

Color—as color—is just a neutral raw material, just like space, type, and pictures. Using it cleverly demands more than just “running a title in blue” or that the page could use some “dressing-up.” Undoubtedly, color may well improve the images and be *pleasing to the eye*, but that is hardly enough. It must also be *revealing to the mind*. It must have broader significance that grows out of the meaning and is integral with that meaning. Such practical utility is far more valuable to the reader than color’s prettiness, however exciting that may be.

## PRODUCT-MAKING

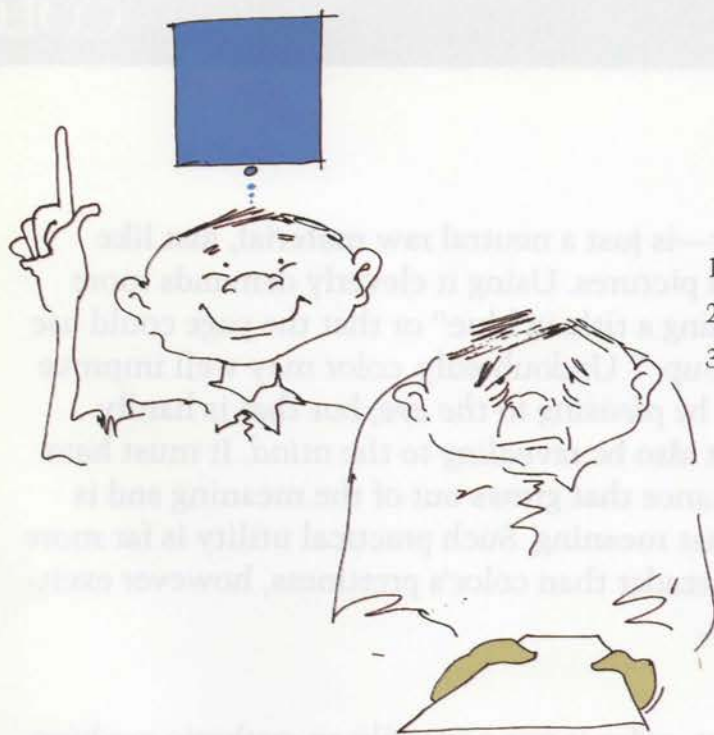
In working print, color is not primarily an æsthetic medium, but a rational technique to be applied for functional purposes: recognition... emphasis... linkage... organization... persuasion... and, sometimes, the deliberate creation of beauty, but usually only as by-product.



## STORY-TELLING

“First-glance value” is not just a professional catch phrase, but the very kernel of functional communication in print. It emphasizes the valuable ideas in the words, while simultaneously exposing them to view in the layout. Therefore it demands that writing/editing and design be blended into a single process. To use color as a functional material:

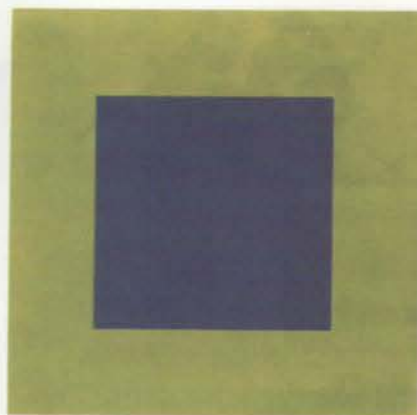
1. Define the thrust of your message.
2. Decide what is most valuable to your readers.
3. Expose it by blending words, images, and space in a lucidly laid-out arrangement, using verbal/visual language they’ll understand and exploiting color to *make the ideas clear, vivid, memorable*.



**Don't pick colors because you like them.** Plan deliberate effects with purpose. Peaceful harmony is usually more successful than clashing variety. Choose colors that are related. Play it safe and pick colors related by one or more of the following:

- 1) *hue* (i.e., the kind of color it is—e.g., redness)
- 2) *saturation* (i.e., its intensity, brightness, chroma)
- 3) *value* (i.e., its shade, darkness, paleness)

Value is the most critical factor in print because it affects contrast, and contrast is what makes things stand out—and making things stand out is one of the effects you use color for.



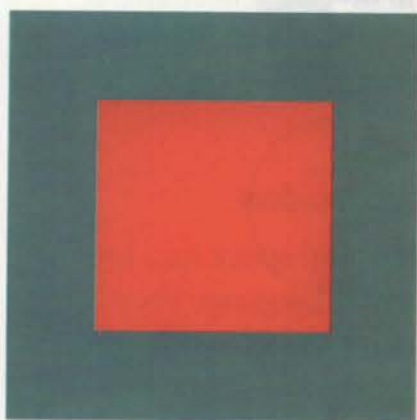
**Colors play tricks.** The same color looks different depending on its background and surroundings.

It looks darker on a light background, lighter on a dark background...

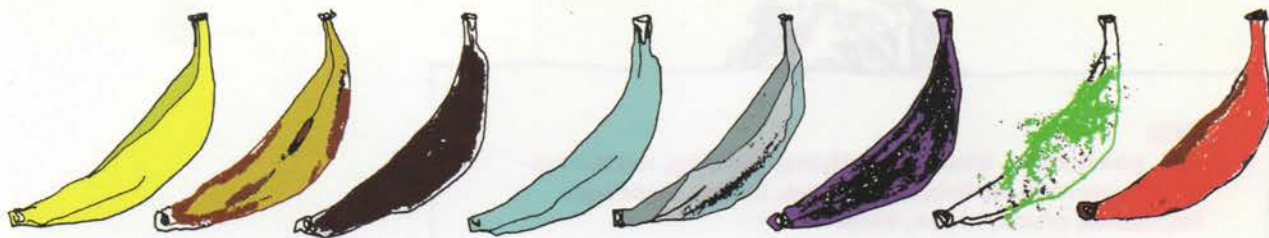
warmer on a cool background, cooler on a warm background.

It also appears different on a textured surface from a smooth, shiny one, and you have no idea what it will look like printed on colored stock. (Test it!) Colors also vary on-screen depending on calibration.

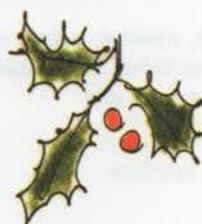
There are other tricks color is capable of, but forget them, if precise color matching—or fine art—are not critical factors. In functional communication, **what the color is used for is far more vital than what it may look like.**







**Colors affect interpretation:**  
 fresh banana; perfect for eating  
 ("when they're flecked with  
 brown and of a golden hue,  
 bananas taste the best and are  
 the best for you"); rotten;  
 frozen; sculpted of stone;  
 purple (artist's interpretation?);  
 child's crayons; not a banana  
 but a red and sour plantain.



Valentine's,  
 Easter,  
 Fourth of July,  
 Hallowe'en,  
 Christmas



Blue for a boy ...pink for a girl ...neuter before he/she is born



Cold



Sunburned



Envious



Embarrassed



Furious



Jaundiced



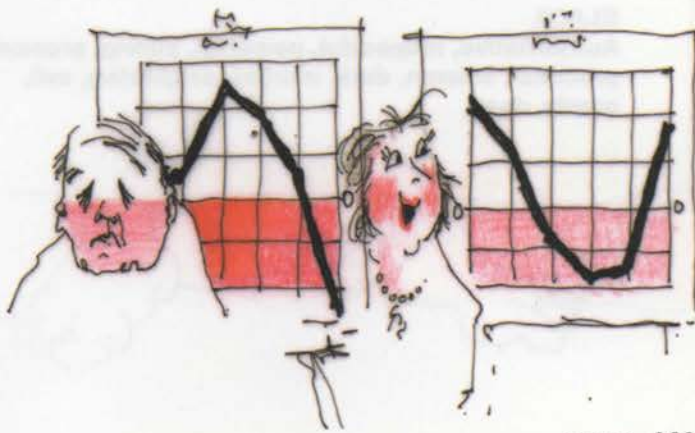
Healthy



Dead



**Speech contains idioms** we seldom consider literally, but they can "color" interpretation. So you can reinforce an idea when it has implications that everyone is likely to understand. But watch metaphorical traps: bankers don't like to be in the red—they prefer to be in the black—unless they wear rose-colored glasses.





### RED

Hot, passionate, bloody, horrifying, burning, revolutionary, dangerous, active, aggressive, loving, vigorous, impulsive, crude, broke, stop!

### PINK

Fleshy, sensuous, girlish

### ORANGE

Warm, autumnal, gentle, informal, affordable, ripe, wise

### YELLOW

Energetic, bright, optimistic, cheerful, sunny, active, stimulating, noticeable, memorable, intellectual, imaginative, idealistic, cowardly, caution!

### GREEN

Natural, fertile, restful, calm, refreshing, financial, prosperous, youthful, abundant, healthy, envious, diseased, decaying, go!

### KHAKI

Military, drab, warlike

### BLUE

Serene, calm, loyal, clear, cool, peaceful, tranquil, excellent, just, watery, hygienic, distant, conservative, deliberate, spiritual, relaxing, trustworthy

### DARK BLUE

Romantic, moonlit, discouraging, stormy

### BROWN

Earthy, mature, ready to harvest, obstinate, reliable, conscientious, stolid, parsimonious

### SEPIA

Old-fashioned, faded, old

### PURPLE

Royal, powerful, luxurious, churchly, pompous, ceremonial, vain, nostalgic, mourning, funereal

### WHITE

Cool, pure, true, innocent, clean, trustworthy, simple, honest

### GREY

Neutral, secure, stable, mature, successful, affluent, safe, retrospective, discreet, wintery, old

### BLACK

Authoritative, respectful, powerful, strong, present, practical, solemn, dark, morbid, despairing, evil, empty, dead

### Gold

Sunny, majestic, rich, wise, honored

Use common sense in picking colors, despite the fact that colors are said to have psychological implications, like the ones listed here. They may or may not be valid, because nationality, age, environment, social, and economic class, and even mood all affect how people react. Besides, many professions and groups have developed specific color palette vocabularies. To complicate matters, colors are affected by their surroundings. The proportions of one to the other changes their effect (see page 202). Even light makes a difference: in a dark office, bright colors and big type will be more effective than if the publication is seen in bright sunlight, when subtler colors and smaller type are appropriate. There are no rules.



**Use common sense when talking about color preferences.** All sorts of tests and surveys show that by and large, women prefer warm and light colors, whereas men prefer darker, cooler ones. Women prefer red over blue, whereas men prefer blue over red. Children prefer yellow, white, pink, red, orange, blue, green, purple—in that order. Adults prefer blue, red, green, white, pink, purple, orange, yellow—in that order. Does that help? Not much. It is far too vague. What precisely is “red” or “orange”—there is an infinite range of subtle shades. These generalizations exist to make the choice less frightening. Relax. **What you use color FOR is more important than the hue you pick to do it with.**

**Rainbow sequence** (*red... orange... yellow... green... blue... indigo... violet*). (Remember it by a mnemonic: “Richard Of York Gains Battles In Vain”)

**Pastel colors** (*pale blues, pinks, yellows, pale greys*). Femininity. They are seen to be gentle, loving, caring, soft, misty, sentimental, springlike.

**Fresh, clean colors** (*yellow, bright blue, bright green*). Health. Remind viewers of cool water, dewy lawns at sunrise, scent of lemon and lime, fresh-picked fruit, outdoors.

**Natural colors** (*earth colors, browns, oranges, dark greens, reds, golds*). Security, dependability. They denote foods traditionally grown in organic soil: healthy and good for you, the way grandma made things. Hence nostalgia by combining them with old-fashioned type and images.

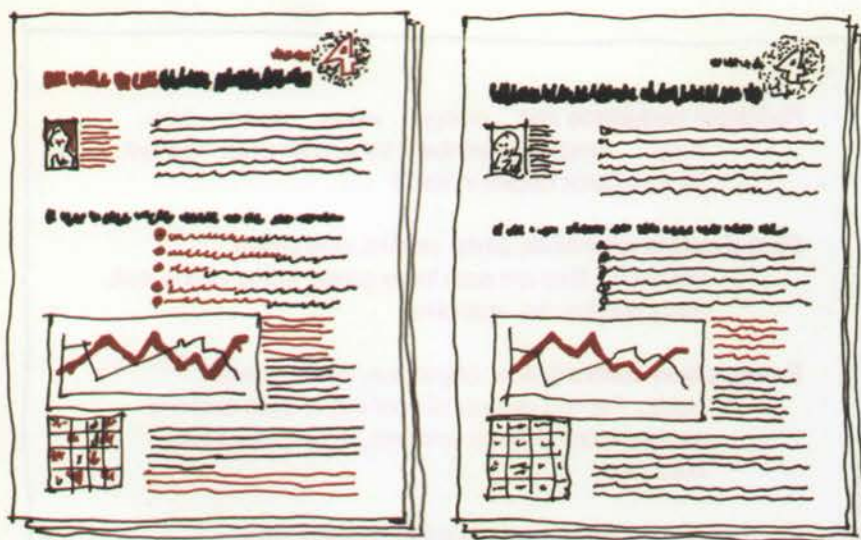
**Loud colors** (*Primary: red, yellow, blue. Secondary: orange, green, purple*). Dominating. Their vibrant presence jumps out at you. They shout for attention, so can be interpreted as aggressive.

**Clashing colors** (*any unexpected combinations*). Exciting. Seen as contemporary when gaudiness is in fashion; therefore they speak to youth. Dynamic. Innovative.

**Quiet colors** (*any colors that are muted and subdued*). Relaxing. They are seen as passive, friendly, peaceful, unassuming. They tend to sink into the background and are preferred by older, more affluent sectors of society.

**Dark colors** (*black, grey, silver, purple, brown*). Masculine and sophisticated when used with restraint and in a minimal way. Reminiscent of dinner jackets or the grey cutaways and top hats worn in the Royal Enclosure at Ascot. High-tech in the 1990s.

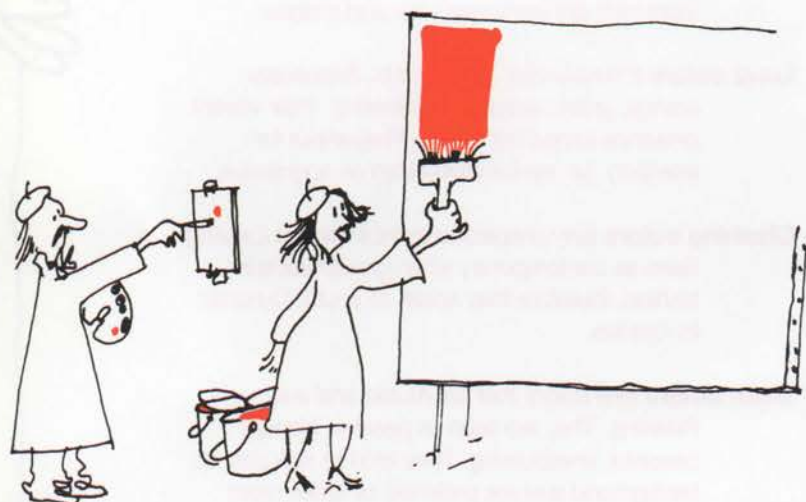
**Elegant colors** (*silver, gold, brown, grey, maroon, dark blue, black*). High style, upmarket; quality and expense.



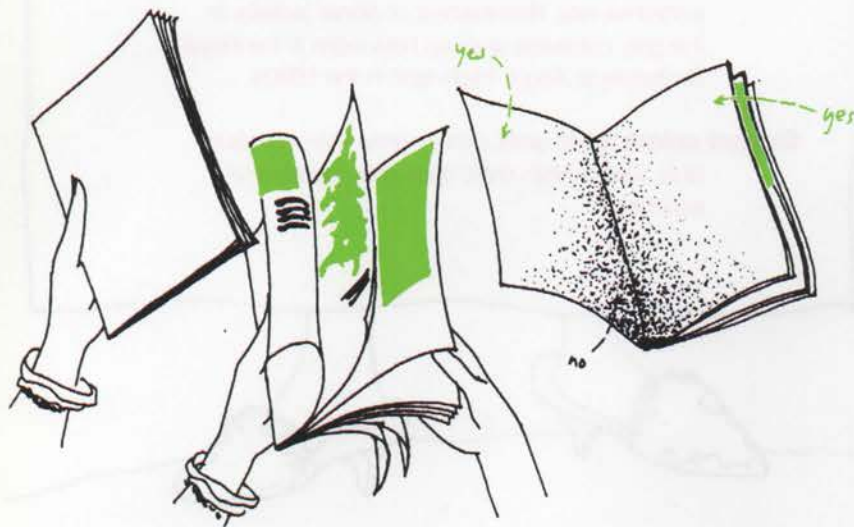
NO

YES

Color's most obvious difference is its most valuable asset: **it is not black**. That's what helps you lead the viewer's eye to what you deem to be important. Don't waste it. Color is only noticed if it is bright enough, large enough, conspicuous enough, and *rare* enough. Less is more.



Use **color boldly**, decisively, strongly when you are using it, because you know it adds value to the communication technique. Little spots are hardly noticeable, so they are hardly worth the effort. The element that is run in color should be worthy of being in color and therefore should be worthy of popping off the page and into the viewers' eyes powerfully.



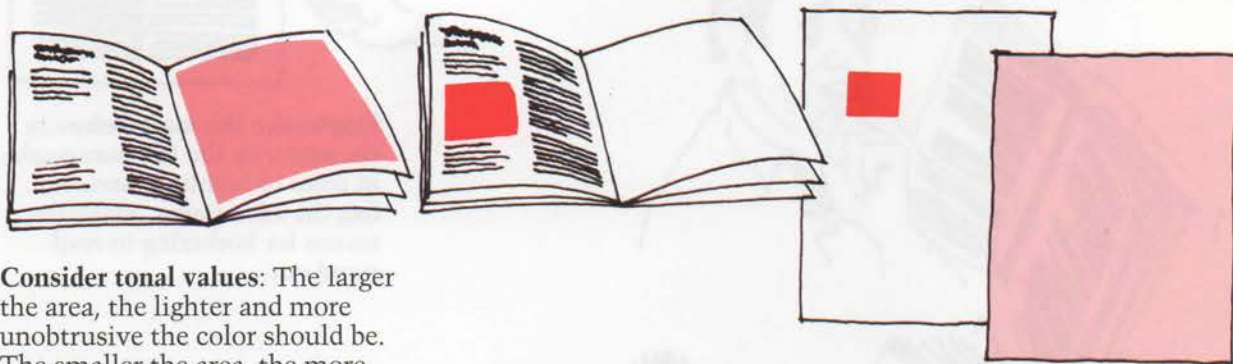
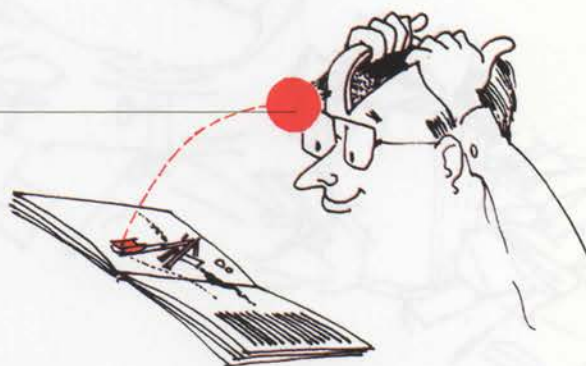
Place color where it will be seen so it does you the most good. Don't bury it in the gutter where it will be hidden. It will help to invite the potential reader into the product when it is noticed on the outsides of the pages. The publication is an object that is held in the hand and its pages are flipped, so it is only common sense to make the most of its physical characteristics and capabilities.



**Rank information by brightness and amount of color:** the more important, the more colorful. The lowly soldier is identified by a little red scarf and hat. The lieutenant has a jacket. The general is resplendent with eye-dazzling redness.

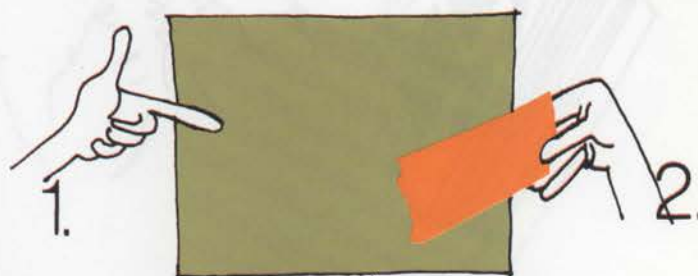


**Make important things noticeable** by strong, saturated, dominant, aggressive colors. "Warm" colors appear close and jump out at the viewer. **Play things down** using shy, recessive, pale colors. "Cool" colors appear to recede far from the viewer.



**Consider tonal values:** The larger the area, the lighter and more unobtrusive the color should be. The smaller the area, the more vivid and bright the color can be. Think in terms of proportions and their relationships more than in terms of hues.

**Choose the background color first**, then conform the color accents to it. Consider color relationships: no color exists by itself, so always take its surroundings into account. The effect also changes as the proportions of the colors to each other vary. The only rule is trial and error and experience. Make an album of annotated tearsheets to keep a visual record.







Assign color deliberately to fulfill specific functions. Plan for it from the start. It can be retrofitted as an afterthought but adding it after-the-thinking-has-been-done seldom does justice to color's capacity as functional, rational, intellectual material. This is an obvious instance where that editor/designer understanding and cooperation are essential. However attractive and decorative color can be, it is more valuable when it also helps to tell the story.



**Emphasize the main points in the text:** run the key paragraphs in color to highlight benefits... flag the advantages. Make the reason for bothering to read stand out.

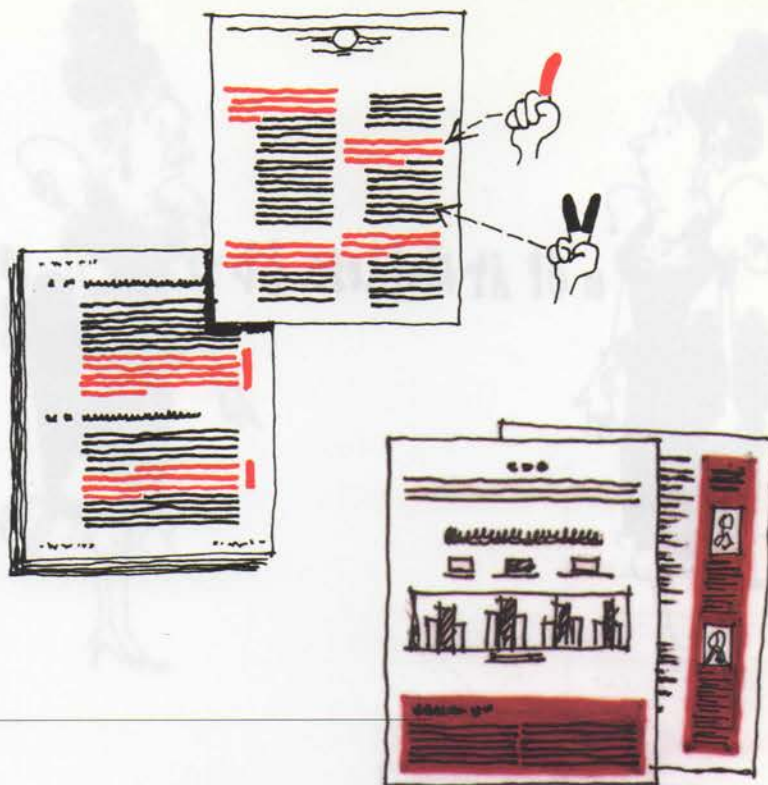


**Pull viewers' attention to what you want them to notice:**  
 the special offer...  
 the telephone number...  
 policy expiration date...  
 warning about safety...  
 profit (or loss)...  
 data that exceed the norm...  
 values that exceed tolerances...  
 changes in procedures...  
 whatever concerns them most (like their own names)...  
 Editing the material to make optimal use of color that way helps to sharpen the message, make it easier to assimilate and to remember.



### Compare two sets of data.

Distinguish new information from old... current situation versus projected... this year's soccer team's results vs. last year's... revisions in specifications... etc. Whether the material in color is more important than the black depends on the proportions and typographic emphasis. In either case, presentation can be organized on two levels, and readily understood by the viewer at first glance.

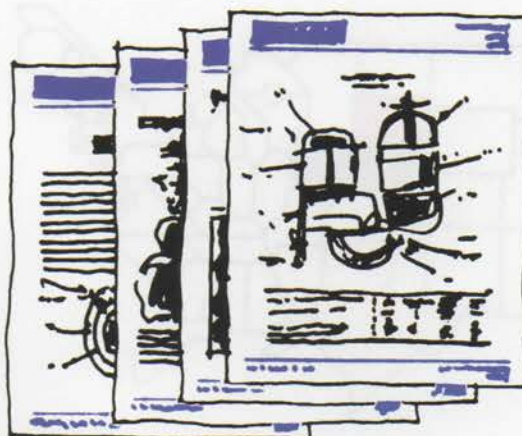


### Organize, classify, codify, categorize information.

Separate and shut subsidiary information in boxes. Fence off sidebars in their own areas. The things in colored boxes are understood to be a secondary category—skippable, but available if and as needed.

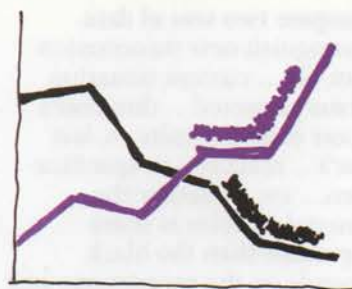


**Make text look shorter** by using color to identify and thus separate abstracts... conclusions... biographies... summaries... instructions... self-tests. The article still takes the same total amount of space, but it looks as if there were less text to read, because the ancillary elements have been broken away and made to look different by color.

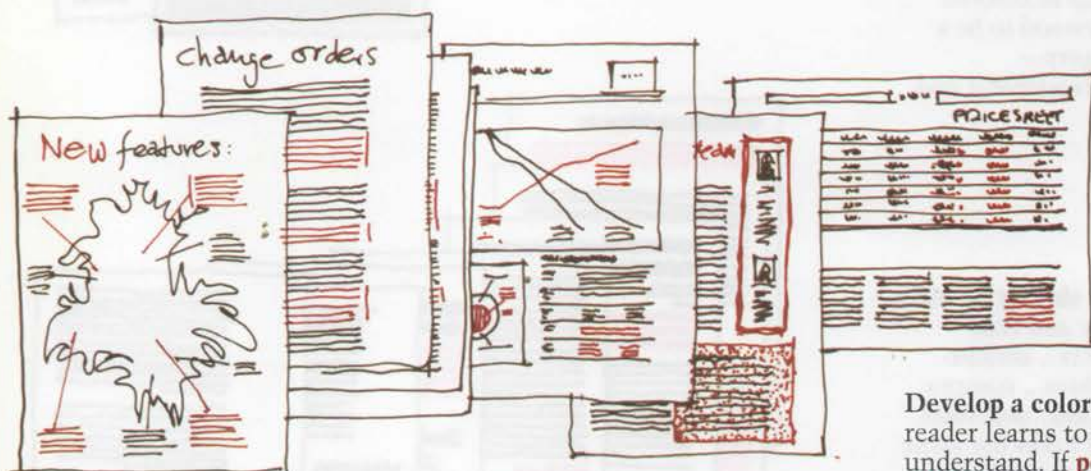


**Split the message** from the publication's "housekeeping" signals such as page numbers, headers, footers, logos, etc. Run those repetitive elements in color. The pages will look simpler, less full, and it becomes easier to concentrate on the story.

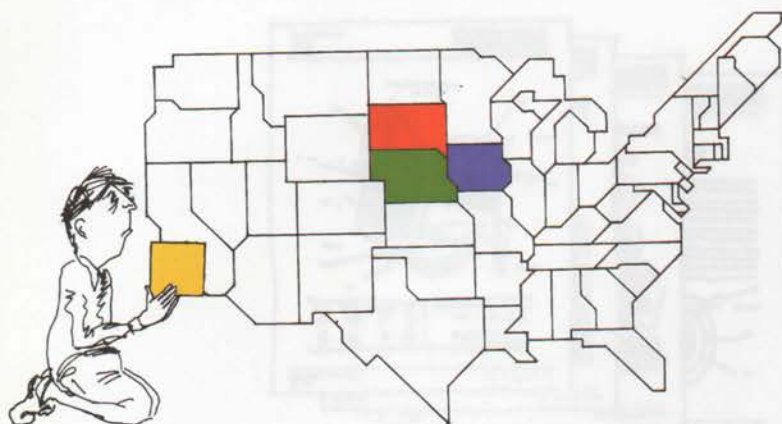




**Link related elements to each other.** The purple title intuitively belongs to its purple line on the graph, just as the lady in the purple dress immediately notices her rival in the same color dress at the party. Be wary of this relationship, because unwitting use of it can mislead the viewer into linking elements on the page that are not meant to be related to each other.

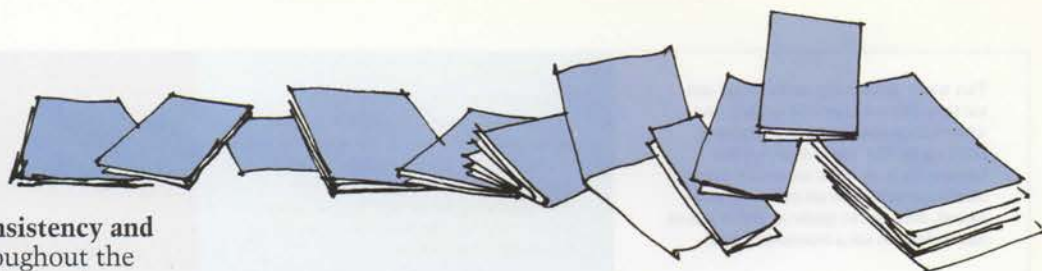


**Develop a color language** the reader learns to recognize and understand. If **positive attributes** are first identified in brownish, then every time **brownish** is seen, whatever it refers to will be interpreted as **positive**.

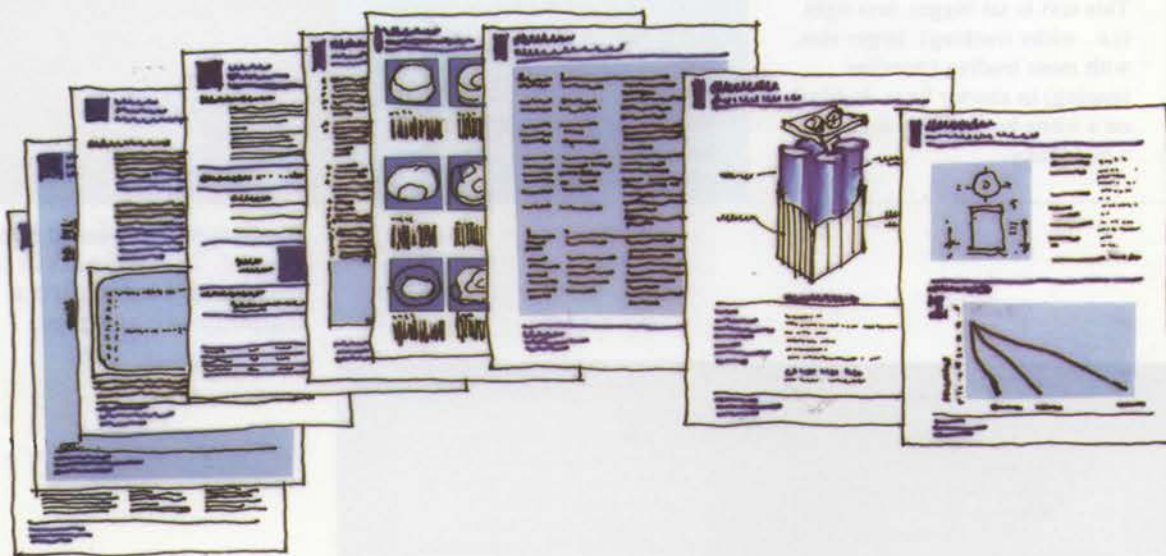


**Keep color coding simple.** Use no more than four colors plus black, otherwise you have to have a color key explaining the coding every time. (And you want to avoid color keys which take time and energy to study). Black plus three distinctive colors are easily remembered.





**Color code for consistency and predictability** throughout the issue or a range of related publications, including those on the Web. Establish personality.

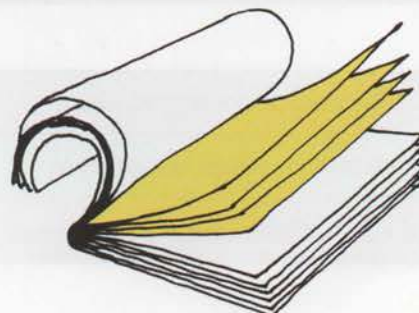


**Provide color continuity** because a coherent look strengthens, variety disintegrates the product. Use just one color for backgrounds. Repetition helps segments look familiar, as the viewer expects them to be. "Belonging" is advantageous to the page, the story, the series, the image of the periodical.

**Interrupt long flows with break pages.** A big publication such as a directory so segmented seems smaller, more accessible, and the whole more user-friendly. Color can identify recurring pages such as chapter openers... thematic illustrations or statements... process diagrams... locator maps... subsidiary tables of contents... self-tests... summaries.



**Identify special sections by colored stock,** but stick to the typographic styling. The color makes it different, everything else helps it "belong."





This text is deliberately set too small and too tight. When it is printed in black on a white background, it can be deciphered fairly easily. The words stand out best because black on white creates the maximal tonal contrast and we are used to it, find it natural, easy, and so prefer it. This is just an illustration and not a recommendation.

When the same text (deliberately set too small and too tight) is printed in black on a colored background, it is more difficult to decipher, but if the color is light, you can get away with it. The paler the color of the background, the greater the tonal contrast, and therefore the less disturbing it is to habit and normal expectations.

When that same text (deliberately set too small and too tight) is printed in black on a colored background, it is much more difficult to decipher if the color is dark, like this. Who will ever bother to dig their way through this disaster?

This is an illustration of what not to do.

This text is set bigger, less tight (i.e., wider tracking), larger size, with more leading (interline spacing) in shorter lines. In black on a white background it can look a bit clunky.

This text is set bigger, less tight, larger size, with more leading and shorter lines. Printed in black on light colored background, it is easy to see, so it is easy to read and therefore it is acceptable.

Printed in black on a dark-colored background, it is less unpleasant than the example above. It is still not ideal, but you can get away with it if you absolutely must.

**Black type on colored background.** The darkness of the background color affects legibility of black type.

This text is deliberately set too small and too tight. That makes it harder to read when it is printed in white on a black background. There is too much tonal contrast and we are not used to it. It hurts the eye. Besides, the tiny, thin letters fill up with ink and we are forced to work hard in order to decipher them.

This text is deliberately set too small and too tight—and it is hard to read when it is printed in white on a dark-colored background. Not only is there too much tonal contrast we are not used to, but the tiny, thin strokes of the letters fill up with the layers of inks unless the printing is in perfect register. This sort of thing should never be inflicted on the reader.

This text is deliberately set too small and too tight. That makes it harder to read when it is printed in white on a dark-colored background. There is too much tonal contrast and we are not used to it. It hurts the eye. Besides, the tiny, thin strokes of the letters fill up with the layers of inks unless the printing is in perfect register. This sort of thing should never be inflicted on the reader.

This text is set sans serif, less tight (wider tracking), larger size, with more leading (interline spacing) in shorter lines, bolder.

This text is the same as at left. It is simple, the strokes are of an even thickness, and it is set unjustified, in order to keep wordspacing rhythmically even.

Even bigger, less tight, larger size, with more leading, in shorter lines, bolder, and sans serif does not help. Nothing can. Don't do this.

**White type on colored background** reads best on a contrasting dark color. White on black is too stark. Use sans-serif, to prevent serifs from filling up, and avoid ultrabold faces whose counters can also drown in ink.

This black-on-color type looks less important than this black-on-white type, which pops out at you more strongly because of the stronger contrast of black on white.

This black-on-a-pale-color type reads as clearly as does this line, although the hues are different, because the tone values of the colors are balanced.

**Equalize the tone values of the background.** Since black is easier to read on white than on a color, an immediate priority is established: the easier-to-read lines are noticed first and so their content gets unintended priority. Balancing the tonal values of the background colors overcomes such unintended and misleading inequality.



This text is deliberately set too small and too tight. When it is printed in process yellow—whose tonal equivalent is 12% black, i.e., a very light grey—it is nearly invisible, let alone legible. When it is printed in cyan, it is deciphered much more easily, because cyan's black equivalent is 67%. A 67% screen of black is a dark grey. The contrast with the white background is greater, so the words are decipherable.

Even though this text is deliberately set bigger, when it is printed in process yellow—whose tonal equivalent is 12% black, i.e., a very light grey—it is nearly invisible, let alone legible. When it is printed in cyan, it is deciphered much more easily, because cyan's black equivalent is 67%. A 67% screen of black is a dark grey. The contrast with the white background is greater, so the words are decipherable.

**To compensate for color's paleness: increase boldness, increase type size, increase interline spacing, decrease lines length, set ragged-right.**

Keep typography simple. Use sans serif, avoid weird, exaggerated, ultra-expanded, ultra-condensed, ultra-oblique faces, pale italics, too many all-cap words.

**Allow the color to do the shouting.**

Colored type on white background suffers from reduced contrast, since color is paler than black. Compensate with dark color and simple typography.

*If it hasn't been done before, there's probably a damn good reason why.*

Colored type on colored background is dangerous. Pick the colors for contrast, not pretty hues or brilliance. Avoid tiring the eye with bright colors on bright backgrounds. Run tests.

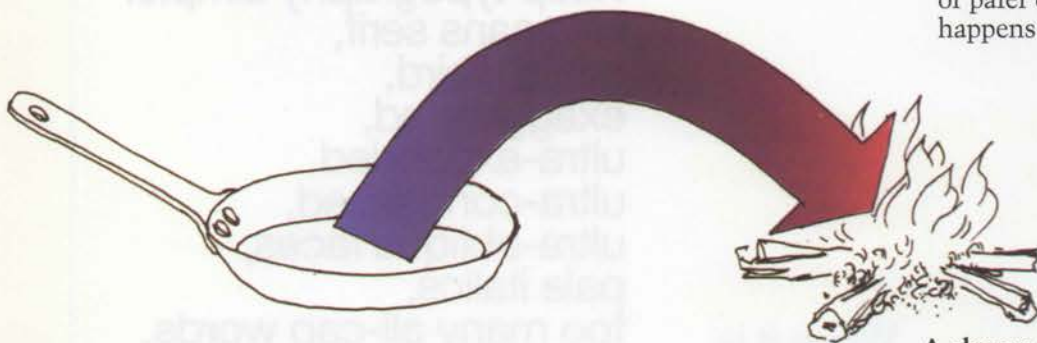
Never run type in black, white, or any color, on a mottled background if you expect to have it read by more than two people (you and your mother).

Never run type in black, white, or any color, on a mottled background if you expect to have it read by more than two people (you and your mother).





**Ramped color is kinetic.** It appears to move. A gradient fill creates the illusion of change (from/to, out of/into, before/after). The natural sequence starts at the left and moves towards the right, but that can be altered by the color itself: the eye is likely to be attracted towards the bright color first, then move towards the duller or paler one, no matter where it happens to be placed.



**A change in the colors** from one part of the ramp towards the other increases the drama of motion, especially if the colors are meaningful. The cold end of the arrow at the frying pan end becomes heated as it flies from the frying pan into the fire.



The end of the line (the "latest information") at top-right is emphasized because it is a white line seen against dark violet. The start at far left (the "old part") is de-emphasized because it looks pale on a pale background. The exact opposite happens when the graph line is black.

**The more tonal contrast, the greater the noticeability.** Guide the viewer to notice what is important by placing it on a pale background if it is in a dark color... and a dark background if it is in a pale color. This has nothing to do with the color's hue or brightness but its darkness/lightness. This technique can be used to make a point vivid and clear—or to cheat the viewer.





**Handle color panels with care.** Unless your publication uses a standardized color for all panels as an element of its graphic styling, the panels near color photographs should be considered with those images as part of an overall effect. Here, The blue panel clashes with the tan photo. Is there a reason why you want it to? If so, then fine. If not...



**...match a color** of the photo in order to expand the power of the picture. The color you pick will emphasize that aspect of the photo that you wish to draw attention to. Here it is merely the color of the rock (which happens to be Ayer's Rock or Uluru, in Australia)...



**...better: use ramped color panels** in the vicinity of full-color photos. Ramping (or gradient fill) looks more naturalistic than flat panels, because there are no flat colors in nature. Flat color exists only in artificial situations like print. The sky's blue changes in tone value from top to bottom. The wall may be painted a flat color but its appearance varies according to the way it is lit. Notice around you. Use color panels with care.







**Call attention to an element** in a color picture by manipulating the color. Think of this as another form of "editing." Obviously, we should leave good pictures alone and protect them from corrosion or "improvement." On the other hand, perhaps the speed and clarity of the message might benefit from some manipulation of the image.

A simple example, the blue feet of the blue-footed booby from the Galápagos Islands. Is one of the "improved" versions below better than the original? Is either of them necessary? Is tampering with the purity of the original image worth this result? The problem is a philosophical one and its solution is not purely aesthetic but editorial: what are we trying to do, who are we, what do our customers need and want? How do we tell them most vividly, forthrightly?



#### Option A.

Tampering with the color of the rest of the picture. Here, by making it just black-and-white, leaving the booby's blue feet in full color.

#### Option B.

Leaving the picture alone, but surrounding it with a matching-blue frame.

