

Good type choices can boost communication

friendly **AGGRESSIVE**

Good type choices can boost communication

Traditional MODERN

Good type choices can boost communication

feminine **MASCULINE**

Good type choices can boost communication

calm **Chaotic**

Good type choices can boost communication



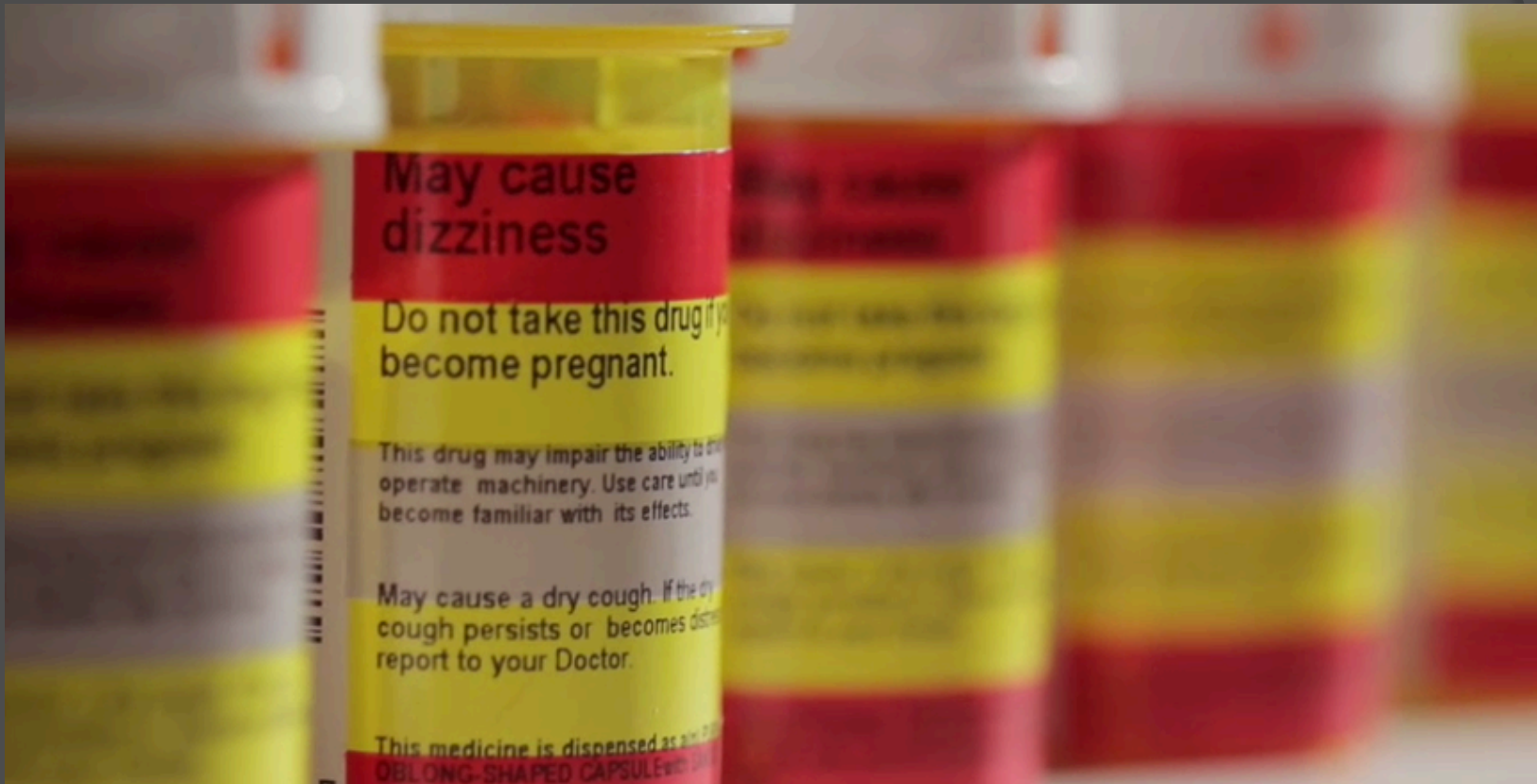
Type is important

- Type conveys information
- Good type usage isn't just a matter of aesthetics, it's a matter of strong legible communication.
- Eg: highway sign, prescription packages design.

Need to be read clear at night, raining or serious weather conditions



Need to be read by people with all ages.



Bad design, hard to read.

Need to be read by people with all ages.

Much better design



Typographic elements interacts.

- They exist in a relationship to one another.
- They must be balanced in size, weight, position, orientation...



SERIFS

With little feet

SANS SERIF

Without little feet

Anatomy of letters

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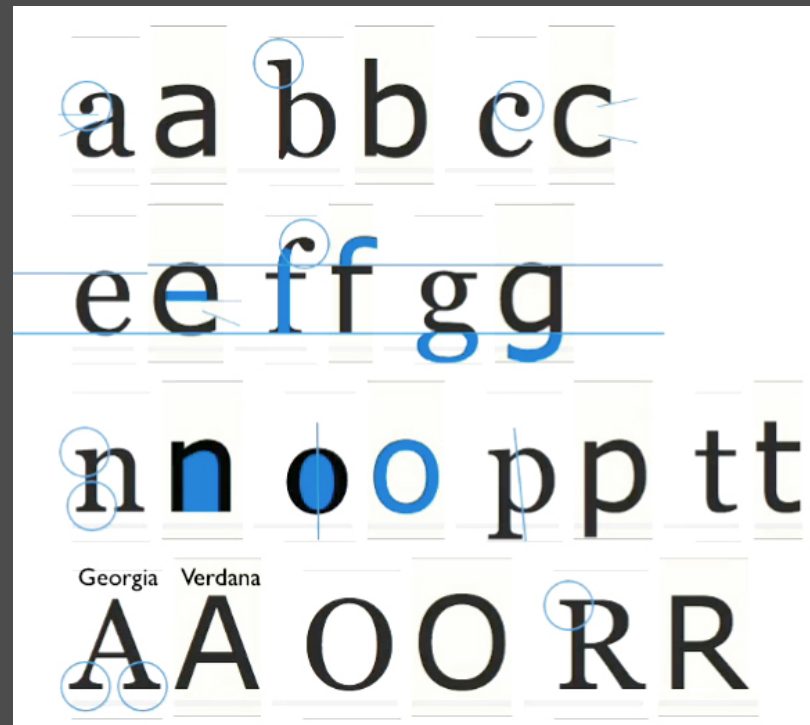
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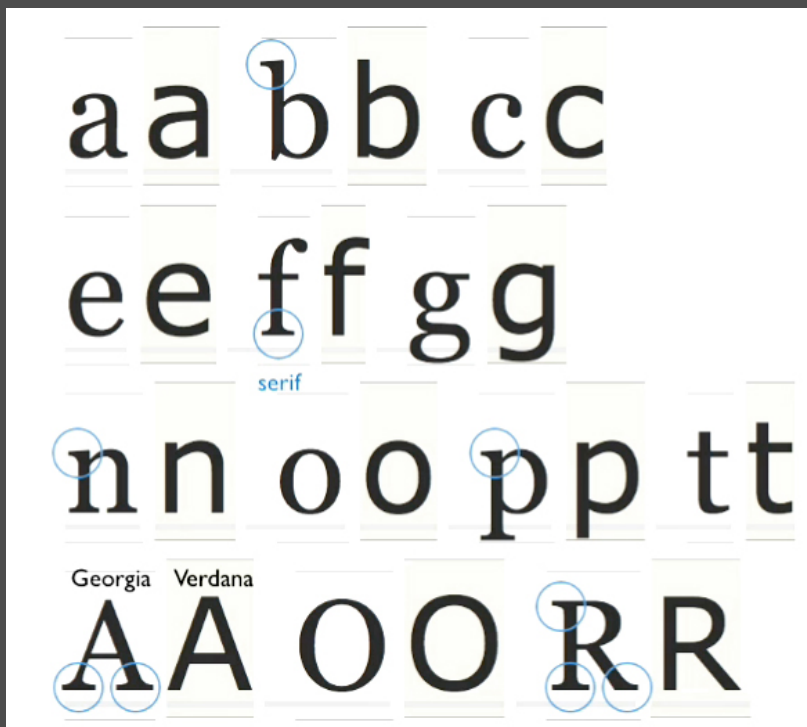
Anatomy of letters

Compare Georgia & Verdana



Anatomy of letters

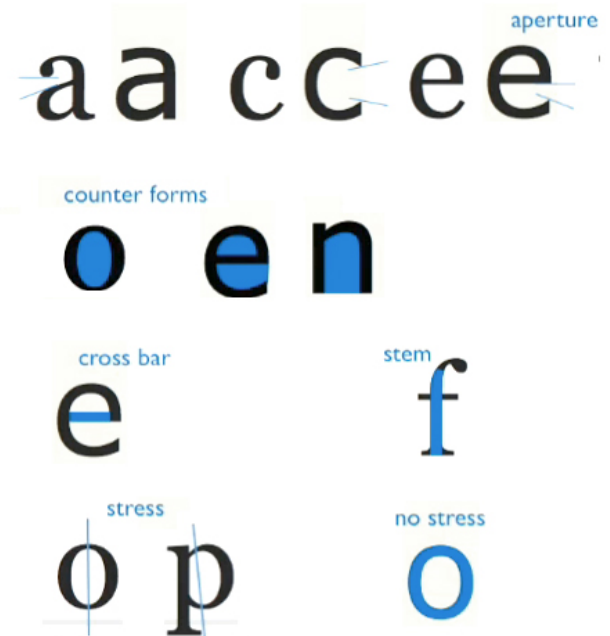
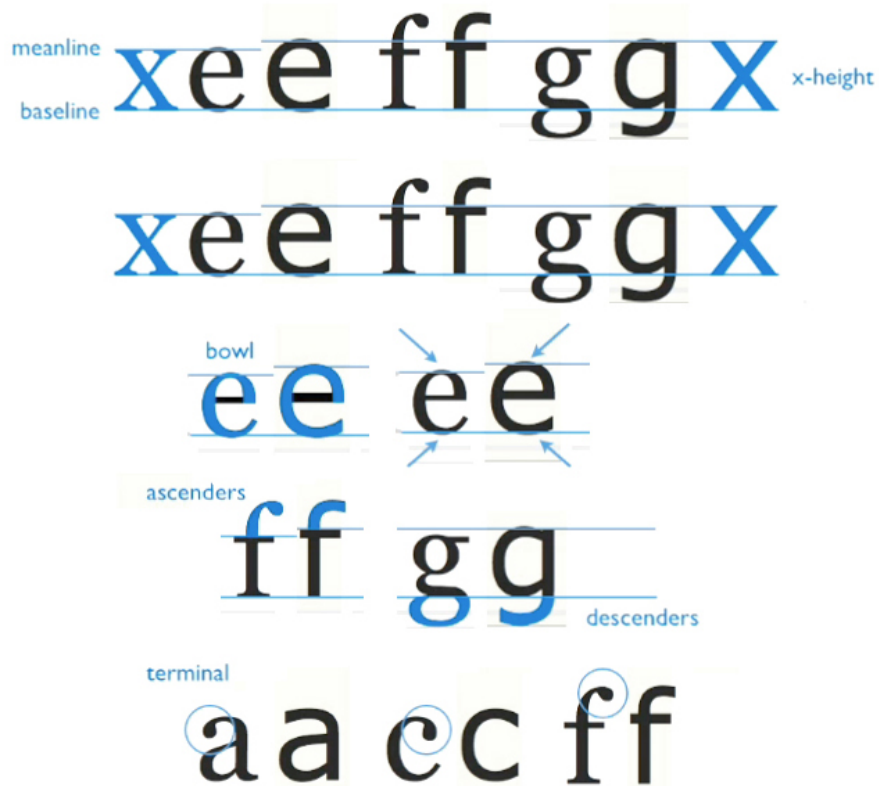
Serif



Sans Serif



Anatomy of letters



SERIES

Baskerville	Georgia
Big Caslon	Goudy Oldstyle
Century	Adobe Jensen
Cochin	Modern No. 20
Courier	Palatino
Didot	Times New Roman
Garamond	Warnock Pro

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SLAB SERIF

American Typewriter

ITC Lubalin Graph

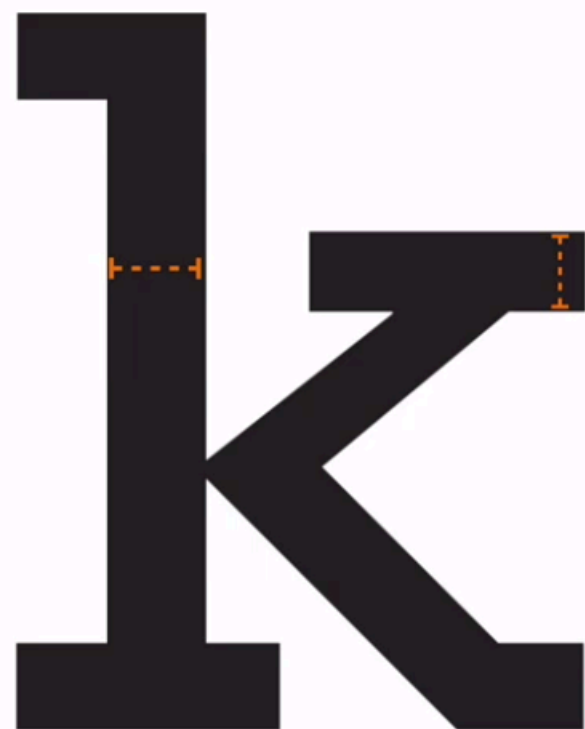
Memphis

Rockwell

Serifa

Stymie

Vitesse



SANS SERIF

Century Gothic

Eurostile

Franklin Gothic

Futura

Gill Sans

Helvetica

Interstate

Kabel

Myriad

News Gothic

Optima

Skia

Stone Sans

Verdana

Classification ?



Sans Serif



Serif



Slab Serif



Script



Blackletter



Mono



Hand



Decorative

<https://typekit.com/>

Sans serif	Without serifs
Serif	With serifs
Slab serif	Thick, block-like serifs
Script	Flowing or calligraphic
Blackletter	Gothic script, “Old English”
Monospaced	Fixed-width
Hand	Handwritten or handmade
Decorative	Swashes, distressed, irregular

<https://typekit.com/>

Weight	Thickness of the strokes
Width	Width of the letterforms
x-height	Ratio of lowercase height to height of capitals
Contrast	Ratio of thin strokes to thick strokes
Standard	Upper and lowercase letters, as in “Type”
All caps	All capitals or small capitals, as in “TYPE”
Lower	Lowercase numbers with a variable baseline
Upper	Uppercase numbers with an even baseline

DISPLAY TYPE

Display type
is designed
to be read in
small quantities
at large sizes.

Text type: effortless to read

- Goal: smooth reading
- No conscious effort at all to see the shapes of the letters.
- Common traits:
 - Open spaces inside the letters.
 - Body height is tall
 - Rhythmic and repetitive shapes
 - Medium weight.

Text typefaces have common characteristics

ADOBE CASLON PRO

Text typefaces have common characteristics

BASKERVILLE

Text typefaces have common characteristics

ADOBE GARAMOND PRO

Display text

- Unique form to announce and amplify its content
- Should be used in a small quantities and with restraint
- A little intense sweetness goes a long way



Type classification beyond just serif and sans serif

Oldstyle

Text typefaces have common characteristics

ADOBE CASLON PRO

Text typefaces have common characteristics

BASKERVILLE

Text typefaces have common characteristics

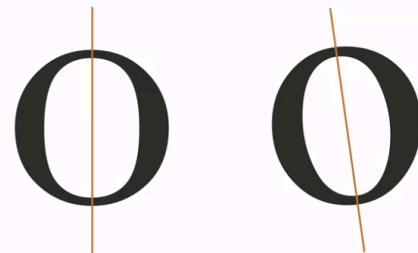
ADOBE GARAMOND PRO

- Created between the late 15th century and the mid 18th century.
- They have low contrast between thick and thin strokes
- They have the long senders and descenders
- Within the body they have smallish spaces.

Transitional

Caslon
Sabon
Bembo
Garamond

- Transitional represents the stylistic bridge between Oldstyle and MODERN, mid 18th Cen
- Higher contrast between thick and thin strokes
- Stress, it is an imaginary line connecting the thinnest parts of an O, is more vertical



Modern

Bodoni Didot Modern No. 20

- Appearance in the late 18th century
- Extreme contrast between thick and thin strokes
- The ultra thin un-bracketed serifs

Slab Serif

Rockwell
Memphis
Serifa
Vitesse

- Emerged in the mid 18th century
- Useful for advertising and signage, because of their weight and strong presence.
- characteristic of Slab Serif is the lack of contrast between strokes.

Gothic (Grotesque)

News Gothic
Helvetica
Univers
Verdana

- Have slight variations in stroke width
- The letters are fairly wide
- The rounded letters are often a bit squared off

Humanist

Gill Sans
Myriad
Optima

- Humanist has the proportions of classical Roman letters.

Geometric

Futura Kabel Century Gothic

- They are based on the Geometric forms of the circle, square, and triangle.
- Reflects the modernist movement of the early 20th century.

Classify font types

- Venetian – has a look created by human hand
- Old style – type writer look, printing technology
- Transitional – increased contrast between thin/thick strokes.
- Modern – exaggerated contrast between thin/thick strokes, and flat serif.
- Slab serif – usually with strict geometry structure.
- Other serif fonts – booming of web font design
- San serif – don't have serif
- Geometric sans – based on circles, or triangles
- Humanist Sans – various thickness, have a humanist feeling.
- Hand writing

Develop a Style Guide

Typography

- No bad fonts, just inappropriate fonts
- Readable and accessible
- Style
- Selection of the font group and when to choose which

Pairing fonts

Harmony – common physical feature

Contrast – not too similar, some differences

Use different font identify hierarchy

In many cases you might be better off selecting just one Typeface which has a large family of variations.

One Large Family

Helvetica Neue Thin Condensed

Helvetica Neue Ultra Light Condensed

Helvetica Light Condensed

Helvetica Neue Condensed

Helvetica Neue Medium Condensed

Helvetica Neue Bold Condensed

Helvetica Neue Heavy Condensed

Helvetica Neue Black Condensed

Helvetica Neue Extra Black Condensed

In many cases you might be better off selecting just one Typeface which has a large family of variations.

Helvetica Neue Thin

Helvetica Neue Ultra Light

Helvetica Light

Helvetica Neue Roman

Helvetica Neue Medium

Helvetica Neue Bold

Helvetica Neue Heavy

Helvetica Neue Black

Pairing fonts

- A common situation is:
body text + headlines.
- Your Text Type choice will most likely be a
Serif text face.
- So for contrast, you will want to look for
something like a Sans Serif that has a variety
of bold weights.

V STYLE



Twin panels
help power
the Fisker
Karma.

The Look

Keeping your gas tank off t

TICKTICK, TICKTICK.... You hear it every time you hit the pump—the sound of the Oil Age drying up. Even if America stabilized Iraq, expanded offshore drilling, and mended fences with Venezuelan President Hugo Chávez, it wouldn't change the fact that oil is a limited natural resource. With demand outpacing supply (\$4 per gallon, \$5 per...), it's time to hawk your Hummer and pimp a fuel-efficient ride like the lithium ion/battery-operated **Fisker Karma** (starting at \$80,000; fiskerautos.com), a luxury hybrid sedan capable of 0-60 mph in 5.8 seconds and of traveling up to 50 miles before the conventional engine kicks in. Backed by the guys who were early investors in Netscape and Google, the Fisker Karma is a glimpse of the future (look for limited production models in late '09). Good thing, too. The clock goes ticktick. **EW**

LEED Conundrum

Time is running out for enrollment in GBCI's credential maintenance program, but many are still confused.

When the Green Building Certification Institute (GBCI) launched the Credential Maintenance Program (CMP) in fall 2009, it gave existing or "legacy" LEED APs a choice. They had two years to opt in to the CMP and enjoy the cachet of a new LEED AP+ "specialty" credential. Or they could let the opt-in period pass and retain their regular LEED AP credential, while also avoiding a \$50 biennial fee and 30 hours of continuing education (CE) requirements.

With that two-year period almost halfway over (it ends in September 2011), many LEED APs are hearing the clock tick and trying to figure out where they fit into the new program. People who are not already LEED APs have to pass the new exam to qualify. Their options are to sign up for the LEED AP+ credential, or the new "Green Associate" credential, for people who want to demonstrate familiarity with LEED but won't be working directly on LEED projects.

As the sustainability leader for Arnhem + Allen and its 75 plus LEED APs, Mara Baum, AIA, has taken responsibility to "guinea pig" the new system and provide pointers to her colleagues. Baum sees legacy LEED APs falling into two camps. The first are sustainability leaders like her who are immersed in LEED projects and committees. For this group, staying up to date on LEED is part of the job, and "the continuing education requirements are little more than what we would be doing anyway." Opting in is an easy choice. On the other side, Baum sees a large group of professionals who for one reason or another may not encounter CE opportunities in the course of their work, or for whom demonstrating that they're completely up to date with the specialty credential may not be necessary. Baum predicts that many in this group will not opt in to the new system. They won't lose their LEED AP credential, and if their situation changes in the future and they want the specialty, they could always take the exam.

Many professionals fall between those two groups, and may want to opt in to the specialty credential



but will need to go through extra work and expense. For them, Baum suggests waiting to see if they find themselves in a situation that earns them the required learning hours. "One reason I might recommend someone opt in now is if they're currently working on a LEED project or about to attend a convention with a lot of CMP options," says Baum.

Baum also points out that there are plenty of cheap ways to earn credits, like authoring a published article or performing committee or volunteer work (half hour per meeting, more for leadership). Baum also recommends the "Netflix" approach, by reporting self study hours from watching sustainability related movies. ("Blue Vinyl" is on Baum's recommended list.) There are many options for earning hours, including taking a CE exam in this magazine, but there are limits on how many of the 30 hours may come from any one source. GBCI's "Credential Maintenance Program Guide," at www.GBCI.org, spells it out.

Once opted in, LEED APs must tackle distribution requirements of the initial two-year reporting period. Since legacy LEED APs can skip the newer, tougher exam, GBCI requires them to spread their initial 30 hours across different topics such as water management, indoor environment, and energy—topics requiring expertise to pass the exam.

LEED APs can log on to "My Credentials" on www.GBCI.org to see their status, including the enrollment period, and to enroll in a specialty credential via testing or continuing education. For more of Baum's advice, a recorded presentation is available at www.LEEDuser.com/CMP. ■

THERE ARE MANY OPTIONS FOR EARNING HOURS, BUT LIMITS ON HOW MANY OF THE 30 HOURS MAY COME FROM ANY ONE SOURCE.

A common mistake in combining Typefaces who have very different yet Strong Stylistic details.

They conflict with one another, and looking very unhappy together.

Stylistic Conflict

Eurostile

Cochin

Pairing fonts

- Choose one simple piece and one complex piece work well, that way the stylistic details of both can be appreciated.
- Choosing two simple pieces of Typefaces works well too.
- Differentiation is the key: **the elements should compliment one another.**
- Let good taste be your guide.

“The task before us is simple to make
beautiful letters and to arrange them well.”

Edward Johnston, the father of modern calligraphy

kerning
tracking

leading

point size
60pt. 125pt.

typeface
Baskerville, Helvetica, Futura, Caslon

justification

line width

what is typography?

Kerning is the adjustment of the spaces between two specific letters.



The diagram shows the words 'po' and 'on' on a set of three horizontal guidelines. Yellow rectangular boxes highlight the spaces between the 'p' and 'o' in 'po', and between the 'o' and 'n' in 'on'. A red horizontal line is drawn through the middle of each yellow box, indicating the specific kerning adjustment for those letter pairs.



The diagram shows the words 'nn' and 'ev' on a set of three horizontal guidelines. Yellow rectangular boxes highlight the space between the two 'n's in 'nn', and the space between the 'e' and 'v' in 'ev'. A red horizontal line is drawn through the middle of each yellow box, indicating the specific kerning adjustment for those letter pairs.

Kerning is the adjustment of the spaces between two specific letters.

BURST

A diagram illustrating kerning. The word "BURST" is shown in a serif font. An orange circle is placed between the letters 'R' and 'S', with a small black arrow pointing from the right side of the 'R' towards the 'S', indicating the adjustment of the space between them.

BURST

A diagram illustrating kerning. The word "BURST" is shown in a serif font. An orange circle is placed between the letters 'R' and 'S', with a small black arrow pointing from the right side of the 'R' towards the 'S', indicating the adjustment of the space between them.

Tracking is an overall adjustment of space applied equally to a word, a line, or a passage of text.

widows

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Gaps and Rivers of space

Four score and seven years ago our fathers brought forth on this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation, so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might

live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we can not dedicate, we can not consecrate, we can not hallow this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which

Alignment



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Flush left, rag right

Alignment

Not good for lengthy reading because the eye will have a hard time finding the next line on the left



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Flush right, rag left

Alignment

Justified

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to berores as quibusdae. Et pelenietus
idus mos squamducium, conectem rem
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explab invelenim nonem quam il maio
blamendiae voluptatis et earum rero

Alignment

Most used on an invitation
Not good for lengthy reading



But, in a larger sense, we can not dedicate, we can not consecrate,
we can not hallow this ground.
The brave men, living and dead, who struggled here,
have consecrated it, far above our poor power to add or detract.
The world will little note, nor long remember what we say here,
but it can never forget what they did here.
It is for us the living, rather, to be dedicated here to the unfinished work
which they who fought here have thus far so nobly advanced.
It is rather for us to be here dedicated to the great task remaining before us—
that from these honored dead we take increased devotion
to that cause for which they gave the last full measure of devotion—
that we here highly resolve that these dead shall not have died in vain—
that this nation, under God, shall have a new birth of freedom—
and that government of the people, by the people, for the people,
shall not perish from the earth.

Centered

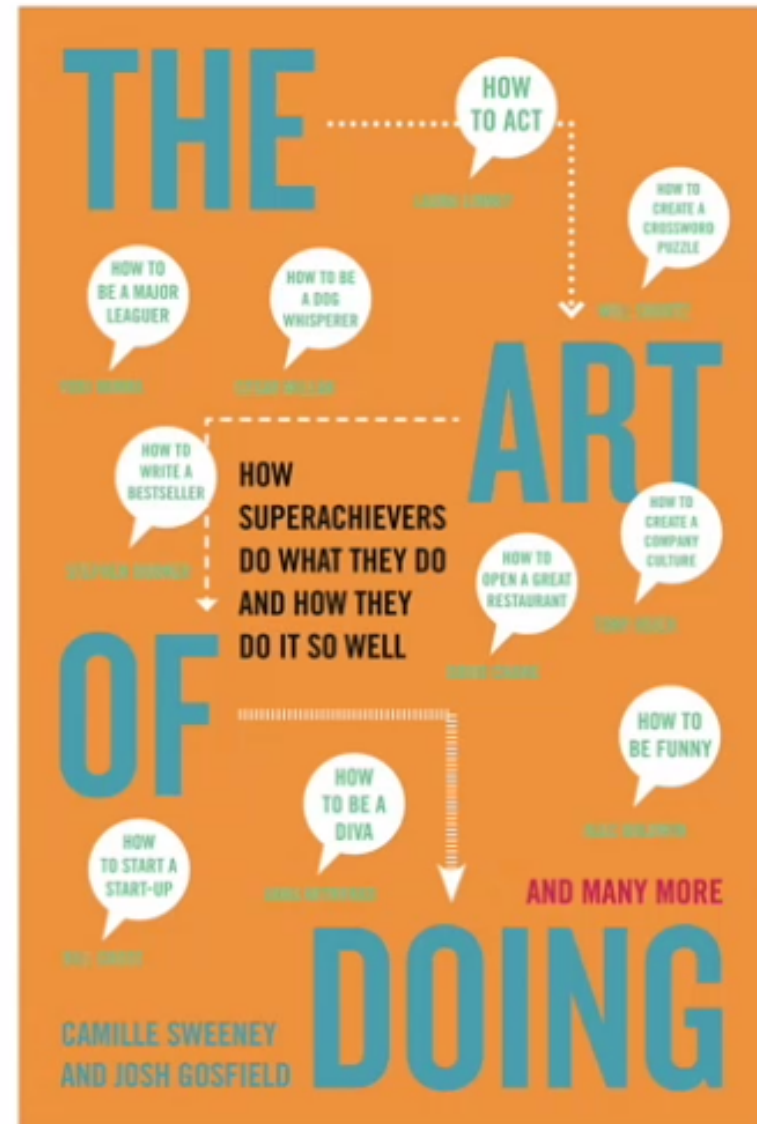
Random arrangements can be visually exciting, not good for lengthy reading.

Type can be set in curves, patterns or shapes for dramatic effect.

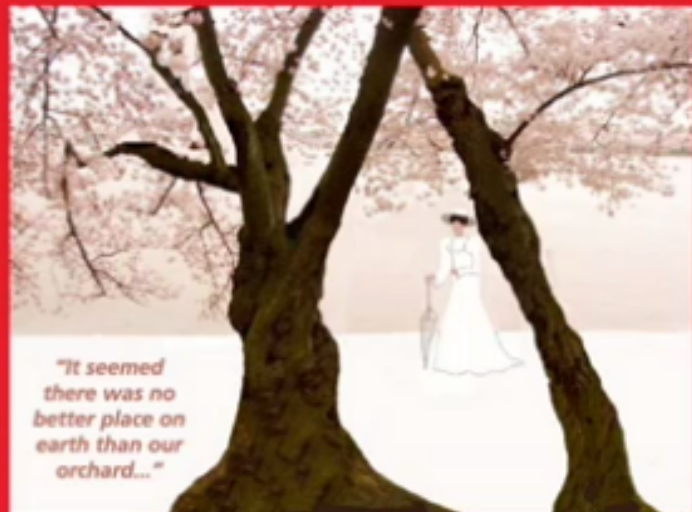
But, in a larger sense, we can not dedicate, we can not consecrate,
we can not hallow this ground.
The brave men, living and dead, who struggled here,
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and that government of the people, by the people, for the people,
shall not perish from the earth.

Random or mixed

Selecting the proper alignment or mix of alignments will help your reader navigate and can add a dynamic quality to your layouts.



Walking the dog Theater in Anton Chekhov's The CHERRY ORCHARD



**PS
21**

PERFORMANCE
SPACES FOR THE
21ST CENTURY

12 performances
Thursdays-Sundays July 5—22
directed by David Anderson
with original music by Jonathan Talbott
cast

Lily Belsen * / Glenn Barrett / Paul Boothroyd
Lora Lee Ecobelli * / Josephine Elwood
Joseph Freeman / Simon Friskhoff / Kevin Kils / Phillip X. Levine
Gabriel Rodriguez / John Romualdi * / Nancy Rothman *
David Wade Smith / Natalie Li-Ting Wong
* Member, Actors' Equity Association

previews: July 5, 6, 7 & 8

2980 ROUTE 66
1 MILE NO. OF CHATHAM VILLAGE
VISIT PS21CHATHAM.ORG FOR
COMPLETE PROGRAM INFO

► their recurrence. But we often don't.

Post-Columbia, Robin Dillon-Merrill and Catherine Tinsley, two researchers at Georgetown's McDonough School of Business, have been attempting to figure out how our near-miss blind spot really works. In one study, they asked NASA employees and MBA students to rank different versions of a mission scenario. One described a highly successful project; the other project nearly self-destructed but was ultimately saved by a lucky break. Regardless, subjects ranked both missions as equally well done. Why? Most of us grade outcomes in binary terms. Success is good. Failure is bad. "People don't learn from a near miss, they just say, 'It worked, so let's do it again,'" Dillon-Merrill says. Other studies have shown that the more often someone gets away with risky behavior, the more likely they are to repeat it.

**The more you get away
with risky behavior, the more
likely you are to repeat it.**

there is a sort of invincibility complex. "For ego protection reasons, we like to assume that past events are a product of what we controlled rather than chance," Tinsley adds.

Thanks to the Columbia, NASA is trying to address this problem. To fight the instinct to treat each near miss as a success, Ed Rogers, chief knowledge officer at NASA's Goddard Space Flight Center, gives NASA managers a training exercise based on the Georgetown tests to show how they fall into the binary trap. The FAA, meanwhile, has gone further. The agency realized that many reports of in-flight errors were probably being treated as one-off mistakes. Since there are so many variables that go into an in-flight close call, it was hard for safety officers to spot patterns. To fix this, they asked their partner, systems engineering firm Mitre, to look at each element of flight—including mechanical, procedural, and geographic. Mitre took the FAA's database of crew and air traffic errors and

combined it with in-flight mechanical information and terrain maps of areas planes generally fly over (and around). The resulting visualization let them easily spot common, potentially dangerous errors. Airlines then make a variety of corrections, such as charting a longer descent into a turbulent airport. (Indeed, the FAA has seen an 83 percent drop in fatalities over the past decade, in part from preemptive fixes.)

The more reports, the better. According to the Process Improvement Institute, a risk analysis firm, across many industries there are between 50 and 100 near misses recorded per serious accident, and about 10,000 smaller errors occur during that time. To keep the intel coming, though, institutions need to embrace people's baser instincts. People may be keen to report near misses right after an accident but are prone to falling out of the habit. In a recent

analysis of NASA flight data from real missions, researchers found reporting of safety issues spiked after Columbia but then dropped off—except for extremely high-profile missions where everyone

knew the world would be watching. One way to combat this is to change how missions are talked about internally. In a follow-up test at Georgetown using fictional incidents, researchers found that NASA personnel and MBA student test subjects were both more likely to grade close calls realistically if they were told beforehand that NASA is "highly visible" and "safety first."

Most accident investigations work backward to determine the causes. A more effective way to curtail disasters is to get better at spotting the near miss. One great success in near-miss awareness is Dow Chemical. The company has seen an 80 percent drop in serious accidents since it started a new program to push close-call reporting. The company is proof that modern disaster prevention can and should be about stopping trouble before it strikes, not cleaning up afterward. **Ben Poynter** (ben@benpoynter.com) also writes about inflatable muzzos on page 58.

DATASTREAM 911-style emergency phone numbers

000: Australia 102: Maldives 191: New Zealand 112: Austria, Belgium, Denmark, England, Finland, France, French Guiana, Germany, Greenland, Hungary, Iceland, Ireland, Italy, Jordan, Kuwait, Malta, Monaco, Montenegro, Poland, Portugal, Romania, Russia, Serbia, Spain, Sweden, Switzerland, Ukraine 103: Philippines 119: North Korea 171: Venezuela 199: Czech Republic, Cyprus, Nigeria 878: Canada, Cayman Islands, El Salvador, Mexico, Panama, Paraguay, United States, Uruguay 999: Bahrain, Hong Kong, Myanmar, Scotland, Solomon Islands, Sudan

SMART THINGS ABOUT QUICKSAND

1

It's less dangerous than you think. Quicksand never swallows people whole; the human body is too buoyant. That said, thrashing about will only tighten the quicksand's grip. Physiologists and geologists advise wiggling your legs slowly to form pockets of air and water around you until there's room to pry yourself free and climb out.

2

It has only one constant, and it's not sand. Quicksand is just a generic term for a naturally occurring viscous pit that you can get stuck in. It can have clay or silt in addition to—and sometimes even instead of—sand. Water is generally a must, so quicksand is much more common near bays, marshes, and swamps than, say, deserts.

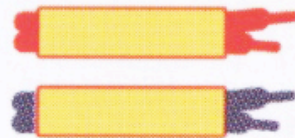
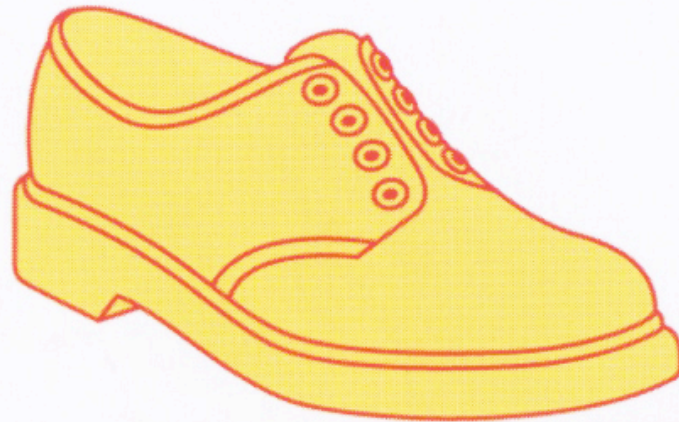
3

Indy's quicksand dip might have been possible. Or not. The science is iffy when it comes to his encounter with a "dry sand pit" in *Kingdom of the Crystal Skull*. Physiologists have created so-called dry quicksand by mixing very fine grains of sand with a controlled airflow instead of water (an object placed on sand that has lots of air between its grains will sink). But the jury is still out on whether it could happen in nature and not just much-maligned sequels. —Marco Calvito

Expressive typography

- Your message will always be most powerful when the words and the image are a perfect match.
- A sense of play
- Think about how you might modify the shapes of the letters or arrange or customize them to bring additional meaning to the words.

How will this be communicated, visually?



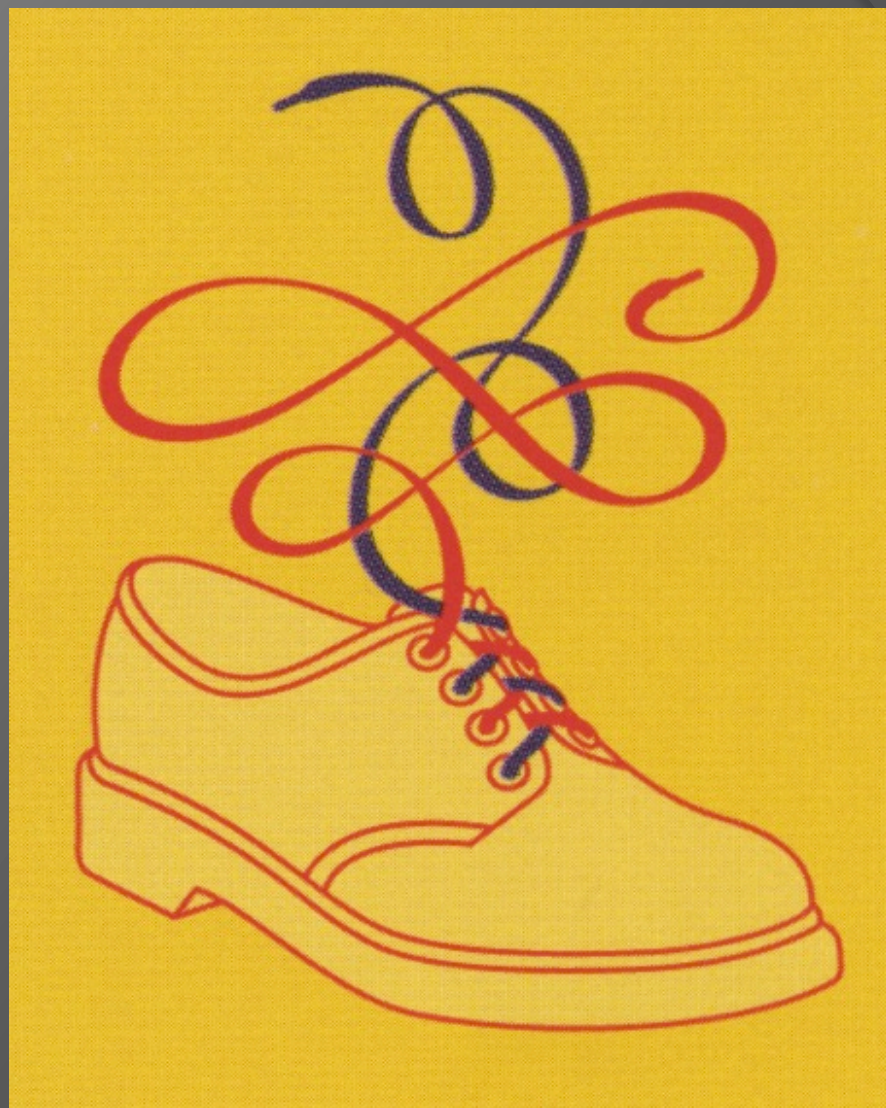
Swiftness

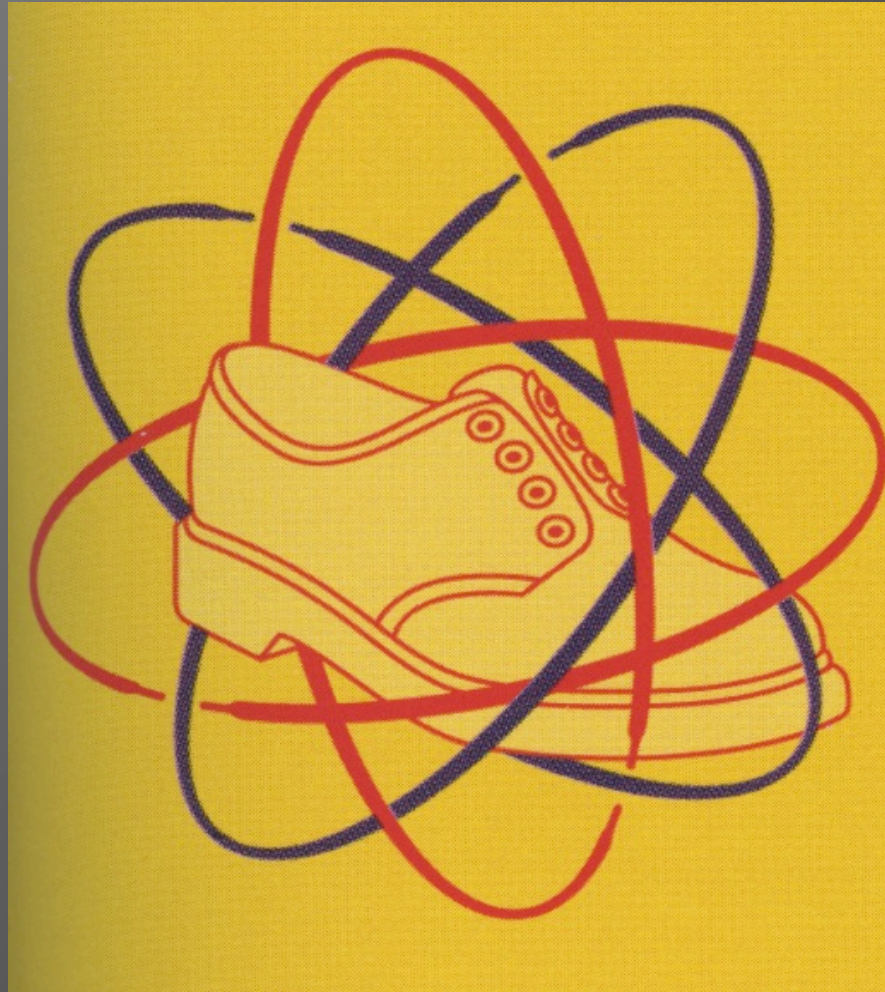
Casual elegance

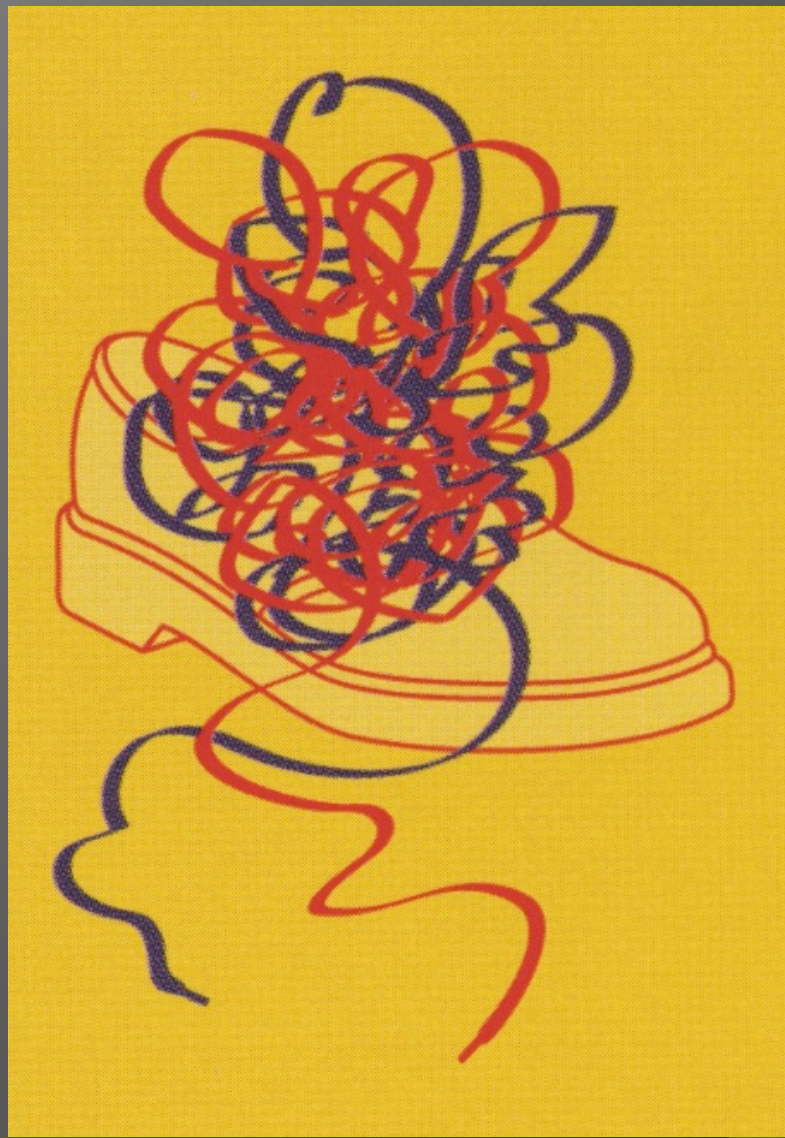
Futurism

Chaos









MOTHER

Families

A READER'S DIGEST
PUBLICATION



MARRIAGE

DON JUAN

Robert Massin is a French graphic designer, art director and typographer who is notable for his innovative experimentation with expressive forms of typographic composition.



Ne vous
détendez
pas

Racontez-moi ça
Madame Smith

Eh bien
voilà
Ça me gêne
beaucoup
de vous parler
franchement mais
un pompier est aussi
un confesseur

Eh bien p

la bonne



J'ai passé un après-midi très agréable
J'ai été au cinéma avec un homme
et j'ai vu un film avec des femmes

A la sortie du cinéma nous sommes allés
boire de l'eau-de-vie et du lait
et puis on a lu le journal



*J'espère que vous avez passé
un après-midi très agréable
que vous êtes allée au cinéma
avec un homme
et que vous avez bu
de l'eau-de-vie et du lait*

Et le journal !



Oublions darling
tout ce qui ne s'est pas passé
entre nous et maintenant
que nous nous sommes retrouvés
tâchons de ne plus nous perdre
et vivons
comme avant

Oui darling



La pendule sonne tout qu'elle veut.
Après de nombreux saluts,
M^{me} et M. Martin se saluent
et separent les paires qu'ils avaient
au début.

M^{me} et M. Smith
entrent à droite
sans aucun dialogue
dans leurs vêtements



Bonsoir chers amis !
excusez-nous de vous avoir fait attendre si longtemps
Nous avons pensé qu'on devait vous rendre les honneurs
auxquels vous avez droit et
dès que nous avons appris que vous vouliez bien
nous faire le plaisir de venir nous voir
sans annoncer votre visite
nous nous sommes dépêchés
d'aller revêtir
nos habits
de gala



Nous n'avons rien mangé
toute la journée
Il y a quatre heures
que nous vous attendons
Pourquoi
êtes-vous
venus
en retard ?



M^{me} et M. Smith
s'assoient en face des visiteurs.
La pendule sonne les répliques,
avec plus ou moins de force, selon le cas.
Les Martin, elle surtout,
ont l'air embarrassé et timide.
C'est pourquoi la conversation s'engage difficilement
et les mots viennent, au début, avec peine.
Un long silence suivi au début,
puis d'autres silences et hésitations
par la suite.

Lou Dorfsman

“Clear typography, simple slogans and smart illustration.” – New York Times

Louis "Lou" Dorfsman (1918 – October 22, 2008) was a graphic designer who oversaw almost every aspect of the advertising and corporate identity for CBS in his 40 years with the network.

With this announcement, CBS Radio opens the mass circulation of nighttime, network radio to advertisers with limited budgets. Also, to large advertisers for special promotions.

RED SKELTON, star-showman, star-salesman — and his 13 million listeners — are now available on a one-time basis. The cost: appreciably less than a color page in a mass magazine.

Here's how a one-time budget now fits big-time radio:

QUESTION: How?

ANSWER: Red Skelton's regular half-hour show — one of the "top ten" in all radio — will be on the air for 39 consecutive weeks, starting October 3. Each mass-market broadcast will be sold to a single sponsor (but a sponsor will not be limited to a single broadcast).

QUESTION: How will advertisers use the show?

ANSWER: To say something special with impact — as explosive as the laughter of Skelton's listeners.... Here is mass radio

uniquely produced to launch a new product — kick off a drive — announce a contest.... Here also is the perfect opportunity for the split-second and commanding attention that many advertisers need for peak-selling seasons and holidays: Christmas, White Sales, Mother's Day, Father's Day, Straw Hat Time, June weddings and graduations. (Skelton ad his over our shoulder: "For Thanksgiving, we can sell bags and bags of cranberries.")

QUESTION: Any merchandising tie-ins?

ANSWER: Displays and mailings will flash the appeal of Skelton's personality, tying in program, product, and purse at the sales counter.

QUESTION: What's the time of broadcast?

ANSWER: During a peak listening hour — 9:00 to 9:30 p.m., Wednesdays. Between the big audience attractions of Dr. Christian and Bing Crosby.

QUESTION: How many stations in the Skelton line-up?

ANSWER: Stations accounting for 91.4 per cent of the entire CBS Radio circulation are available for clearance.

QUESTION: How many listeners will Red Skelton deliver on an average program?

ANSWER: Year-in, year-out, Red Skelton in front of a microphone is a human, fan-making magnet. Last season, he drew an average weekly audience of more than 13 million people.

QUESTION: How much does the show cost?

ANSWER: \$23,500 — including time, talent, and merchandising. To give this price a yardstick: For \$23,500, you can tap a mass audience and listener-loyalty that took an annual investment of more than \$1,500,000 to build.

QUESTION: How will sponsors be scheduled?

ANSWER: Solely on a first-come, first-to-profit basis.

QUESTION: Are there any other answers?

ANSWER: Just a reminder: To say things that get things started.... or to give a peak-selling season a higher peak than ever, **RED SKELTON** is your boy.... For a program date best suited to your needs, call your representative at....

THE CBS RADIO NETWORK



LIKE TO HAVE A PIECE OF SKELTON?

TELEVISION: A sponsor using today's most popular advertising medium reaches an average of 7.9 MILLION families in the average nighttime minute.* And, depending on the program buy, the sponsor's commercial message allowance generally ranges from two to six minutes.

RADIO: A sponsor using the CBS Radio Network IMPACT plan complements and insures television's effectiveness. He reaches a net of 8.3 MILLION families and he delivers over three minutes of commercial messages per family - at the most efficient costs in all advertising.

*He does far better than that across the street, on CBS Television.



IMPACT

ON THE
CBS RADIO
NETWORK

Typographical games

In recent years the love affair with typography has become contagious; art directors and designers have universally discovered the design potential inherent in typography. But these efforts (206-210) go back more than 30 years and represent the mutual influence of Lou Dorfsman and Herb Lubalin on each other.

MIS ING S\$OMETHING?

Yes—
you are missing
from \$92,000,000 to
\$120,000,000 in family
purchasing power
each week if your
television advertising
is not on the CBS
Television Network.
You're missing it
because week after
week this season
the average nighttime
show on our network
is delivering 3/4 million
more families than
on Network Y— one
million more families
than on Network Z.*
CBS Television Network

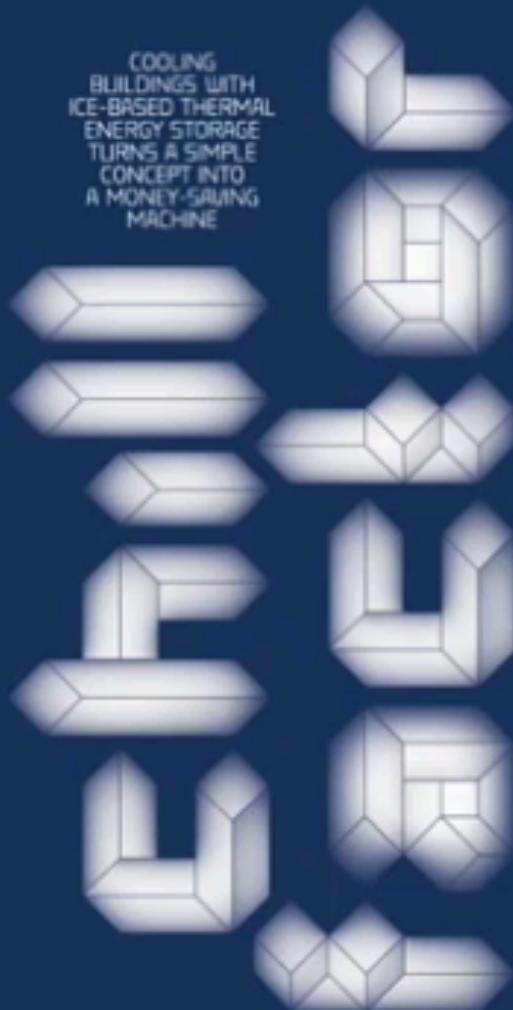
*Based on the following assumptions: CBS average (1989-1990) 100% share, 100% of all jobs, an average household organization of 3.14 (1989-1990) U.S. Dept. of Commerce.

“
Worth Repeating

The Columbia Broadcasting System turned in a superb journalistic beat last night, running away with the major honors in reporting President Johnson's election victory. In clarity of presentation the network led all the way... In a medium where time is of the essence the performance of CBS was of landslide proportions. The difference... lay in the CBS sampling process called Vote Profile Analysis... the CBS staff called the outcome in state after state before its rivals. JACK OUEL, *The New York Times* (11/4)

” CBS News

COOLING
BUILDINGS WITH
ICE-BASED THERMAL
ENERGY STORAGE
TURNS A SIMPLE
CONCEPT INTO
A MONEY-SAVING
MACHINE



CONTINUING EDUCATION

USE THE LEARNING
After reading this feature
to finish your study while
reading "Chill Factor"
to earn one AIA learning
unit, including one hour
of health, safety, and
welfare/sustainable design
credit/LEED credit. Turn to
page 40 and follow the
instructions.

**AFTER READING
THIS ARTICLE, YOU
SHOULD BE ABLE TO:**

- Discuss the key principles
of ice-based thermal
energy storage (ITES)
- Understand why ITES
can reduce air pollution in
some situations.
- Explain how ITES
can reduce mechanical
equipment costs in
commercial buildings.
- Explain the two primary
ways in which ITES
can reduce operating
costs in commercial
buildings.

| FEATURE

| ON THE ROCKS

| By ALEX WALSON
Photograph by HUNTERGATHERER





Germ Warfare

*A new generation of drugs could blast any viral disease—
from HIV to the common cold.*

Should we pull the trigger?

BY CARL ZIMMER





CHICAGO



THE GREAT LAKES

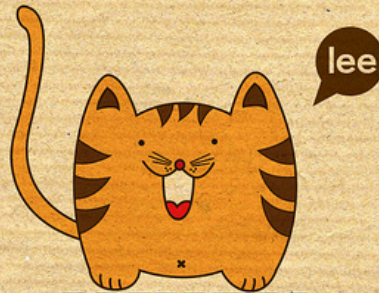




THUMP THUMP

THUMP THUMP





WHEN
I GROW UP
I WANNA
BE FAMOUS
WANNA
BE A
STAR
WHEN I GROW UP
I WANNA
SEE
THE WORLD
DRIVE NICE
CARS
HAVE
GROUPIES
WHEN I GROW
UP
BE ON TV
PEOPLE KNOW ME
BE ON MAGAZINE
NO. 1
WHEN I STEP
OUT ON THE
CAT
SCENE

"I have a dream..."



Martin Luther King, Jr.

1929-1968

Thursday was August 28. The year, 1963. Dr. Martin Luther King stood before 250,000 people at the Lincoln Memorial in Washington, D.C. His voice rang out, and his words moved millions. He spoke of his "dream" that "one day little children will see the free in a nation where they will not be judged by the color of their skin but by the content of their character." The King's speech helped make that day one of the great moments in the civil rights struggle of the 1950s and 1960s — a struggle for which Dr. King himself had done so much.

Martin Luther King, Jr., was born on January 15, 1929, in Atlanta, Georgia. In 1954, he became pastor of the Dexter Avenue Baptist Church in Montgomery, Alabama. In 1955, Dr. King led Martin Luther King Jr. to a house of Montgomery's segregated bus system. This was only the first of many nonviolent protests, marches, and other actions the King would lead — often going to jail for his beliefs. His efforts dismantled the unfair way blacks were treated in many parts of the nation, and the movement he led helped secure voting rights for blacks and ended other many of the legal barriers blacks faced.

Dr. King told his followers, "We must never allow ourselves to be intimidated by the inspired violence with the idea of nonviolent protest. But the dream was often a target of violence. On April 4, 1968, at the age of 39, he was shot and killed in Memphis, Tennessee.

**NO
STANDING
ONLY
DANCING**

**LIFE WAS
MUCH EASIER
WHEN Apple
AND *BLACKBERRY*
WERE JUST
FRUITS**

“YOU'RE NOT YOUR JOB.
YOU'RE NOT HOW MUCH
MONEY YOU HAVE IN THE BANK.
YOU'RE NOT
THE CAR YOU DRIVE.
YOU'RE NOT THE CONTENTS
OF YOUR WALLET.
YOU'RE NOT YOUR FUCKING KHA-KIS.
YOU'RE THE ALL-SINGING,
ALL-DANCING CRAP OF
THE WORLD.”

DEATHCLUB PRESENTS



JAMES CHANCE AND THE CONTOURIONS

CHIK BUDO
TWISTED CHARM

£10 ADVANCE
DOORS AT 7.30
1ST MAY 2007
AT THE CAMDEN BARFLY

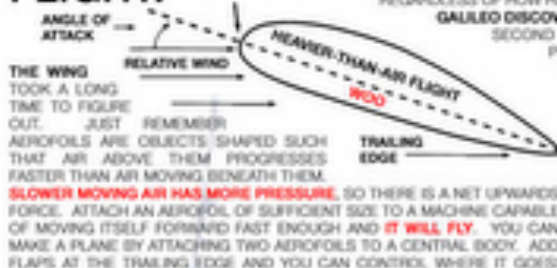
LET'S SAY YOU'VE GONE BACK IN TIME.

NICE ONE. OKAY, WE'RE GOING TO ASSUME THAT YOU'RE ON EARTH AND YOU CAN READ ENGLISH. SO FAR, SO GOOD. BUT HOW CAN YOU BUILD ALL THE AMENITIES OF TOMORROW WHEN YOU'RE STUCK IN THE PAST?

DON'T WORRY. YOUR POSTER HAS THIS ONE COVERED.

FIRST, WE NEED SOME UNITS, BUT NO BIGGIE. THE EXACT SPEED OF LIGHT IN A VACUUM IS 299,792,458 METERS PER SECOND. GOOD TO KNOW. A METER IS DEFINED IN TERMS OF LIGHT, BUT IF YOU CAN'T MEASURE IT ACCURATELY, THE LENGTH OF A PENDULUM THAT TAKES ONE SECOND TO SWING REGARDLESS OF HOW HIGH YOU START THEM OFF, SO DON'T WORRY ABOUT THAT. PRETTY NEAT, RIGHT? GALILEO DISCOVERED THAT, BUT WHATEVER. **TAKE THE CREDIT.** IF YOU DON'T HAVE A WATCH, A SECOND IS ABOUT HOW LONG IT TAKES YOU TO SAY "ONE MISSISSIPPI." AND A GRAM IS PRETTY MUCH THE WEIGHT OF ONE CENTIMETER CUBED OF WATER.

FLIGHT:



TECHNOLOGY:

HEAT MILK TO JUST BELOW ITS BOILING POINT: IT WON'T CURDLE, AND 99.99% OF THE BUGS IN IT WILL BE KILLED. CONGRATULATIONS! **YOU JUST INVENTED PASTEURIZATION.** A MOVING ELECTRIC FIELD PRODUCES MAGNETISM, AND VICE VERSA. WRAP COPPER WIRE AROUND AN IRON CORE AND RUN ELECTRICITY THROUGH IT, AND **YOU'VE GOT AN ELECTROMAGNET.** DON'T HAVE ANY ELECTRICITY? PUT A MAGNET ON A WATER WHEEL, AND PUT YOUR COPPER-WRAPPED IRON BESIDE THE WHEEL, AND HEY PRESTO, YOU'RE CONVERTING MECHANICAL ENERGY INTO ELECTRICITY. DON'T HAVE ANY MAGNETS? HEAT IRON TO GET A VERY WEAK ONE. LOOK FOR BLACK GRAINS IN BEACH SANDS THAT STICK TOGETHER, OR EXAMINE THE SITES OF LIGHTNING STRIKES FOR MAGNETIC LOCKSTONES. **RUN ELECTRICITY THROUGH TUNGSTEN TO GET THE LIGHTBULB.** RUN ELECTRICITY BACK AND FORTH ALONG A WIRE WITH ENOUGH POWER AND **YOU'VE INVENTED RADIO.** WHEN A RADIO WIRE INTERACTS WITH A RECEIVING ANTENNA, THE EXACT SAME ELECTRICAL CHARGE CAN BE RECOVERED. INFORMATION CAN BE ENCODED IN TWO WAYS: IN THE CHARGE OF THE ELECTRICITY (HIGHER CURRENT PRODUCES A HIGHER AMPLITUDE WAVE) OR IN THE FREQUENCY OF THE ELECTRICAL REVERSALS. FM IS MORE RESISTANT TO AMPLITUDE DECAY IN TRANSIT. SEND OUT HIGH-FREQUENCY WAVES AND MEASURE HOW AND WHEN THEY BOUNCE BACK, AND **YOU'VE INVENTED RADAR.** DO THE SAME WITH SOUND, AND **OH MAN! SONAR.** MOUNT A MAGNET SO IT CAN MOVE FREELY, AND **YOU'VE INVENTED THE COMPASS.** ARE YOU **TAKING THE CREDIT?** POLARIS (THE NORTH STAR) IS JUST ABOUT THE BRIGHTEST ONE IN THE SKY, AND IT'S NEAR THE BIG DIPPER. MEASURE HOW HIGH UP IT APPEARS TO BE, AND THAT ANGLE IS YOUR **LATITUDE.** QUARTZ CRYSTALS ARE GREAT: RUN SOME CURRENT THROUGH THEM AND THEY'LL CHANGE SHAPE! STOP THE CURRENT AND THEY'LL RESUME THEIR SHAPE, AND THEY'LL GENERATE ELECTRICITY WITH A VERY PRECISE FREQUENCY AS THEY DO SO. YOU CAN USE THIS TO BUILD **PRECISION CLOCKS.** NICE. WITH THESE CLOCKS, YOU CAN DETERMINE **LONGITUDE.** JUST SET YOUR CLOCK TO LONDON TIME, TAKE THE DIFFERENCE BETWEEN LONDON NOON AND LOCAL NOON, AND THAT'S HOW FAR AWAY FROM THE PRIME MERIDIAN YOU ARE. HEY! **THAT'S LONGITUDE RIGHT THERE.** THAT WAS EASY. **THAT DESERVES SOME CREDIT.** IF YOU'RE IN 1714, THE BRITISH HAVE A £20,000 PRIZE UP FOR A SIMPLE WAY TO CALCULATE LONGITUDE.



OTHER FUN INVENTIONS: GEARS, CATAPULTS, GLASSES, KITES, THERMOMETERS, SCISSORS, CIRCULAR SAWS, BUTTONS, FORKS, PAINT ROLLERS, WRITTEN AND SPOKEN LANGUAGE, THE WHEEL, RUDDERS, CPR, UMBRELLAS, SCREWS, CONDOMS, DELICIOUS CARBONATED WATER

HEALTH:

GERMS SPREAD DISEASE, AND THEY CAN LIVE BASICALLY ANYWHERE. **FIGHT THEM WITH HYGIENE AND ANTIBIOTICS.** WASH TO KEEP YOURSELF AND THOSE AROUND YOU CLEAN. MEDICAL INSTRUMENTS SHOULD BE CLEANED IN BOILING WATER. STEAM WORKS ON THINGS THAT CAN'T BE WASHED. **THE BEST ANTIBIOTIC IS PENICILLIN:** THE MOLD *PENICILLIUM NOTATUM*, FOUND ON FOOD. IT'S INCREDIBLY EFFECTIVE AT STOPPING INFECTION, AND WORKS BY PREVENTING OTHER BACTERIA FROM MAKING NEW CELL WALLS AND REPRODUCING. IT'LL USHER IN A NEW AGE OF ANTIBIOTICS. **TAKE THE CREDIT.** IF THE *PENICILLIUM* MOLD IS UNKNOWN, LOOK FOR MOLDS ON FOODS THAT, WHEN VIEWED UNDER A MICROSCOPE, LOOK LIKE CRAZY HANDS ON LONG STALKS. THERE'S YOUR *PENICILLIUM*. **GERMS SPREAD DISEASE,** BUT UNLIKE GERMS, CAN'T REPRODUCE ON THEIR OWN. THEY RELY ON HOST CELLS TO REPRODUCE. **FIGHT THEM WITH VACCINATION,** WHICH ALLOWS THE BODY TO PRODUCE ANTIBODIES THAT FIGHT A GIVEN VIRUS BEFORE IT EVEN SHOWS UP. MAKE A VACCINE BY GROWING A CULTURE AND THEN HEATING IT: THE HEAT WILL KILL THE VIRUS, AND THEIR DEAD SHELLS ARE ENOUGH TO TEACH THE BODY TO FIGHT. WEAKER STRAINS ALSO VACCINATE. YOU'RE PROBABLY GOOD FOR MOST DISEASES, BUT **OUR GENERATION WAS THE FIRST TO GROW UP WITHOUT SMALLPOX.** **COXSAK** ARE SPOTS FOUND ON COW UDDERS, AND IT'S CLOSE ENOUGH TO VACCINATE YOU WHILE BEING WEAK ENOUGH NOT TO KILL YOU. **SPEAKING OF NOT BEING KILLED,** DIABETES IS CHARACTERIZED BY FREQUENT URINATION, EXTREME THIRST OR HUNGER, AND/OR EXTREME WEIGHT LOSS. WITHOUT TREATMENT IT'S FATAL, BUT **INSULIN CAN BE EXTRACTED FROM THE PANCREAS OF DOGS AND PIGS** BY TYING A STRING AROUND THE PANCREATIC DUCT. BLEACH THIS EXTRACT AND IT WILL ACT AS A MIRACULOUS TREATMENT. FORGET SANTIAGO AND BEST. **TAKE THE CREDIT.**

CHEMISTRY:

DON'T FORGET THE BASIC BUILDING BLOCKS OF MATTER. ATOMS, ATOMS CONSIST OF A NUCLEUS AT THE CORE, MADE OUT OF NEUTRALLY-CHARGED NEUTRONS AND POSITIVELY-CHARGED PROTONS, SURROUNDED BY NEGATIVELY-CHARGED ELECTRONS. AN ATOM WITH THE SAME NUMBER OF ELECTRONS AND PROTONS IS ELECTRICALLY NEUTRAL. OTHERWISE IT WILL HAVE A POSITIVE OR NEGATIVE CHARGE. **THE NUMBER OF PROTONS IN AN ATOM DETERMINE WHICH ELEMENT IT IS.** FOR OUR PURPOSES THE MOST USEFUL ONES ARE HYDROGEN (H) WITH 1 PROTON, CARBON (C) WITH 6, NITROGEN (N) WITH 7, AND OXYGEN (O) WITH 8. WATER IS MADE OF HYDROGEN AND OXYGEN: H_2O . KRAZY GLUE IS $C_9H_{19}NO_2$. IF YOU'RE A WOMAN AND YOU SWALLOW PROGESTERONE, YOU WON'T OVULATE. $C_{20}H_{32}O_2$ IS A GOOD SYNTHETIC SUBSTITUTE. **ALUMINUM USED TO BE MORE VALUABLE THAN GOLD.** DEPENDING ON WHEN YOU ARE, IT STILL IS. EXTRACT IT FROM ROCKS BY DISSOLVING THEM IN MOLTEN CRYOLITE AND RUNNING CURRENT THROUGH IT. YOU'LL FIND CRYOLITE IN GREENLAND, LATITUDE 61.2 LONGITUDE -48.16. LOOK FOR GLASSY WHITE CRYSTALS. **ATOMS CAN BE SPLIT,** WHICH RELEASES A TREMENDOUS AMOUNT OF ENERGY AND RADIATION. ENERGY CANNOT BE CREATED OR DESTROYED, JUST CONVERTED. REMEMBER **EINSTEIN:** ENERGY IS MASS TIMES THE SPEED OF LIGHT SQUARED. **TAKE THE CREDIT.**



ANY WAY.

HANG THIS UP IN YOUR TIME MACHINE



METAMORPHOSIS
PROFOUND
CHANGE
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NEXT

KENOTE
SPEAKERS:
& ANDREW
ADELBANCO
JULIAN
& CLARENCE LEVI
PROFESSOR
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graphics creative design

form follows function

breaking boundaries

INSPIRATION



ABCDEFGHIJKLMNOPQRSTUVWXYZ
HELVE
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PQRSTUVWXYZ
Regular
Bold
Oblique
Bold-Oblique

1957
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When Linotype adopted
Neue Haas Grotesk
(which was never
planned to be a full
range of mechanical
and hot-metal type-
es) its design was re-
worked. After the suc-
cess of Univers, Arthur
Ritzel of Stempel re-
signed Neue Haas
Grotesk into a larger
family.

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Max Miedinger
Eduard Hoffmann

Helvetica was developed in 1957 by Max Miedinger
with Eduard Hoffmann at the Haas'sche Schrift-
glesserei (Haas type foundry) of Münchenstein, Swit-
zerland. Haas set out to design a new sans-serif
typeface that could compete with the successful
Akzidenz-Grotesk in the Swiss market. Originally
called Neue Haas Grotesk, its design was based on
Schelter-Grotesk and Haas' Normal Grotesk. The aim
of the new design was to create a neutral typeface
that had great clarity, no intrinsic meaning in its
form, and could be used on a wide variety of signage

Erik Adigard
[M.A.D.]
Thursday, September 12
6:00 PM

Graphic designer Erik Adigard founded McShane Adigard Design (M.A.D.) in 1989. The firm has since designed Web sites, multimedia installations, and print publications for global clients, including Wired magazine.

Julie Bargmann
[D.I.R.T. Studio]
Tuesday, October 9
7:30 PM

Julie Bargmann founded D.I.R.T. Studio, a landscape consultancy, in 1992. Recent projects include the landscaping of Massachusetts Museum of Contemporary Art in North Adams, Riverside Park South and the Hudson River Park in New York City.

DESIGN CULTURE NOW

Michael Gabellini
[Gabellini Associates]
Wednesday, November 2
6:00 PM

Michael Gabellini, a graduate of the Rhode Island School of Design, worked for Kohn Pedersen Fox Associates before founding his own practice in 1991. Recent projects include exhibitions for the Guggenheim Museum, the Marian Goodman Gallery, and the Council of Fashion Designers of America.

Cooper-Hewitt National Design Museum 2 East 91st Street New York City

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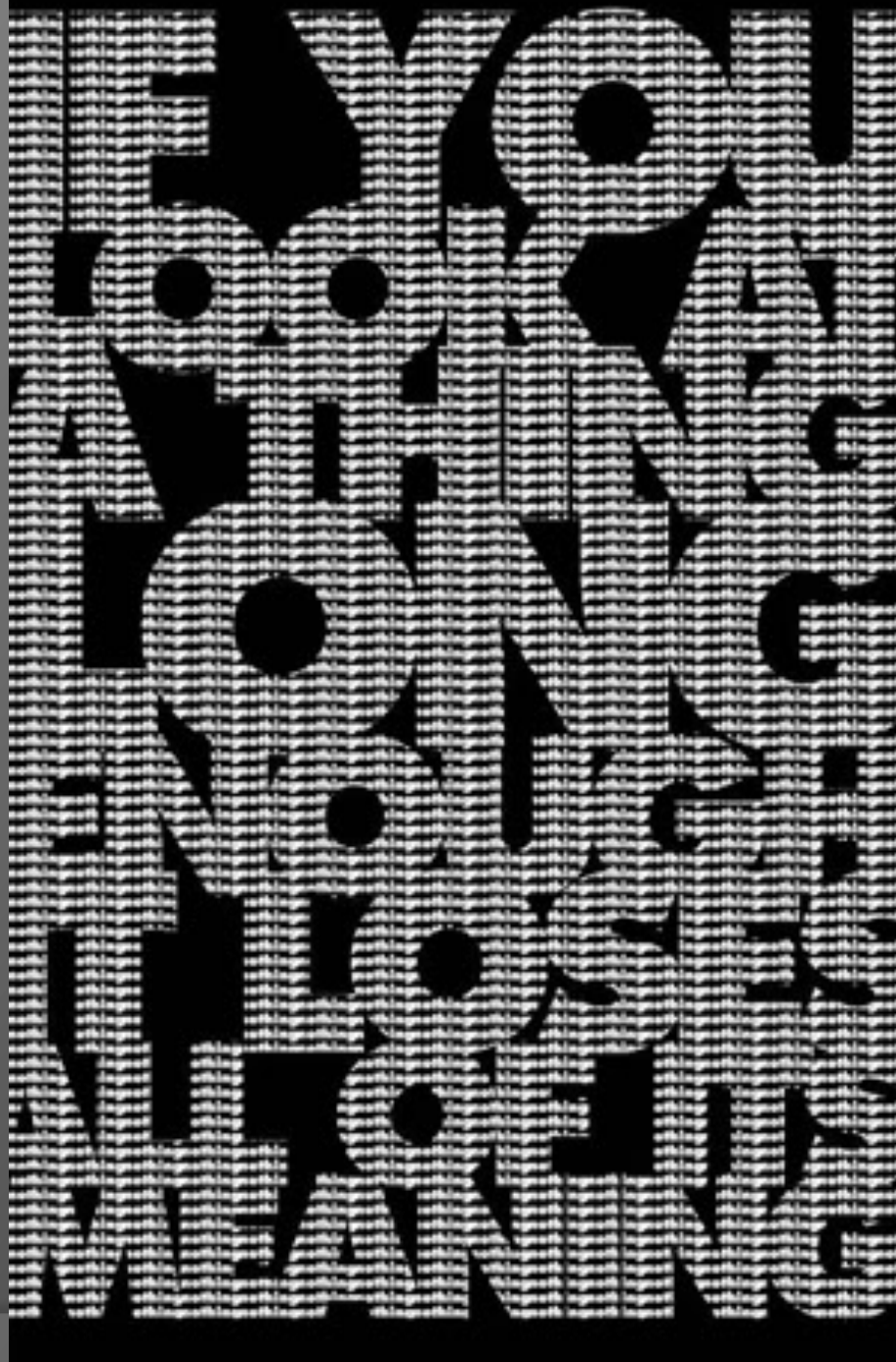
Rebeca Méndez
[Méndez Communications]
Thursday, December 4
6:30 PM

Rebeca Méndez, born and raised in Mexico City and trained at the Art Center College of Design in Pasadena, has designed publications for the Getty Center, the Los Angeles County Museum of Art, and the Whitney Museum of American Art.

— WE HAVE A —
**STRATEGIC
PLAN**

IT'S CALLED
★ **DOING** ★
THINGS.

—
-Herb Kelleher



BAD OLD
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GOOD TYPOGRAPHY IS INVISIBLE
BAD TYPOGRAPHY IS EVERYWHERE

According to the authors, the results of the study suggest that the use of the "redundancy" of information in the text is a key factor in the effectiveness of the text. The authors suggest that the use of the "redundancy" of information in the text is a key factor in the effectiveness of the text.

DO
MORE
OF WHAT
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HAPPY

FUNERAL







Some of the quotes student examples



Planning for the future is escapism

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Sloppy thinking gets worse over time

Sloppy
Thinking

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Time

Sloppy

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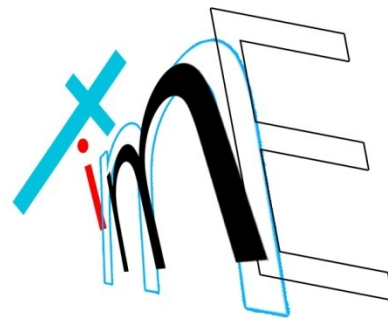
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it's just an accident

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SOMETIMES

SCIENCE

ADVANCES

FA:FA:FA:FASTER



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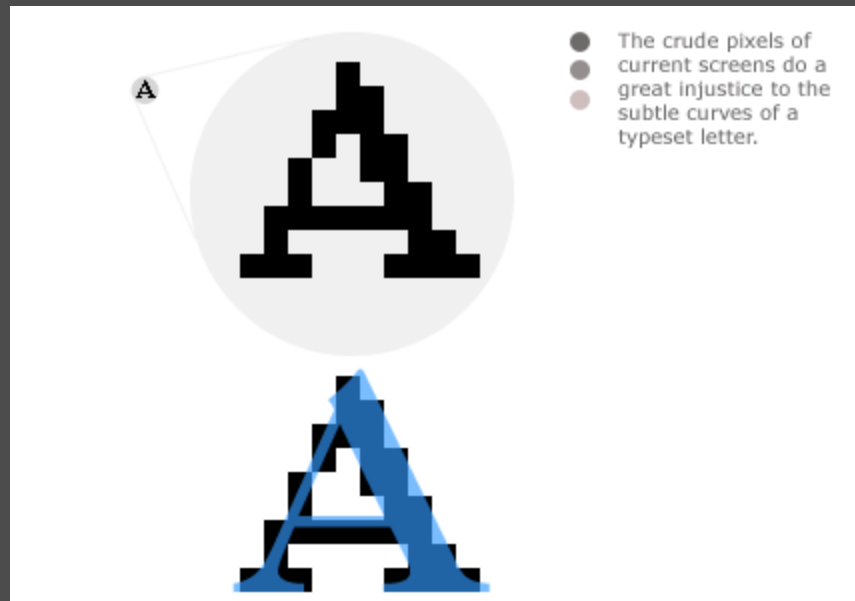
IT IS
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HIMSELF

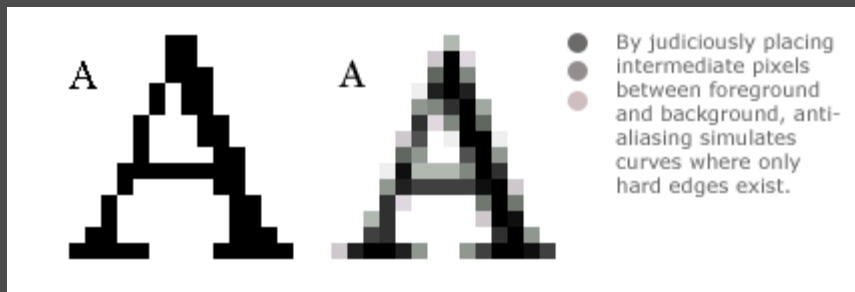
Problems with online delivery

Pixelization



Anti-aliasing

Using intermediate colored pixels around the edge of letterforms



Develop a Style Guide

Fonts resources

- <http://www.google.com/webfonts>
- <https://typekit.com/>
- <http://www.microsoft.com/typography/default.mspx>
- <http://www.type.co.uk/>
- <http://www.goodwebfonts.com/>