integrating the layout into the publication's overall visual logic: what defines this spread as belonging to the same publication? Usually, using the same typefaces as are used elsewhere will do so, as will application of similar colors as on other pages; but these alone will not unify the altered spread with the others that clearly follow an established structure. The designer must create some reference to the established structure even as he or she violates it—perhaps a typographic element from the previous spread continues onto the unique spread. In addition, the designer must consider the transition back into the grid-structured pages following the violation; if the pages following this particular spread are a continuation of its content, the designer might add smaller violating elements that recall the major violation while reestablishing the regular structure.
Exploring Other Options: Nonstructural Design Approaches

Grid structure in typography and design has become part of the status quo of designing, but, as recent history has shown, there are numerous ways to organize information and images. The decision whether to use a grid always comes down to the nature of the content in a given project. Sometimes that content has its own internal structure that a grid won't necessarily clarify; sometimes the content needs to ignore structure altogether to create specific kinds of emotional...
reactions in the intended audience; and sometimes a designer simply envisions a more complex intellectual involvement on the part of the audience as part of their experience of the piece. Our ability to apprehend and digest information has become more sophisticated over time as well: constant bombardment of information from sources such as television, film, and interactive digital media has created a certain kind of expectation for information to behave in particular ways. One has only to look at television news broadcasting or reality-based programming, where several kinds of presentation—oral delivery, video, still images and icons, and moving typography—overlap or succeed each other in rapid succession to understand that people have become accustomed to more complex, designed experiences. In an effort to create a meaningful impression that competes with—and distinguishes itself within—this visual environment, designers have pursued various new ways of organizing visual experience.
Grid Deconstruction The first option is splitting apart a conventional grid, even a very simple one. A structure can be altered in any number of ways. A designer might "cut apart" major zones and shift them horizontally or vertically. It's important to watch what happens when information that would normally appear in an expected place—marking a structural juncture in the grid—is moved to another place, perhaps aligned with some other kind of information in a way that creates a new verbal connection that didn't exist before. The shifted information might end up behind or on top of some other information if a change in size or density accompanies the shift in placement. The optical confusion this creates might be perceived as a surreal kind of space where foreground and background swap places. A conventional grid structure

SHIFING columns and exaggerated textual qualities harmonize the type with the images.

Hynkoek Kang School of Visual Arts, United States

Tribute to MM UF

In the 1930s, Werkman developed new technologies for the application on paper of his graphic systems, which he was able to exhibit in the De Stijl circle and to the freedom of cultural expressionism. He commenced to manually intervene in the printing itself, with stencils and shaped matrices, using the tool directly to provide help to the form of the brush, while also using its external part.

SLIGHT OVERLAPS in columns, changing column widths, and column rotations create movement and semantic spaces reminiscent of the design work and historical context of the poster's subject without copying his style or showing any of his own projects.

Leonardo Sbarbati Italy

Sixty years have passed since 1945, in which Werkman was arrested by the secret police on 13 March, and executed on 30 April. Here, in the poem "De Swijt" in his last calendar: "Only many years later was the extent of his influence on entire generations of graphic people understood, the poetic rebirth of a humble Dutch printer."
Visual Logic

Structuring the Page

Intuitive Arrangement
Integrating Type and Image
Layout Systems

Objectif:
Cinéma
18 Février au
27 Mars 2005

CUT-AND-PASTE: Typographic texture is distributed in both spontaneous and ordered ways in this poster.

SubCommunications Connects

17.22

This poster organizes typographic material loosely and organically, showing evidence of the designer’s attention to looseness and contrast relationships in proximity, clustering, overlap, edge-to-edge spacing, and angular versus curvilinear logic.

Cathy Keo, The Art Institute, Chicago, County, United States
Spontaneous Optical Composition

Far from being random, this compositional method can be described as purposeful intuitive placement of material based on its formal aspects. Seeing the inherent visual relationships and contrasts within the material and making connections for the viewer based on those relationships. Sometimes designers will use this method as a step in the process of building a grid but its role as an organizational idea on its own is just as valid. This approach starts fast and loose allowing the designer works with the material much like a painter does, making quick decisions as the material is put together and the relationships are first seen. As the different optical qualities of the elements begin to interact, the designer can determine which qualities are affected by those initial decisions and make adjustments to enhance or negate the qualities in whatever way is most appropriate for the communication. The method's inherent liveliness has an affinity with collage; its sense of immediacy and directness can be inviting to viewers, providing them with a simple and gratifying experience that is very accessible. The result is a structure that is dependent on the optical tensions of the composition and their connection to the information hierarchy within the space.

THE DESIGNER HAS CREATED
a shifting maze of positive and negative shapes to contain, as well as work around, the text elements. The shapes take on the attitudes of road signs and architecture but appear to move about, as heavy masses, open spaces, and texture collides and separates.

HAPPINESS IS A HARM GUN.

CONFESSIONS

TUNE INTO THE SPIRITUAL, LISTEN TO THE LYRICAL, BRING IT INTO THE PHYSICAL.

EXTREME SCALE CHANGES, contrast in weight among the scales of the large title, and the textural qualities of the diagonally aligned paragraph and background elements create dynamic foreground and background relationships and a very colorful set of contrasts.

Ko-Hsiung Wang The Art Institute, Orange County, United States
**Conceptual or Pictorial Allusion** Another interesting way of creating compositions is to derive a visual idea from the content and impose it on the page format as a kind of arbitrary structure. The structure can be an allusive representation of a subject, like waves or the surface of water, or can be based on a concept, like a childhood memory, a historical event, or a diagram. Whatever the source of the idea, the designer can organize material to refer to it. For example, text and images might sink underwater or float around like objects caught in a flood. Even though no grid is present, sequential compositions are given a kind of unity because of the governing idea. Margins, intervals between images and text, and relative depth on the page might constantly change, but this change has recognizable features that relate to the overall idea; these might even be called allusive structures. In projects of a sequential nature, like books or walls in an exhibit, visual elements relate to each other in time, as though in frames of a film. Images might move across a format or otherwise be changed from page to page, affecting other images or text that appear later. A simple example of this visual kinesis might be a sequence of pages where text appears to advance forward in space because its scale changes incrementally every time the page is turned. Using sensory experiences of space and time as organizing principles can be a powerful tool for evoking a visceral, emotional response from viewers.
FROM LEFT TO RIGHT AND BACK MORE TIMES TO END AND

VEILS OF COLORED TEXTURE

and persuaded type-making
in two directions, under the
web of Arabic culture and in
close to LegorGO. reading
the present moment by that of
Woven by Weaving.

Leonardo Sciascia (1921)
Visual Relationships Between Words and Pictures

Getting type to interact with imagery poses a serious problem for many designers. The results of poorly integrated type and image fall into two categories. The first category includes type that has nothing in common with the images around it or is completely separated from the image areas. The second category includes typography that has been so aggressively integrated with image that it becomes an illegible mass of shape and texture. Images are composed of lights and darks, linear motion and volume, contours, and open or closed spaces, arranged in a particular order. Type shares these same attributes. It is composed of lights and darks, linear and volumetric forms, and contours and rhythms of open and closed spaces, also arranged in a particular order. The task is finding where the specific attributes of both come together.

THE STAGGERED MOVEMENT

and size change of the type correspond to the vertical movement of the sewing machine needle—contrasting it with horizontal motion—and the flow of fabric through the sewing machine.

VCU Qatar Qwaq

Integrating Type and Image

Placing the type directly onto the image permits a quick comparison of the shapes within both elements. In these examples, the type responds to the scale changes, directional movement, and the tonal variations found in the images.

THE IMAGE OF the spiral staircase, symbolizing career evolution, is visually similar to the spiraling geometric shapes in the logo.

C. Harvey Graphic Design United States
Laying type into or across an image is a quick way of finding visual relationships. Their immediate juxtaposition will reveal similarities in the shape or size of elements in each. The rag of a short paragraph might have a similar shape as a background element in a photograph. An image of a landscape with trees has a horizon line that might correspond to a horizontal line of type, and the rhythm and location of trees on the horizon might share some qualities with the type's ascenders. At the opposite end of the spectrum, the image and the typographic forms might be completely unrelated—in opposition to each other. Opposition is a form of contrast that can be an equally viable strategy for integrating the two materials. A textural and moody image with great variation in tone, but no linear qualities, might work well with typography that is exceptionally linear, light, and rhythmically spaced. The contrast in presentation helps enhance the distinct qualities of each.

PHILADELPHIA YOUTH ORCHESTRA
ANNUAL FESTIVAL CONCERT

Sunday, May 8, 2005
3:00 PM • Verizon Hall
The Kimmel Center for the Performing Arts

PHILADELPHIA YOUTH ORCHESTRA
Joshua Ence, Conductor

THE DIRECTIONAL MOVEMENT

of the delicate, curving feather form is supported by the back-and-forth shifting of the poster's title while its vertical structure is restated by the rotated type elements. Careful attention has been paid to the locations of visual stress and openness within the image in considering the placement of the type elements to interact with it.

Pierce Design Associates United States

ALTERNATING DARK AND LIGHT

Typographic elements in the upper portion of the brochure were used to set up the text. A black and white photograph and a stylized image of a sunflower are used to create a contrast in the landscape image.

Andreas Ortig Austria

COOL

calm

and

[CONNECTED]

When film producer Tim Lynch is in charge, SERENITY RULES

THE TEXTURAL COLLAGE

Changing typefaces and sizes echoes the graffiti on the wall in the photograph.

Barbara Ferguson United States
**Formal Congruence** Similarities between type elements and pictorial elements make a strong connection between the two. Every image portrays clear relationships between figure and ground, light and dark, and has movement within it. Objects depicted in photographs have a scale relationship with each other and proportional relationships with the edge of the image. When typographic configurations display similar attributes to an adjacent image, or expand on those attributes, the type and the image are said to be formally congruent.

The type in this series of studies is related to the image alternately through position (A); repetition of linear movement and alternation of weights (B); mimicry of depth and perspective (C); and the angle of its alignment (D).

The numerals and the figure have similar shapes and movement. Note how the position of the numeral 3 highlights the mass of the shoulder and the curve of the torso.

The light and dark areas of the image show similarity to the locations, shapes, sizes, and tonality of the type forms.

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*The Designer Uses* typographic features in the background—and its color—to correspond formally with the design in the silhouetted image but uses the violet type to formally oppose the image. This violet type, however, shares a formal quality—contrast in stroke weight—with the light, letterform script.

Finest Magnus, Germany
There are an unlimited number of ways for type to become congruent with an image. The selection of a particular face for the type might relate to tonal or textural qualities in the image. Instances in which type extrapolates the formal qualities in an image create powerful emotional and intellectual responses in the viewer. Type that is adjacent to an image also can be formally congruent in terms of its position relative to the image. In this kind of formal congruence, the image exerts an influence on the composition of the page as a whole.

Even if the type retains its natural architecture, it may still react to the compositional architecture within the image. All three elements—image, format, and type—appear to share the same physical space. **Formal Opposition** Relating typographic elements to images by contrasting their visual characteristics is also a viable way of integrating them. Although seemingly counterintuitive, creating formal opposition between the two kinds of material actually can help clarify their individual characteristics. Contrast is one of the most powerful qualities that a designer can use to integrate material—by their very difference, two opposing visual elements become more clearly identified and understood.

Within a letterform combination of an M and an O, for example, the fact of the M's angularity is reinforced by the curved strokes of the O. The movement within each form is made more pronounced, and the two elements essentially fight for dominance. The caveat is that some congruence between the elements must also exist so that the opposing characteristics are brought clearly into focus. In the same way that a hierarchy is destroyed if all the elements are completely different, the strength of the contrast in opposing forms is weakened if all their characteristics are completely different.

In these three examples, the visual relationship between type and image is one of opposition, but the choice of type style and treatment in each example shares some formal relationship with the image:

1. A soft-focus photograph with muted detail and light tonal values overall is contrasted by a bold-weight sans serif typeface, but the subdued color of the type shares a tonal and color relationship with the image.

2. A regular-weight modern serif face with a great deal of contrast in the strokes—the opposite of the photograph's lack of contrast. The geometric quality of the typeface responds to shapes apparent in the image.

3. A lightweight text with very active details; the type's stylized quality counteracts the passive, neutral character of the image, but its arrangement within the image responds to areas of light and dark.

A study of letterform combinations reveals both congruence and opposition. The inherent differences between the O and M are made more pronounced by changing the posture, weights, styles, and positions of the letters; yet the combinations in which they share one—or two-aspects seem richer. The inherent similarities of the A and K allow for more dramatic opposition because their structural similarity is so powerfully congruent.
Positioning Strategies Consider the location of the type relative to the image and the attributes of the image's outer shape in relation to the format. An image cropped into a rectangle presents three options: the type might be enclosed within the image; the type might be outside, or adjacent to the image; or the type might cross the image and connect the space around it to its interior. Type that is placed within the field of a rectangular image becomes part of it. Type adjacent to a rectangular image remains a separate entity. Its relationship to the image depends on its positioning and any correspondence between its compositional elements and those in the image. The type might align with the top edge of the image rectangle, or it might rest elsewhere, perhaps in line with a division between light and dark inside the rectangle. Type that crosses over an image and into the format space becomes both part of the image in the rectangle and part of the elements on the page. Its location in space becomes ambiguous.
Type will appear to change spatial relationships when placed on, in, or next to a cropped image. This spatial ambiguity might also involve the space around the cropped image, creating a connection between the field, image, and type that brings them together in space. The type at top left is part of the image. In the layout at upper right, the type leaves the image; it enters the format space and moves into the foreground. The type crossing the image, lower left, joins image and space by crossing the image. At lower right, the type responds to the rectangular shape of the image, relating it to the format shape.

Wer Grenzen kennt schafft weite

FOR ALL APPEARANCES, the chapter title on this book spread is situated on the gallery wall at the back of the image.

Hinest Magna Germany
A modular grid—even a very simple one, as shown here—will provide an almost endless number of possibilities for arranging images. Clearly, less can do more.

Strategies for integrating images on a simple column grid revolve around the relationship of the images to flowlines—whether the images hang from one (A); hang from several (B); appear anywhere vertically, conforming only to the column widths (C); or stretch between flowlines in a more rigid approach (D).
Integrating Images with a Grid Using a grid structure to organize pictures and text means bringing them in line with the natural horizontal and vertical axes created by columns and blocks of text. By organizing images into a grid that repeats these attributes, a designer chooses to deemphasize their internal visual qualities in favor of the structural proportions of the page. A designer may use either a column grid without modules, or a modular column grid, to provide locations and proportions for images. As images increase in size, based on the widths of columns or modules, their internal visual qualities become more pronounced, and the structural quality of the type begins to contrast the image. As images shrink relative to the grid, their internal visual qualities become less pronounced, and their shapes as geometric objects within the text structure become more important. This fluctuation is another compositional attribute imparted by the grid. Even though using a grid to organize images might seem to stifle their visual potential, remember that a grid has a kind of built-in, organic flexibility to it. A simple column grid has consistent width intervals that pictures can traverse—the more columns, the more possible widths for images—but it also allows a variety of depths for the images. Images might be allowed to meet a system of flowlines if they are established as part of the column grid. Modular grids, which at first appear to limit possibilities for images, actually provide enormous flexibility for how images might interact on a page. Each module can contain an image, and groupings of modules in any combination may also contain images—3 x 3, 3 x 5, and so on, all the way up to full-bleed images and large divisions of the overall spread.
Silhouetted images contrast sharply with rigid grid structures by virtue of their irregular outer contours. Still, the designer must position silhouetted images with respect to the grid so that they don't seem out of place but, rather, flow smoothly into the geometry surrounding them. Although such images are irregular in shape, the designer must ensure that they "feel" as though they're proportioned and situated like grid-structured images, yet retain their inherent organic quality without feeling stiff or awkward.

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**Visual Logic**

**Structuring the Page**

**Intuitive Arrangement**

**Integrating Type and Image**

**Layout Systems**
In the first version of the spread (left), the size of the silhouetted image, along with its strict adherence to the margins and column guides, causes it to seem small, weak, and somewhat stiff. Resizing the image—and adjusting its orientation so that it optically relates with other grid-structured images—not only makes it seem more at home in the structure with the surrounding elements, but also enhances its irregularity with regard to creating contrast to the structure's clear geometry.

The relationship between the image shape and the rag becomes dominant if the rag enters into the image's contour; the geometric alignment in the same block of text will naturally counter the irregular forms within the silhouetted image.

**Integrating Silhouettes** Silhouetted images—which contours are free from enclosure in a rectangle—share a visual relationship with the rags of paragraphs or columns but also share an opposing relationship with their alignments. Type adjacent to a silhouetted image offers more or less contrast, depending on its location relative to the image. If the rag leads into the image contours, the two elements flow together, and the type might seem to share the spatial context of the image. Bringing the vertical alignment of a column into proximity with an image's irregular contour produces the opposite effect: the type advances in space and disconnects itself from the spatial context of the image. The strong contrast between the aligned edge of the type and the contour of the image might then be countered by the irregular contour of the column's rag.

**GEOMETRIC SILHOUETTES**
- The circular teacups and the triangular potting marker—are contrasted by the regular silhouettes of the flowers and leaves. Both types of silhouettes contrast the angular and linear aspects of the type structure.

Red Canoe United States
Design as a System

The vast majority of designed works—printed, interactive, and environmental—are systematic in nature; the existence of a single-format, one-off design piece is exceedingly rare. A website, for example, consists of multiple pages that interact; consider, too, the pages of a book in sequence, all of which must relate to each other, as well as to the exterior of the book as an object itself. Most publications are produced serially—meaning that new issues are produced periodically, as with magazines or newsletters—or sequentially—meaning that they are either a family of separate, but related, items that are produced all together, or that they are individual publications whose information is augmented or supported at different times, such as families or series of brochures. Advertising campaigns, too, are systematic: a single format might be used serially, placed in sequential issues of a magazine, or the ads within a campaign might appear simultaneously in multiple...
Consistency and Flexibility Establishing tension between repeated, recognizable visual qualities and the lively, unexpected, or clever manipulation—even violation—of those qualities in a system-oriented work is a difficult task. At one extreme, designers risk disintegrating the visual coherence that makes for a unified and memorable experience by constantly altering the project’s visual language in his or her effort to continually refresh the viewer. At the other extreme, treating material too consistently will kill the project’s energy. In some instances, it might also do the material a disservice by constraining all elements into a strangled mold that decreases the clarity of either the concept or informational relationships by not allowing these to flex as they must. The renowned designer, Massimo Vignelli—known chiefly for his rigorous use of grid structures—put it this way: “A [structure] is like a cage with a lion in it, and the designer is the lion-tamer; playing with the lion is entertaining and safe for the viewer because of the cage, but there’s always a danger that something will go wrong… and the lion-tamer has to know when to get out so he doesn’t get eaten.”
A SIMILAR STRATEGY is employed in the series of business cards. The size and position of elements, both on the front and the back of each card, remain the same, but the color palette changes.

Fisher & Company

In depth study of the potential formal variation possible for even one aspect of a project's visual logic can be time-consuming, but the results of even an hour or two of experimentation can open up a wide range of possible solutions (as well as solutions for other projects with which the designer is struggling). "Serious study" means looking for a range between extremes within a particular variable—very light versus very dark, for example—and taking into account off-shoots of logic that potentially could lead to a truly original solution. Even if the study isn't rigorously organized or the actual composition of the studies isn't totally resolved, just seeing the possible permutations can be invaluable. A rough composition study for a poster series yields a multitude of possibilities for a consistent, yet flexible, visual language. In each set of examples, one aspect of the visual language has been called out for variation without disturbing any of the other aspects. In the first, scale change
Finding Flexibility  There are two fundamental variables in any project that a designer can investigate while looking for strategies to keep the work visually consistent as well as flexible. The first variable has to do with the way material is presented, what its actual form and colors are. Within a given project, there may already be a range of possibilities that the designer has established—the options within a selected color palette presents one possibility of changing the presentation of material; the kinds of images the designer chooses to use might also offer a range of options. The second variable is pacing—altering the frequency of different page components in some kind of pattern so that the kinds of images or shapes, the number of images, and the amount of specific colors from within the palette are constantly changing.

is the variation that is exploited for flexibility; in the second study, the shape of the organic forms changes, but their essential identities remain recognizable; in the third, position of elements is the only variation.
Formal Variation  As noted earlier, a designer's understanding of the internal logic of the visual language he or she is creating is paramount; one variable a designer can look at to create flexibility is variation in the visual language's internal logic. The first step is to consider what the components of that visual logic are, and, if necessary, make a written list of them. Asking simple questions of oneself is a great way to begin the evaluation process--and answering such questions as simply as possible is equally important. “What are the visual components of this project?” “What kind of images am I using?” “Is geometry important in the shapes or relationship?” “Is there spatial depth, and, if so, what creates it--transparency, scale change, overlap?” “Do I sense movement, and, if so, is it lateral, vertical, frenzied, calm and repeated?” Once the designer has answers to these questions, focusing on one or two of the variables--scale change and color family, for example, or texture, organic shapes, and overlapping--might lead to establishing rules for how these variables might be altered without changing their fundamental character.

ALTHOUGH THE TYPOGRAPHY throughout this identity program is rigidly styled as a consistent grid, the designer has introduced flexibility in form at every level: variations in the visual shape of the logotype, a series of abstract line illustrations that can be used in a number of ways, and a strong color palette of analogous hues with varying levels of intensity.

Claireness Théobert Scheffler
Austin

Achtundzwanzigtausend Quadratmeter
Vision    Kooperation

Lakeside  SCIENCE TECHNOLOGY
Riesenrad & Hightech
Einladung zur Eröffnung
Lakeside Science & Technology Park
22. April 2005
13.00 bis 17.00 Uhr

Auf dem Campus der Universität Klagenfurt eröffnet mit dem Lakeside Park ein internationales Zentrum für die Zusammenarbeit zwischen Bildungsinstitutionen und Wirtschaft. Im Rahmen der offiziellen Eröffnungsfeierlichkeiten präsentiert sich der Lakeside Park auch Nachbarn, Freunden und interessierten. Wir freuen uns auf Ihr Kommen!

Zeit & Ort
Freitag, 22. April 2005, 13.00 bis 17.00 Uhr
Lakeside Science & Technology Park

www.lakeside-sch.ac.at
Overall Progressive Sequencing
This strategy articulates image and text on a grid beginning with one type of logic and progressively changing the logic spread by spread. The result is a continuous transition in the pacing over the course of the entire project.

Overall Syncopated Sequences
In this approach, content is articulated on a grid using one type of logic for a particular sequence of page spreads, altering the logic for a second sequence of spreads, and then returning to the previous logic. This strategy can become more complicated—instead of the A-B-A rhythm described, a rhythm of A-B-A-C-A might be used, or A-B-C-B-C-D-C-D-E, for example.

Continuous Variation
This is an approach in which the articulation of content continuously changes from spread to spread. The change might focus on the relative position of elements or on the proportions of spatial zones given to specific informational components.

Section Variation
The same grid is articulated using a specific logic in one sequence of page spreads, another logic in the following sequence, and another logic in the sequence after, without repetition. Or, completely different grids might be used in each section.

Content Presentation Changing the Content's Visual Attributes

Color Progression or Syncopation
In this visual strategy, page sequences exhibit a distinct color scheme, either varying completely between sequences or tied together by a color or two that are universal. The color schemes might progress—from cool to warm, or neutral to vibrant—or they may alternate in a particular rhythm—cool, warm, cool, warm.

Scale Progression or Syncopation
Similar to color progressions, this variation focuses on scale change from spread to spread or from sequence to sequence. Images might grow in scale over a sequence of pages, or their scales might alternate between page spreads or sequential sections. Scale-based pacing might or might not be influenced by grid variation.

Text Vercue Image
The relationship between the amount of text and the amount of image material changes, either progressively or in a distinct rhythm.

Image Treatment Progressions or Syncopation
This approach presents changes in image treatment or mode between spreads or sequences, for example, progressing from representational to abstract, or alternating between photographic and graphic icons. The complexity of the material may be reflected as a progression—for example, simple to complex—or as a syncopation—simple/complex/simple/complex.

Since every project is different, the ways in which a designer might address pacing in a specific project are unlimited. However, most pacing strategies can be distilled into two basic overall approaches.

Structural Variation
Regardless of the content's treatment in terms of color, imagery, or typography, the structure of a publication can be articulated in a variety of ways.

Content Presentation
Aside from varying structure, the designer might exploit formal variation and opposition within the content to create pacing changes: its color, scale, photographic or illustrative treatment, and its complexity. Sometimes such pacing changes coincide with structural variation; for example, changing the scale of images over a page sequence might reflect a change in grid logic. At other times, changes to content treatment for pacing might be independent of any structural variations.
Pacing and Sequencing Building off the idea of variation, the order in which a designer delivers content—or, the order in which the formal variation occurs—can be a powerful method for creating variation without disturbing the essential logic of the visual language. The sequence of a multipart project creates a particular rhythm, or pacing. Pacing can be understood as a kind of cadence or “timing” the reader will apprehend from part to part—whether from homepage to subpage within a website, or between page spreads in a magazine, or between brochures in a literature system—almost like a film.

By varying this rhythm from slow to fast, or from quiet to dynamic, for example, the designer can accomplish several goals. One result achieved is strictly visual: each turn of a page engages the reader in a new way by varying the presentation. Another result might be that the reader is cured to a significant content change; the informational function is clarified by the pacing.

Periodic publications, such as magazines, present specific concerns regarding pacing. Much of a publication’s flow will be determined by its overall structure. Magazines, for example, are often divided into sections: a series of “department” pages that recur in the same order every issue and a sequence of feature stories that changes every issue. Within each section, too, the designer must establish visual variation so that the reader, while recognizing a consistent structure, doesn’t become bored. On a conceptual level, the pacing and sequencing contribute tremendously to the message delivered by content. Indeed, such organization may be an intrinsic part of the concept that governs the visual presentation of the content. Sometimes, content organization derives directly from the designer’s common-sense understanding of the content’s

THIS NEWSLETTER employs a clear, simple strategy to create rhythmic pacing from spread to spread: changes in the sizes, proportions, and placement of photographs. Using tinted blocks to call out specific portions of text also introduces constant change in the presence of the type.

Martin Oostra Netherlands
structure, or from generally accepted (even legally required) conventions as to how particular content ought to be delivered. In the first instance, for example, the general public assumes that the upper levels of a Web site’s content will be more general, each directing them toward more specific content as they delve further into the site. Conventions abound for publications such as books or periodicals, where the average reader assumes a certain kind
of introductory sequence, followed by sections or chapters that group related or sequential content. In the second instance, an annual report is legally required to present brand-related content separately from financial data, and the date must appear in a specific order. Most projects, however, benefit from evaluating the expected method of delivery and finding whether it will best serve the content as defined, or if a better sequence is more appropriate. Designers must always investigate this aspect of a project—the fundamental relationship of all the content’s parts—on a case-by-case basis, and in association with their conceptual goals and their client’s communication goals.

**THE SPREADS IN** each chapter of this book on abnormal psychology progress from arrangements of image and type that communicate the quality of a given disorder to a state of grid-based resolution that describes various treatment options and successful case studies.

Jae Jin Lee, School of Visual Arts, United States.
Appendix A

The Right Design Choices

Twenty Reminders for Working Designers
1. Have a concept.
2. Communicate; don’t decorate.
3. Speak with one visual voice.
4. Use two typefaces maximum.
5. Show one thing first.
6. Pick colors on purpose.
7. If you can do more with less, do it.
8. Negative space is magical.
9. Treat type as image.
11. Be universal; it’s not about you.
12. Squish and separate: create rhythms in density and openness.
15. Measure with your eyes.
16. Make what you need; don’t scavenge.
17. Ignore fashion.
18. Move it! Static equals dull.
19. Look to history, but don’t repeat it.
20. Symmetry is the ultimate evil.
If a design doesn’t feel good in your heart, what the mind thinks doesn’t matter.

April Greiman
Graphic designer, author, and educator

Appendix B
Rules in graphic design exist as guidelines to help establish a way to evaluate what's good and what's not; but, more importantly, they serve to help designers avoid problems that interfere with communication. It is often said, however, that rules are made to be broken, and this is never truer than in design. No two projects are alike: every project comes with different requirements, different messages and ideas that must be expressed, and different—sometimes very specific—audiences. No design approach is ever out of bounds or "illegal"—thou shalt not, on pain of death. In breaking rules, it is important for designers to understand what a rule means and, most importantly, what will happen when the rule is broken. Some rules are less flexible than others; for example, a really dark gray word printed on an even darker background will likely be illegible or close to it. This is not to say that making some type difficult to read can't be an appropriate part of the design; it's just a matter of context: Is making type difficult to read appropriate to that project, and why? Which type elements will be difficult to read? When breaking a rule, there is likely to be a trade-off—something will be gained, and something lost. The designer must decide whether the sacrifice is acceptable and ultimately be prepared to accept the consequence of the decision. Once a designer feels confident that he or she understands how the rules work and what the effects of breaking them will be, a designer must decide why, when, and how. Some of the greatest innovations in graphic design will happen when the designer knowingly—and intelligently—throws the rule book away.

Don't expect theory to determine how things look.

Michael Rock
Principal of 2x4, New York; graphic designer and educator
Sometimes a designer needs to get out of the way to let the content speak with as little interference as possible. This is true in the case of pure information design—in forms, for example, where the content’s only requirement is to get seen and understood very easily—but might also be true for other project types as well. Being neutral and having no concept, that is, selecting a pleasing color scheme, neutral typefaces, and a pleasant paper stock—almost to the point of being purely decorative—can result in a quickly accessible, informative, and functional object, which is not without its appeal.

Have a concept.

Breaking It

Much of designing is simply problem solving: how to set up a system for information that is easy to use, easy to recreate, and gets the job done. Such is the case for these office-furnishing self-sheets. No concept, just clear hierarchy, thoughtful treatment of type with weight and size to distinguish informational components, pleasantly decisive margin proportions, and a grid to accommodate one image or multiples.

The artifacts collected in the client museum are their own content and concept, and there’s no need to embellish that fact in the website. Instead, the design team has focused on developing a strong and easily navigable structure that separates different content areas, is flexible for presenting different combinations of content, and is scalable for future updates. An analogous scheme of greens and pale beige unify the feeling of the site, further help distinguish navigational elements, and generally leave the fanfare to the striking images from the museum’s collection.
This poster promotes a video production studio, but one might not know that from the selection of collage elements, which are unrelated to the subject matter—except for a hint of film reels in the central area. Instead, the selection of collage elements plays off the abstract notion of the tag line, “Music for the Eyes,” and creates references to cultural and stylistic attitudes that might be appropriate to the audience.

Thomas Csano Canada

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Breaking It Communicate—

When the message warrants it, use form willy-nilly, without regard for its meaning. This, in itself, might be interpreted as a message and—on rare occasions—that message is appropriate as part of a design solution. A project concerning Baroque architecture or Victorian aesthetics, for example, might very well benefit from extremely decorative treatments that would otherwise constitute a crime against nature.
These posters are part of a series promoting events during one season of a jazz festival. Unlike most event branding schemes, however, they don't offer any similarities in color, type style, spatial arrangement, or form language. In this case, violating the cardinal rule of consistency expresses the improvisational nature and individuality of each performance. Another benefit is that potential patrons won't be likely to mistake one performance announcement for another and accidentally miss something they would like to see.

Niklaus Troessler Switzerland

The quickest way to draw attention to a particular element is to make it different from everything else around it, and this can be highly effective as a communication strategy. Disharmony among visual elements—whether stylistic, or in terms of spatial arrangement or color relationship—is also a message unto itself.
An extremely complex text, with a great many parts, will be clarified by strong, varied changes in type style. Sometimes you'll need many different typefaces working together to create a certain kind of texture, a busy-ness, that conveys something really important about the client, the subject of the project, or the project's relationship to some other context. Thinking outside the type box can be difficult, especially if you're comfortable with a select set of typefaces: so take a deep breath, close your eyes, and click the font list at random to see what happens. You might be surprised.

A tremendous variety of typefaces shares space in this music publication. The constant change in typographic style relates to the various musical genres and will appeal to younger audiences that culturally expect a constant shifting of stylistic language in their visual diet.

Ames Bros, United States

Breaking It

Use two typeface families maximum. Oh, maybe three.
Breaking It
Use the one-two punch!

Presenting a multitude of items for simultaneous consideration is usually a no-no, but, in some instances, it helps get the information out front quickly, leaving the viewers to pick which thing interests them most or which is most important at a particular moment. Letting the viewers decide, instead of pointing the direction out for them, can be a good way of engaging them—making them participate in getting the information, rather than handing it to them on a plate. If they have to work for it, they might enjoy it and remember it more easily later.
Being completely random with color selection—choosing colors whose usual association purposely conflicts with expectation—for a project is a viable method that can achieve some surprising results. After a time, choosing color using familiar methods yields combinations that are, at the least, somewhat expected and, at the worst, completely uninteresting. Purposely selecting colors that feel awkward in combination or disharmonious might present unexpected options that, despite their seeming randomness, retain some chromatic relationship. Additionally, a random color choice might sometimes aid in communication, depending on the nature of the project. Seeming randomness, like other messages, can be valid given the concept the designer intends to convey.

Pick colors on purpose.

Breaking It

They say you're scared.
They say you don't care.
They say you won't stop AIDS.
You know different.
Get real.
Get tested.
Get your results.

www.youknowdifferent.org

Each of these two projects explores color in a relatively random or contradictory way. The public service advertisement (A) uses a jarring combination of intense colors that are unrelated in value and temperature to create contrast and enhance the stark directness of the message. The currency design, however, avoids the color cliche usually associated with China in favor of a cool, vivid scheme of analogous hues that calls to mind fruit, water, sky, and leaves.

A Metropolitan Group
United States

B Maggie Vasquez Laguna College of Art, United States

OK, there's really no good way to break this rule. An absence of negative space is a disaster and always will be. That said, allowing visual material in particular segments of a project to overwhelm the compositional space—on occasion, in response to other segments in which negative space is used liberally—can be an excellent strategy for introducing dramatic rhythm and helping separate out simpler material for special attention.

Negative space is magical—create it, don't just fill it up!

Speaking of overdoing it: This book appropriately and excitingly delivers its content, an exploration and showcase of a design trend called Maximalism, in which the more ornament, texture, complexity, and surface treatment, the better. The pages revel in overblown patterns, layers of texture, abstract graphic elements, and color; yet somehow the images and text are presented in a masterfully clear way.

Loeavy United Kingdom
Breaking It

There are always times when typography needs to shut up and get out of the way of the pictures—especially when the type accompanies catalogued artwork or is acting in support of images that are carrying the brunt of the communication burden. In such instances, treating the type as quietly and as neutrally as possible can be most appropriate. Even so, the relationship of the typography to the format will bear some consideration, as will consideration of its size, spacing, and stylistic presentation.

The relationship between the typography and the images in this brochure is absolutely neutral; they completely contrast with each other in quality and are independent of the other’s compositional strategy. This, in itself, is a very clear kind of logic and perfectly acceptable when it's done with understanding.

Carregal Pease (Mind Stale)

The headline on the cover of this brochure is as understated and un-designed as could be. It's pleasantly sized and sits at an interesting location in the space, but, other than that, it hasn’t been fussed with too much. How refreshing!

Lotway United Kingdom
In a perfect world, everyone would be friendly and every message we read would be about how friendly we are. Sadly, this is not the case—and many messages are not particularly friendly. As you might guess, the relative accessibility of type greatly depends on the message being conveyed. Making portions of type illegible, overbearing, aggressive, sharp and dangerous, nerve-wracking, or fragile is perfectly acceptable—indeed, preferable—when the job calls for it. There is no excuse for typography that doesn't viscerally communicate in an appropriate way, even if this means frightening, frustrating, or confusing viewers in service of the right concept.

A tricky, textural exploration of legibility and access occurs in this experimental typographic layout. The concept, appropriately supported by the difficulty in reading the type, is about getting lost in information.

Mundo Graphics Australia
Always tailor the message to the audience; this includes ignoring the usual imperative to communicate with the widest possible constituency to speak directly to a very small audience in culturally specific ways. For a small audience whose cultural expectations of visual messaging are closely related—a CD cover or music poster, as opposed to a large-scale, general-public branding campaign—using visual metaphor, idiosyncratic stylistic treatments of type or image, and color that references their shared context will resonate more personally and evocatively than images and color that are designed to speak to as broad a group as one is able.

Breaking It
Dynamic, ever-changing, rhythmic movement is highly engaging and most often desirable as a way of attracting and holding attention. Still, a pronounced lack of movement or tension creates an altogether different feeling in a project and, when it makes sense for the message, is quite appropriate. Sometimes, constant visual activity and bouncing movement will adversely distract viewers from focusing on the content. Consistency in rhythm and arrangement is a message that can also communicate.

Although there are some areas of tension and density in this poster invitation (try finding a good piece of design where there's absolutely no contrast whatsoever!), the tension is minimal. Overall, almost all the negative spaces created by the back-and-forth motion of the thread line are similar in size, shape, and presence. Almost all the elements are equidistant from the format edges. And all the elements are linear, with only mild changes in weight and size. The result is a very quiet, casual, lackadaisical expression that is unpretentious, comfortable, and charming.

Sagmeister United States
All three projects here—two posters and a website—purposely play down tonal contrast to achieve restful and contemplative results. The blue poster presents a political message for careful consideration rather than as a call to action; the construction company’s website is uncharacteristically soft, detailed, and precise; and the black poster creates a very quietly glamorous, almost sinister, tactile sensuality in service of a fashion collection with textural black illustrations and a metallic surface.

A: Studio International Graham
B: E: Types Denmark
C: 2Fresh Turkey

Subtle tonal shifts, like consistent spatial rhythm, are a strong vehicle for messaging. Among competing visual material with strong contrast, a tonally quiet, soft presentation in which contrast between light and dark, or between chromatic relationships such as value and intensity, might be just as effective in garnering attention and creating space that helps separate viewers from surrounding visual activity. Low-contrast images and typography tend to be perceived as more contemplative and elegant, rather than urgent or aggressive.

Distribute light and dark like firecrackers and the rising sun.
Ambiguity, after all, can be a good thing. While clear visual and conceptual relationships are usually favored for the sake of quick, accessible communication, introducing mixed states of being among elements—elements that appear to be in the foreground, as well as in the background, as a simple example—can create an impulse on the part of the viewer to question and investigate more thoroughly. The gap between the concrete idea and the ambiguously presented image that refers to it can provide more complex avenues of interpretation and a rich, engaging experience that yields deeper, more complex understanding.

Breaking It purpose, or don't do it at all.

A jarring grid of checkered spaces gives way to a set of ellipses that change the pattern's density to create type forms. The change also creates a strange, somewhat translucent quality and an ambiguous optical separation between the title and the background.

Leonardo Senneli (Italy)

Two conflicting grids—one for text, one for images—encourage bizarre overlaps of type and pictures, as well as linear elements, in this book spread. Take a look at the not-quite-aligned relationship between the images themselves. The indecisive quality of these structural details elicits questions from the viewer, rather than attempting to answer questions in advance or persuade them of some truth.

Cousin Netherlands

DESIGN ELEMENTS

Cousin Some Trouble
Any time the form elements are tightly locked together and arranged systematically, as in an intricate pattern or grid structure, mathematical measurements and alignment become unavoidable—and likely, more appropriate conceptually. Optically aligning, spacing, or sizing material that is very tightly arranged will call attention to misalignments, uneven spaces, or elements that are not quite the same size, even though they are intended to be perceived that way.
Time is money, it is often said; and the time it takes to research truly effective stock images can burn a hole in a designer’s budget faster than you can say “Ow!” True, finding an image to stick into a layout tends to be quicker; but this is still not a good reason to use images that already exist because the existing image will never be as closely tied to the project’s message as it really needs to be. Sometimes, however, purposely using banal, almost meaningless or kitsch images from stock sources can be great fun, especially if the project calls for a tongue-in-cheek approach or if the designer is conceptually referring to the ubiquity of image content and the influence of day-to-day pop culture. But the real benefit of scavenging is acquiring pieces and parts that can be used to create custom images quickly. Still, proceed with caution. Even presenting a group of found images, but customizing them to integrate formally and conceptually with other material, is preferable to using them as is.

Create images—don’t scavenge.

Both of these projects—a poster and a book—use completely scavenged images as a basis for their designs. The poster, which promotes an exhibition, draws from various generations of clip art to create ambiguous messages and to intrigue the viewer. The book, an exploration of the musical work of DJ Spooky, alludes to the idea of sampling or appropriation and ubiquitous branded imagery as a way of expressing the cultural connection of the artist to his scene—as well as the act of sampling and mixing.

A Mixer Switzerland
B Coen Netherlands
Riding the current stylistic trend has occasional benefits. In choosing to do so, a designer is opting to speak more personally and directly to an audience whose expectations of visual messaging coincide with a particular thematic metaphor and which, as a result, is likely to bypass visual material that doesn't appear to speak to them. This is especially true when communicating to adolescents, who identify with very specific visual styles at any given moment, and will ignore anything else.

As ephemeral as fashion may be, it is a powerful communicator in today's youth market, especially in the entertainment industry. These three items trade on current trends in the illustrative realm of design: super-stylized, retro-techno graphics and type, highly idiosyncratic and personal drawings, and the iconography of electronics and video gaming.

A. SubCommunication Contigo
B. Ames Bros., United States
C. Sergio Gutierrez Spain
As with all the rules, proceed with caution when breaking this one. The primary danger here is causing viewers to disengage, because it is dynamic visual activity—stimulating the eyes and brain to move about—that generally holds their attention. Static arrangements of material, however, can be very focused and restful, an alternative to dramatic movement and deep spatial illusion, and in that sense can be useful at times. As part of a pacing scheme that alternates with clearly dynamic movement, static arrangements can provide areas of rest, visual punctuation to aggressive presentation, and contrasting moments of focus and introspection.
There will be an endless number of communication projects that present history as a theme or overall context in which a given message will participate. Books or exhibitions that focus on historical subjects, or invitations to period-themed events, for example, are perfect vehicles for exhuming visual style from the vaults of antiquity—even if that antiquity is only twenty years old. The fun for designers in such situations is to assimilate a period’s characteristic visual details, colors, typefaces, and image styles into their own visual sensibility, not so much copying the style outright as sampling portions thereof, adjusting them, and reorganizing them so they become new again—while still capturing the essence of the period and, in appropriate contexts, celebrating it.

A CD-ROM cover and a series of stickers for an auto manufacturer’s promotion reveal in their appropriation of period design styles without succumbing to being wholly derivative—a difficult line to walk. The CD-ROM cover invokes the design sensibility of Blue Note jazz albums from the 1950s and 1960s in its use of slab serif typefaces and blue-and-black color scheme. The confrontational close-up image is a decidedly contemporary treatment that makes the layout fresh and inventive and likely resonates deeply with its audience. The stickers use color schemes, typography, and illustrative styles associated with clip art and stock-car graphic detailing of the 1970s, a Me Generation salute to the contemporary consumer’s environmental activism embodied in the positioning of the car’s hybrid energy system.

A: Stereotype Design United States
B: Ames Bros. United States
The symmetrical arrangement of type and imagery in this poster is counteracted by irregular graphic elements and stark changes in contrast and rhythm, avoiding any possibility of a static layout that will fail to engage the viewer.

MV Design United States

Although situated in an asymmetrical location relative to the package's format, the label area for this food product is nonetheless a masterful study in typographic tension and contrast around a centered axis. Each element changes presence through scale, weight, density, style, and color; but the designer has implemented these changes while keeping some formal congruence between the elements.

Wallace Church United States

In all its manifestations, symmetry is a compositional strategy to be approached with caution. Along with its inherent quietness, inflexibility, and disconnect from most other kinds of form, symmetry brings with it a set of classical, stuffy, old-world, elitist messages that, in the context of the past fifty years or so of design work, can immediately skew communication away from a feeling of relevance. It is precisely because of this effect, however, that symmetry can be a powerful approach to designing very formal, historical, and serious material—as well as material that requires a very simple, clear separation of image and typography, strong contrast between dynamic, textural content, or rigid presentation of a great deal of similar content. When working with symmetrical relationships—whether those of text configuration or image placement—the tension between spatial intervals, density and openness, and light and dark becomes critical in maintaining visual activity so that the symmetry becomes elegant, lively, and austere, rather than heavy-handed, stiff, and dull.

Symmetry is the ultimate evil.
Acknowledgments

Books of this kind depend on the time and effort of a lot of very busy people. My thanks to all the designers who took time from their often hectic schedules to help illustrate the ideas within and provide a sampling of the ongoing evolution of the graphic design field. Once again, I'd like to thank the team at Rockport, who—as always—work tirelessly to make sure things turn out the way they're supposed to. This book is dedicated to Sean, my parents and friends, and all my students.

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Organizations use graphic design to clarify their messages and craft them into emotional experiences. It is the graphic designer’s job to take these messages and visually transform them to be well organized, evocative, and memorable. For graphic designers to do this successfully they must be armed with the proper knowledge, skills, and intuition.

DESIGN ELEMENTS is a fun and comprehensive manual for graphic designers that includes hundreds of tips and examples for designers to attain the fundamental skills that contribute to successful design. It is the most compact and lucid handbook available outlining the basic principles of layout, typography, color usage, space, image, and how to put it all together. Design Elements not only offers great tips on the basics, but also shows you how to break the rules without compromising communication or confusing your audience.

FEATURES

- Twenty rules for making good design, including: Communicate—Don’t Decorate (RULE 2); Pick Colors on Purpose (RULE 6); Be Universal (RULE 11)

- A refresher course on graphic design’s basic visual toolkit—dot, line, plane, and texture—and how to use such elements effectively

- An in-depth look at color, from its optical qualities to its effect on type

- Methods for integrating type and image, including a tutorial on using grid systems to structure layouts

- When and why to challenge anything in this book—and the best ways to break the rules