

Web Typography Sucks

Richard Rutter

RR: We're here to talk about web typography sucks – how it does, why it needn't, when it doesn't and how we can all do something about it.
Let's talk about what we mean by typography...

typography /tʌɪˈpɒɡrəfi/ •n.

1 the art or process of setting and arranging types and printing from them. 2 the style and appearance of printed matter.

Oxford English Dictionary

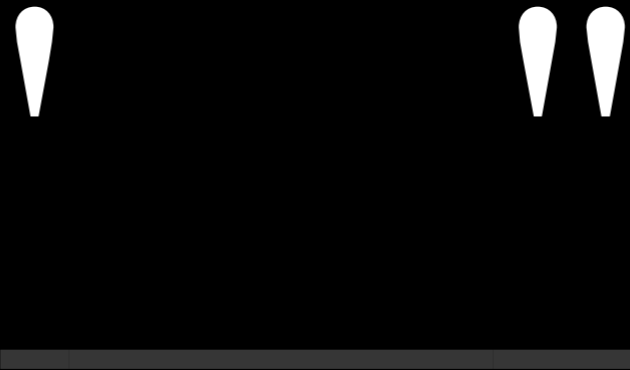
RR: Definition from the OED. It's not really appropriate – it's all about printed matter and the days of metal type. I wrote to OED and they agreed the definition is out of date and said the word is under review. What we need is another definition.

typography /tʌɪˈpɒɡrəfi/ •n.

1 the mechanical notation and arrangement of language.

Type & Typography by Phil Baines

RR: Definition from typographer & author Phil Baines in his book *Type & Typography*. Where mechanical include all things digital and language is the conveyance of info and ideas. So why does web typography suck?



MB: Anybody recognise these characters? These are primes.

6'10"

MB: They have a specific purpose...

6'10"

50°49'33"

MB: They are not quote marks or apostrophes.

"It's a bloody aardvark!"

MB: So when we see punctuation like this throughout the Web, it is wrong.

“It’s a bloody aardvark!”

MB: This is the right way to do it, using the correct characters. (Actually neutral quotes, but get the point)

- hyphen	Müller-Brockmann
– en dash	3–6 April; 25–30 mm a phrase marker – thus – with spaces
— em dash	a phrase marker—thus—with no spaces — Doesn't sound much like a bee to me. — It's a bloody aardvark!
− minus	4−1=3

MB: There are cultural and stylistic differences in the usage of these characters. For example the Hart's Typesetting Rules in the UK, states Em dashes should be used as a phrase marker with no spaces. The Chicago Manual of Style states an En dash should be used with a hair, or thin space, either side.

The minus is a distinctly different character. It appears to be the same length of an en dash, but is thicker to match the equals sign.

'I found out my four kids were really fathered by wife's lover'



MEMO TO McCLAREN:
Bring back Becks now

CHAMPIONS LEAGUE
BARCELONA 1
LIVERPOOL 2
FC PORTO 1
CHELSEA 1
SEE SUNSPORT

SEE SUNSPORT

HARRY TO IRAQ AS PM ORDERS TROOPS HOME

**1,600 OUT
..ONE'S IN**

EXCLUSIVE by TOM NEWTON
DUNN, Defence Editor

PRINCE Harry will today be ordered to terrorist-infested Iraq with his regiment.

The news came as Tony Blair revealed he was bringing 1,600 other British troops HOME.

Harry, 22, third in line to the throne, will lead a troop of Household Cavalry armoured vehicles.

Full story — Pages Eight and Nine



RR: The Sun, a UK newspaper, has a reading age of eight years old.

PRODI QUILTS AS PM

By ANDREW PORTER, Deputy Political Editor
 ITALY'S prime minister is quitting after less than a year in charge — plunging the country into a political crisis.
 Romano Prodi was forced to step down after a major defeat over foreign policy yesterday.
 His government was split over Italy's involvement in Afghanistan and its backing for US policy in the Middle East.
 President Giorgio Napolitano could now call for an election or ask Prodi to form a new government.
 It is the latest in a history of short-lived Italian governments.
 The upheaval could see the return of Tony Blair's ally in the war on terror, Silvio Berlusconi, who was ousted as PM last year.



Crisis... Romano Prodi

5yr 'MOT' for docs

DOCTORS face five-yearly 'MOTs' to prove they are fit to practice, it was announced last night.
 They will be tested on knowledge, but also on their attitude and technical skills.
 Five-yearly 'MOTs' for doctors will be introduced to improve patient safety, the Government has announced.
 Health minister Andy Burnham said: "The most important thing is improving patient safety."

Samurai nut jailed

A KILLER who inflicted savage wounds on his victim with a samurai sword before running her over has been jailed for life.
 Junko Hugh Pearce, 37, attacked lodger Carla Burns, 25, over a relationship she was having then tried to slash a taxi bus in Co Durham.
 Ms Pearce, who admitted murder, laughed and waved at pals in the public gallery as he was sentenced to at least 13 years at Newcastle Crown Court.

EXCLUSIVE:

A DOTING dad told yesterday how he brought up four kids as his own — only to find they were all fathered by his wife's secret LOVER.

By JOHN COLES

Cheated Charles Bostock, 68, spent years thinking the three cherished girls and a boy were his children.
 He only discovered the shock news when his 40-year-old wife Sarah fell pregnant with a FIFTH child by married love rival Richard Mills.

Retired policeman Charles knew he could not be the dad because he had not bedded Sarah for many months.
 Pals finally told him who the baby's dad was. But he did not learn the truth about the other four children — aged 12, ten, nine and six — until DNA tests proved they were Mills.

Heartbroken, Charles said yesterday: "I feel like the life has been ripped out of me."
 "I brought those kids up for 12 years like any normal dad. I changed their nappies, dried their tears, took them to school — and now I've just

everything. I still love them and they love me, but what sort of life will they have now?"
 "And how can someone be married to somebody all those years and just stick two fingers up to them? It's not right. It's a whole, a trap and an adulteress. What those two have done to me is evil."

Charles added: "Sarah must have known all along the kids were his — why didn't she say?"

Wrecked
 "She kept up the lie all those years. She kept me going, using me like some sugar daddy to pay for Mills' kids."
 "If she'd had the courage to tell me the truth at the start I could have had a chance of rebuilding my life. But not any more. It's too late for me."

Mills, 48, who has a grown-up son and daughter by wife Carol, recently fathered a SIXTH child with Sarah.
 But he is refusing to live with her and his lovechildren, and Sarah suspects he is cheating on her too. Plant hire boss Mills has now been divorced, while Charles' 28-year mar-

riage ended the same way. The shell-shocked ex-cop, who left his £400,000 marital home near Bodmin, Cornwall, about 18 months ago — has even contemplated SUICIDE.

He said: "Mills has wrecked two marriages and so many lives. I've lost everything — my home, my wife, my kids, all the things I worked hard for. I was going to end it all and I've even thought how to and I've even thought how to come back home and still be his dad. But I'm just in shock."

Charles wed second wife Sarah in 1973. Within six months she fell pregnant with daughter Alison, now 28. Two years later she bore Charles a son — also named Charles.
 In 1980 Charles fell pregnant after a motorbike accident and left Britain, Surrey, for a new life in Cornwall.

He got a job as a council waste regulation officer and Sarah looked after their two children at home. But 12 years ago she became pregnant again — with what turned out to be the first of Mills' kids.
 As another three siblings followed in the next six years, Charles thought his family and life were complete. Sarah even put his name on their birth certificates, although she's now planning to call them Mills.

In 2001 Sarah told her hubby she wanted more kids. Who he refused on most grounds, he angrily declared she wouldn't have sex with him any more.
 But months later she announced she was pregnant.
 Charles said: "I told her: 'That's impossible — I haven't touched you for at least six months.' I asked who the dad was but she wouldn't say. She even claimed she'd had sex with me while I was away."

Sarah insisted on having the child a girl now nearly five — and Charles demanded a separation. Just before the birth, he learned Mills' identity when pals tipped him.

Bombshell
 He said: "I could have killed him — I have considered them both. But Mills said he didn't want anything to do with the child, and for a while I said I'd take her on and look after her as my own."
 "I thought it was a one-off and I was prepared to live with that for my kids' sake."
 Charles remained in the house to be with "his" children, but quit the marriage.

He said: "She then started seeing Mills again. She started me saying: 'You're ugly and old — he's virile and rich and he's got a Mercedes.'"
 "That's when I moved out and started on the divorce."
 A few months later, the children raised Charles and Mills was their real father.

He said: "They said, 'Richard took away from our mums.' My wife refused to say why but a few weeks later she came again and the 12-year-old said: 'You aren't our dad.'"
 And she said: "No Richard Mills has told us that he is."

Charles got his solicitor to order DNA tests — and she confirmed the terrible truth.
 The ex-cop said he has only met Mills once and did not know him as a court hearing.

He added: "You couldn't print what I said, I said it on the phone. It's a total lie — which life's been a lie and hell no. And I've been their mum."
 "Thanks to them I've lost everything — now I'm nothing but a lonely old man. I keep thinking what an idiot I was."
 Mills last night did not deny his story. He asked: "Why's that such big news?"
 Sarah said she had had six of her children. *Journalist's name withheld.*



Family... but Charles' kids, ID hidden, were fathered by rival



All smiles... yet Charles and Sarah divorced after kids shock



Affair... phone snap shows Mills and Sarah at Bostocks' home

WIFE HAD 4 KIDS BY LOVER

The mother of all betrayals



THE WIFE
 Sarah Bostock has had six children by her secret lover Richard Mills



THE HUSBAND
 Bitter Charles Bostock with DNA swabs that proved he was not dad



THE LOVER
 Richard Mills fathered six children by cheating mistress Sarah Bostock

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Whether you're buying a home or thinking about re-mortgaging, you could save £499 on our 5 year Fixed Rate Mortgage. That's because we've reduced the booking fee. You'll have peace of mind for a full 5 years that any interest rate rises won't affect you. And afterwards you'll have to pay HSBC variable rate, or you can take out one of our other mortgages. Come into branch, call us or visit hsbc.co.uk

Lender	Initial rate	Then Changing to	Overall cost for competition APR
HSBC 5 Year Fixed Rate	5.89%	6.10%	6.4%
Northern Rock 5 Year Fixed Rate	5.99%	7.04%	6.9%
Halifax 5 Year Fixed Rate	5.99%	7.25%	6.9%
Abn-Amro 5 Year Fixed Rate	5.99%	7.25%	7.0%

Source: Moneyfacts. Rates correct as at 12 February 2007 and may vary. Rates based on the 5 Year Fixed Rate borrowing being no more than 90% of the property value with a loan size of £110,000 and a property value of £200,000. There are no booking fees/arrangement fees applicable to any of the products featured.

Fixed rate 5.89% for 5 years. After 5 years variable rate. The overall cost for competition APR is 6.4%.

The HSBC rate applies if your total borrowing does not exceed 90% of the property value. The total borrowing figure includes the amount of any mortgage and Homeowner loans you already have with us. An early repayment charge applies until 31/03/2007. Please see for details.

Your home may be repossessed if you do not keep up repayments on your mortgage.

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RR

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"I brought those kids up for 12 years like any normal dad. I changed their nappies, dried their tears, took them to school – and now I've lost

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RR: Even they use the correct characters. Note the en dashes, quotes and apostrophes.

OCTOBER 19, 2001

The Trouble With EM 'n EN (and Other Shady Characters)

by PETER K SHEERIN

Published in: HTML and XHTML, Typography | No discussion

The dawn of the web has frequently been compared to the invention of the printing press. But the web has also destroyed one of the greatest features of nearly every press since Gutenberg: the ability to publish pleasing type.

The printing press gave us type that was clearer and easier to read than that produced from a typewriter, because the typesetter had additional tools at his disposal—and knew how to use them. The web has cost us some of those tools.

Lack of tools and knowledge

There are two problems here. The first is that until [HTML 4](#) came along, the web was missing almost all of these tools (it's still missing many important ones).

But the larger problem is, now that they're available, almost no one publishing on the web today knows how to use them—or often even knows of their existence.

Read this, though, and you'll understand the answers to both problems far better than almost anyone else, including your English teachers.

Search ALA

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Snapshot

More than you ever wanted to know about dashes, spaces, curly quotes, and other vagaries of [online typography](#). HTML specs, grammatical rules, browser bugs and character encoding—it's all here, in this famous and much-bookmarked ALA article.

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today knows how to use them—or often even knows of their existence.

ALA article.

and much-bookmarked all here, in this famous character encoding—it's famous and

www.alistapart.com/articles/emen

RR How do we accomplish these characters on the Web? This fantastic ALA article explains all.

“	opening double quote	“
”	closing double quote	”
‘	opening single quote	‘
’	closing single quote	’
–	en dash	–
—	em dash	—
–	minus	−
×	multiplication	×
...	ellipsis	…

RR: Here's a brief summary of the characters and their HTML entities.

By JOHN GRUBER

ARCHIVES
PROJECTS
LINKED LIST
MEMBERSHIP
CONTACT
COLOPHON



DOWNLOAD

[SmartyPants 1.5.1](#) (20 KB) — Fri 12 Mar 2004

[What's new?](#)

DESCRIPTION

SmartyPants is a free web publishing plug-in for Movable Type, Bloxom, and BBEdit that easily translates plain ASCII punctuation characters into "smart" typographic punctuation HTML entities.

SmartyPants can perform the following transformations:

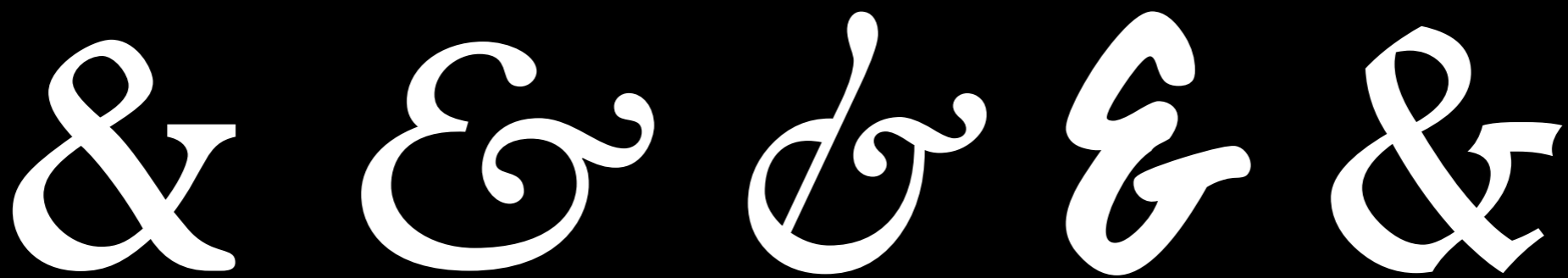


SmartyPants can perform the following transformations:

"smart" typographic punctuation HTML entities.

and easily translates plain ASCII punctuation characters into

RR: SmartyPants and Textile can help automate the procedure. There are plugins for BBEdit and Textmate.



MB: Ampersands. Some fabulous designs.

&

MB: Who knows what typeface this is? Rotis Sans. One of the worst ampersands available.

5.1.3 In heads and titles use the best available ampersand

Elements of Typographic Style by Robert Bringhurst

Hand-crafted pixels & text.

SimpleBits is a **tiny web design studio** founded by designer and author Dan Cederholm. We create simple, readable interfaces balanced with a standards-based methodology. [Learn more](#) ▶



RECENT NOTEBOOK ARTICLES & QUICKBITS

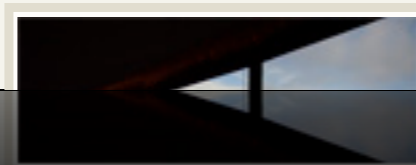
★ [Planet Microformats](#)

A giant master feed of anything and everything tagged with "microformats" from Brian Suda. {02.20.07}

Web Directions North

I've returned from several days in Vancouver, and the first-ever [Web Directions North](#). It was a great trip, a great conference, and my second attempt at snowboarding in the last 20 years.

I'll first say congrats to [Maxine](#), [John](#), [Dave](#) and [Derek](#) for putting on what was an outstanding



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directions north, it was a great trip, a great conference, and my second

LATEST FEATURED WORK



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[Cork'd](#)

Creative Director



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Logo + interface design

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[An Event Apart Boston](#)

☰ March 26-27, 2007 ~ *Boston*

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☰ May 24-25, 2007 ~ *San Francisco*

[@media 2007 \(Europe\)](#)

☰ June 7-8, 2007 ~ *London*

See me speak at

AN EVENT APART

AN EVENT APART

See me speak at

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MB: Dan Cederholm's SimpleBits applies the principle beautifully.



SimpleBits

{HOME}

NOTEBOOK

WORK

PUBLICATIONS

ICON S

Hand-crafted pixels & text.

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RECENT NOTEBOOK ARTICLES & QUICKBITS

* [Planet Microformats](#)

A giant master feed of anything and everything tagged with microformats.

A giant master feed of anything and everything tagged with microformats.

PLANET MICROFORMATS

MB: Ampersands in his strapline and headings are real text, not images.

```
<h1>Hand-crafted pixels  
<span class="amp">&amp;</span> text.</h1>
```

```
span.amp {  
    font-family: "Goudy Old Style", "Palatino",  
    "Book Antiqua", serif;  
    font-style: italic;  
    font-size: 110%; }
```



RR: Vertical rhythm. The rhythm of reading down the page. Something that is lost when sticking to the browser defaults.

Aboard Minerva off the Coast of New England

Daniel is roused by a rooster on the forecastledeck[†] that is growing certain it's not just imagining that light in the eastern sky. Unfortunately the eastern sky is off to port this morning. Yesterday it was starboard. Minerva has been sailing up and down the New England coast for the better part of a fortnight, trying to catch a wind that will decisively take her out into deep water, or "off soundings," as they say. They are probably not more than fifty miles away from Boston.

[†] The forecastledeck is the short deck that, towards the ship's bow, is built above the upperdeck.

Contrary Winds

Daniel goes back and sits by one of the windows – these are undershot so that he can look straight down and see Minerva's wake being born in a foamy collision around the rudder. He opens a small hatch below a window and drops out a Fahrenheit thermometer on a string. It is the very latest in temperature measurement from Europe – Enoch presented it to him as a sort of party favour. He lets it bounce through the surf for a few minutes, then hauls it in and takes a reading.

He's been trying to perform this ritual every four hours – the objective being to see if there's any rumour that the North Atlantic is striped with currents of warm water. He can present the data to the Royal Society if God-willing he reaches London.

Text taken from *Quicksilver* by Neal Stephenson.

Basic web page with h1, h2, paragraphs and sidenote. Using the default line height and margins with some font size adjustments. 12px paras, 18px h1, 14px h2, 10px note. Not too bad, but text a hard to read with the default line height – needs some leading.

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Add some leading (increase the lineheight). But still looking a bit random due to the default margins used by browsers.

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Now showing the vertical rhythm of 18px. As you can see the text loses its rhythm as you head down the page.

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So adjusting the margins we can this. Let's see that again...

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And without the rhythm lines. Flipping back to our starting point...

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And back...

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Contrary Winds

Daniel goes back and sits by one of the windows – these are undershot so that he can look straight down and see Minerva's wake being born in a foamy collision around the rudder. He opens a small hatch below a window and drops out a Fahrenheit thermometer on a string. It is the very latest in temperature measurement from Europe – Enoch presented it to him as a sort of party favour. He lets it bounce through the surf for a few minutes, then hauls it in and takes a reading.

He's been trying to perform this ritual every four hours – the objective being to see if there's any rumour that the North Atlantic is striped with currents of warm water. He can present the data to the Royal Society if God-willing he reaches London.

Text taken from *Quicksilver* by Neal Stephenson.

Text taken from *Quicksilver* by Neal Stephenson.

Let's talk briefly how this was achieved. There's going to be some maths so pay attention. Firstly a rhythm is decided upon. In this case 18px. This works with a base text size of 12px.

```
body { font-size: 12px;  
        line-height: 1.5em; /* 18px */ }
```

line height: $18\text{px} \div 12\text{px} = 1.5\text{em}$

Setting line-height with a unit
means the *value* is inherited

Set base text size to be 12px – everything is related to that. Set line height to the rhythm – use unit so it's inherited. Line height is desired height divided by the font size.

```
p { font-size: 1em; /* 12px */  
    margin: 0 0 1.5em 0; }
```

Set paragraphs to base size, but remember to tweak margins. No need to set line-height because it is inherited.

Aboard Minerva off the Coast of New England

Daniel is roused by a rooster on the forecastledeck[†] that is growing certain it's not just imagining that light in the eastern sky. Unfortunately the eastern sky is off to port this morning. Yesterday it was starboard. Minerva has been sailing up and down the New England coast for the better part of a fortnight, trying to catch a wind that will decisively take her out into deep water, or "off soundings," as they say. They are probably not more than fifty miles away from Boston.

[†] The forecastledeck is the short deck that, towards the ship's bow, is built above the upperdeck.

Contrary Winds

Daniel goes back and sits by one of the windows – these are undershot so that he can look straight down and see Minerva's wake being born in a foamy collision around the rudder. He opens a small hatch below a window and drops out a Fahrenheit thermometer on a string. It is the very latest in temperature measurement from Europe – Enoch presented it to him as a sort of party favour. He lets it bounce through the surf for a few minutes, then hauls it in and takes a reading.

He's been trying to perform this ritual every four hours – the objective being to see if there's any rumour that the North Atlantic is striped with currents of warm water. He can present the data to the Royal Society if God-willing he reaches London.

Text taken from *Quicksilver* by Neal Stephenson.

Text taken from *Quicksilver* by Neal Stephenson.

Consider the heading. Sized at 18px.

```
h1 { font-size: 1.5em; /* 18px */  
      margin: 0 0 1em 0; }
```

font size: $18\text{px} \div 12\text{px} = 1.5\text{em}$

Font size is desired size in pixels divided by the base size (or size of parent).

Aboard Minerva off the Coast of New England

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Text taken from *Quicksilver* by Neal Stephenson.

Text taken from *Quicksilver* by Neal Stephenson.

Consider the side note. Smaller text at 10px, but still following the rhythm.

```
.sidenote { font-size: 0.8333em; /* 10px */ }
```

font size: $10\text{px} \div 12\text{px} = 0.8333\text{em}$

line height: $18\text{px} \div 10\text{px} = 1.8\text{em}$

Again font size in ems equals desired size in pixels divided by base size. Don't be afraid of decimal places – help the browser's rendering.

Aboard Minerva off the Coast of New England

Daniel is roused by a rooster on the forecastledeck[†] that is growing certain it's not just imagining that light in the eastern sky. Unfortunately the eastern sky is off to port this morning. Yesterday it was starboard. Minerva has been sailing up and down the New England coast for the better part of a fortnight, trying to catch a wind that will decisively take her out into deep water, or "off soundings," as they say. They are probably not more than fifty miles away from Boston.

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Text taken from *Quicksilver* by Neal Stephenson.

Text taken from *Quicksilver* by Neal Stephenson.

Consider the subheading. More complicated. Set at 14px, but syncopated with asymmetrical margins.

```
h2 { font-size: 1.1667em; /* 14px */  
      margin-top: 1.929em; /* 27px */  
      margin-bottom: 0.643em; /* 9px */ }
```

font size: $14\text{px} \div 12\text{px} = 1.1667\text{em}$

top margin: $27\text{px} \div 14\text{px} = 1.929\text{em}$

bot margin: $9\text{px} \div 14\text{px} = 0.643\text{em}$

Font sizes follow same maths. margins similarly: desired margin (1.5 times 18) divided by font size.

Aboard Minerva off the Coast of New England

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Text taken from *Quicksilver* by Neal Stephenson.

Text taken from *Quicksilver* by Neal Stephenson.

And the final result again.

NOVEMBER 20, 2007

How to Size Text in CSS

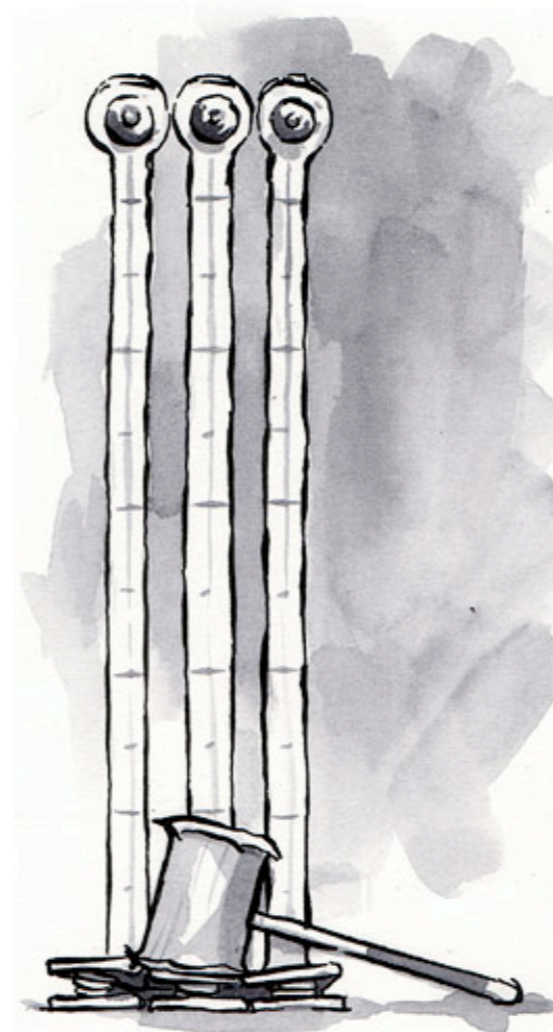
by RICHARD RUTTER

Published in: Browsers, CSS, HTML and XHTML, Layout, Typography | [Discuss this article »](#)

There's been a welcome resurgence of interest in [web typography](#) over the past year or so, with many [articles](#) and [conference talks](#) offering [techniques](#) and [theory](#). Frequently asserted is the notion that good typography requires accurate control of font size and line-height. But this is the web: it's a special medium where the reader can have as much control as the designer—the implication being that text on the web, while bending to the designer's will, must also be reliably resizable across browsers and platforms.

In this article, we will reconcile the designer's requirement for accuracy with the user's need to resize text on demand, arriving at a best practice that satisfies designers *and* users and works across browsers and platforms.

We'll reach our destination by the traditional method of trial and error. With more than a nod to Owen Briggs's [pioneering work](#) of 2002, I have created a base case with six iterations and 161 screenshots. Follow along, won't you?



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 Include discussions

Topics

- ♦ Code
- ♦ Content
- ♦ Culture
- ♦ Design
- ♦ Process
- ♦ User Science

Snapshot

In this article, we will reconcile the designer's requirement for accuracy with the user's need to resize text on demand, arriving at a best practice that satisfies designers *and* users and works across browsers and platforms.



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MB: When a person speaks a list, they will generally use a gesture. You should aim to mirror that gesture typographically.

Component parts of DIN letterheads

Besides the format, there are also standards for the placing of the component parts of business letterheads.

The authority for all these standards is DIN sheet 676: we show examples for the following pages.

Standards exist for:

1. The position of the address
2. Position for receipt and treatment marks
3. Sequence and position for the main information
4. Sequence and position of firm's particulars
5. Side margin of at least 20mm

A standardized letterhead, before it is written, often gives the impression that not enough room has been left for the letter itself.

itself.

Text taken from *The New Typography* by Jan Tschichold

This slide shows a body of text with no leading or spacing applied.

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Text taken from *The New Typography* by Jan Tschichold

Adding whitespace to the text in the form of margins and leading.

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A standardized letterhead, before it is written, often gives the impression that not enough room has been left for the letter itself.

Text taken from *The New Typography* by Jan Tschichold

Use position (hanging in margin, or extra lead), or prominence (different typeface) to define the list. Left margin. Your eye follows the line much easier than if there were an indent.



RR: Let's talk briefly about layout

The Elements
of Typographic Style

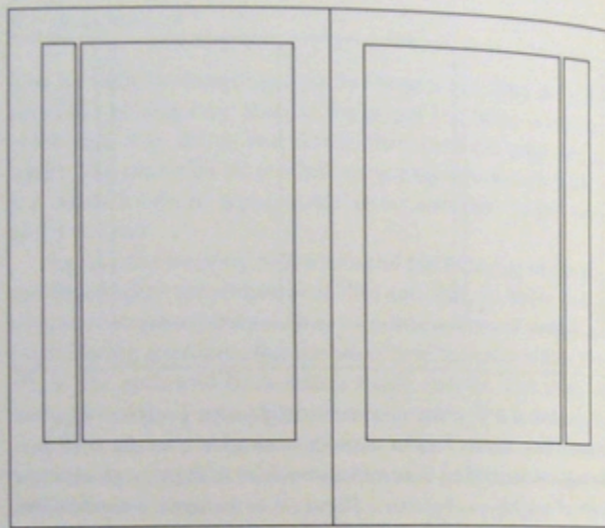
second edition, revised & enlarged

Robert Bringhurst



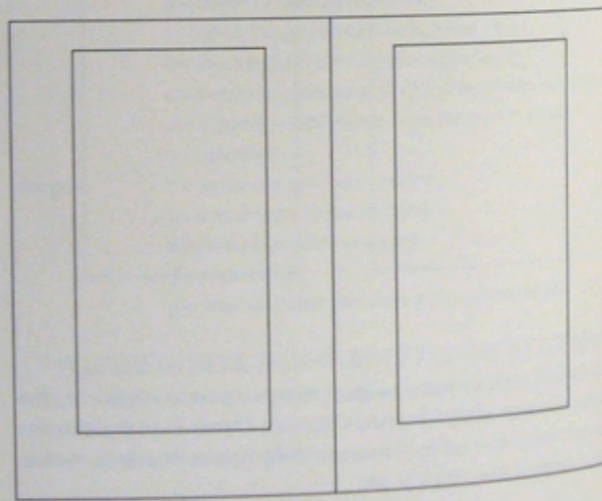
RR: The Elements of Typographic Style by Robert Bringhurst is a book about typography...

Examples

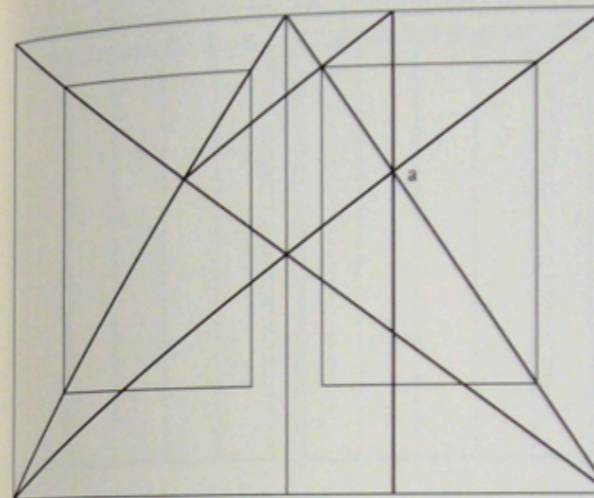


$P = 1.62$ [golden section]; $T = 1.87$ [tall hexagon]. Margins: $s = w/9$; $t = s$; $e = 2s$. Secondary column: $g = w/75$; $n = s$. The text is in Claude Garamond's 14 pt roman; the sidenotes are 12 pt italic. The gutter between main text and sidenotes is tiny: 6 or 7 pt against a main text measure of 33.5 picas. But the differences in size and face prevent any confusion. The text is a history of the Hundred Years' War. (Jean Froissart, *Histoire et chronique*, Jean de Tournes, Paris, 1559.) Original size: roughly 21×34 cm.

This grid is analyzed on the facing page.



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Shaping the Page

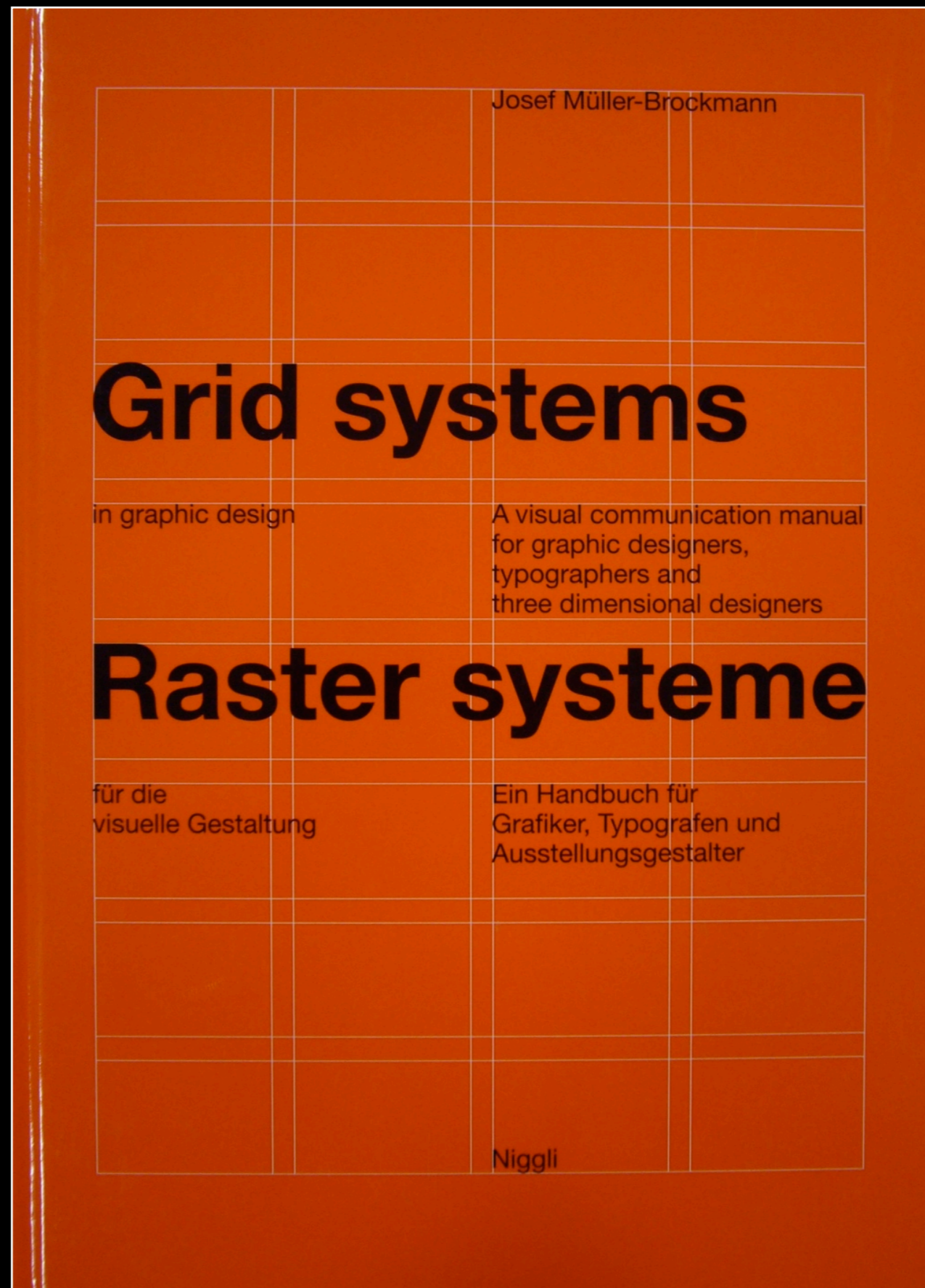
$P = T = 1.5$ [2 : 3]. Margins: $s = w/9$; $t = h/9$; $e = 2s$; $f = 2t$. The margins are thus in the proportion $s : t : e : f = 2 : 3 : 4 : 6$. A sound, elegant and basic medieval structure, which will work for any proportion of page and textblock, so long as the two remain in unison. Spine and head margins may be ninths, tenths, twelfths or any other desired proportion of the page size. Twelfths, of course, give a fuller and more efficient page, with less white space. But if the page proportion is 2 : 3 and the spine and head margins are ninths, as shown here, the consonance of textblock and page is considerably deepened, because $d = w$, which is to say, the *depth* of the textblock matches the *width* of the page. Thus $m : w = d : h = w : h = m : d = s : t = e : f = 2 : 3$. Point *a*, where the half and full diagonals intersect, is one third of the way down and across the textblock and the page. Jan Tschichold, 1955, after Villard de Honnecourt, France, c. 1280. See Tschichold's *The Form of the Book* (1991).

Scribes employing this format often designed their pages so that the line height was an even factor of the spine margin. If $\lambda = s/3$, the depth of the textblock will be 27 lines. If $\lambda = s/4$, the depth of the textblock will be 36 lines.

FACING PAGE: $P = 1.5$ [2 : 3]; $T = 2$ [double square]. Margins: $s = e = w/5$; $t = s/2$. The text is a book of poems, set throughout in a chancery italic with roman capitals. The designer and publisher of this book was a master calligrapher, certainly aware of the tradition that the inner margins should be smaller than the outer. He followed that tradition himself with books of prose, but in this book of poems he chose to center the textblock on the page. The text throughout is set in one size. Titles are set in the capitals of the text font, letterspaced about 30%. There are no running heads or other diversions. (Giangiorgio Trissino, *Canzone*, Ludovico degli Arrighi, Rome, c. 1523.) Original size: 12.5×18.75 cm.

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RR: ...with a section on layout.



RR: Grid Systems by Josef Müller-Brockmann is a book about layout...

Helvetica

HELVETICA

abcdefghijklmnopqrs
 ßtuvwxyz
 ABCDEFGHIJKLMN
 OPQRSTUVWXYZ
 1234567890

Helvetica, 48-pt. medium
 The Helvetica face, brought out by the Haas Typefoundry, Basle, rapidly met with a wide response. M. Miedinger designed this type in 1957. The form of the letters is based on Berthold and on the early sans-serif faces. Characteristic features of Helvetica are the horizontally cut ends of the letters c, e, g, s in contrast to Berthold, where they are cut radially. The forms are somewhat more open and round. The "G" is simplified. The vertical strokes are somewhat shorter than in the case of Berthold, and this improves the legibility.

Helvetica is cast in 13 sizes from 6- to 48-pt. It is now also on the market for film-setting.

Helvetica

Helvetica, 48 Pt. normal
 Die Helvetica-Schrift, von der Haas'schen Schriftgiesserei, Basle, herausgebracht, fand in kurzer Zeit ein grosses Echo. M. Miedinger konzipierte 1957 diese Type. Die Buchstabenform lehnt sich an die Berthold und an die früheren Grottesk-Schriften an. Charakteristische Eigenschaften der Helvetica sind die horizontal geschnittenen Endungen der Buchstaben c, e, g, s, im Gegensatz zur Berthold, wo sie radial geschnitten sind. Die Formen sind etwas offener und runder. Das «G» ist vereinfacht. Die Vertikalstriche sind etwas kürzer als bei der Berthold, was

die Lesbarkeit verbessert. Die Helvetica wird in 13 Graden gegossen von 6-48 Pt. Jetzt ist sie auch im Fotosatz auf dem Markte.

28

Univers

UNIVERS

abcdefghijklmnopqrs
 ßtuvwxyz
 ABCDEFGHIJKLMNO
 PQRSTUVWXYZ
 1234567890

Univers, 48-pt. medium
 Univers, designed by Adrian Frutiger 1957-1963 for the Paris typefounders Deberny & Peignot, has since become the most widely used sans-serif face. This is due to certain advantages which are of importance for printers and designers. For one thing, the face is available in light, medium, semi-bold and bold, in roman and also in italic sizes, and for another it is obtainable for film-setting in all sizes in a large number of countries. In order to assure as good a reproduction as possible the connections between the stem and the bowl of the letter

are made slighter and the ascenders and descenders shortened.

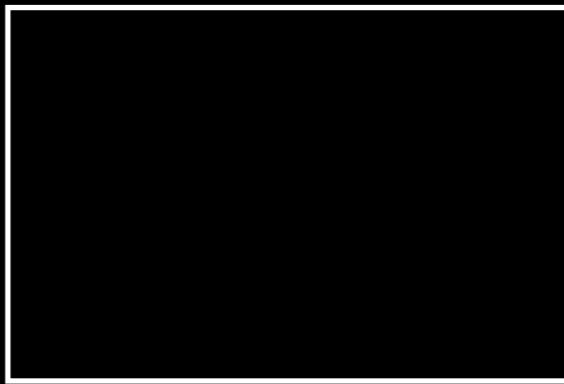
Univers

Univers, 48 Pt. normal
 Die Univers, von Adrian Frutiger 1957-1963 für die Pariser Schriftgiesserei Deberny & Peignot entworfen, ist seither die weitest verbreitete Grotteskschrift. Das verdankt sie einigen Vorteilen, die für die Druckereien und Gestalter von Bedeutung sind. Einmal ist die Schrift in mager, normal, halbfett und fett, als auch in den kursiven Graden vorhanden, und zum zweiten ist sie auch im Fotosatz mit allen Graden in vielen Ländern zur Verfügung. Um eine möglichst gute Druckwiedergabe zu erhalten, sind die Verbindungsstellen zwischen Stamm und Rundung des

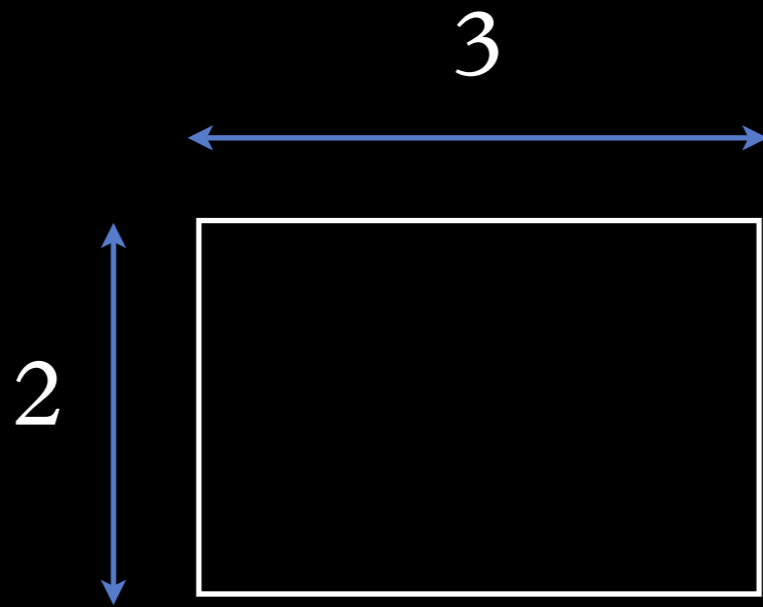
Buchstabens verdünnt und die Ober- und Unterlängen verkürzt.

29

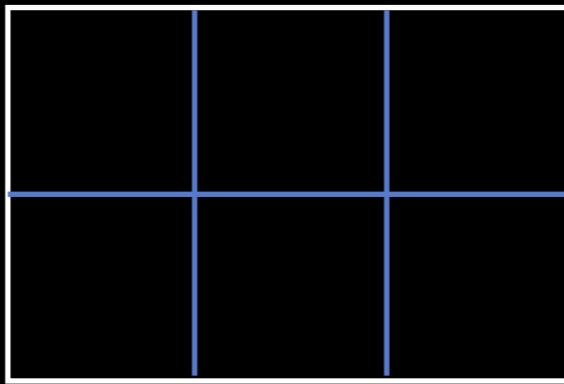
RR: ... with a section on typography. Clearly typography and layout are intrinsically linked.



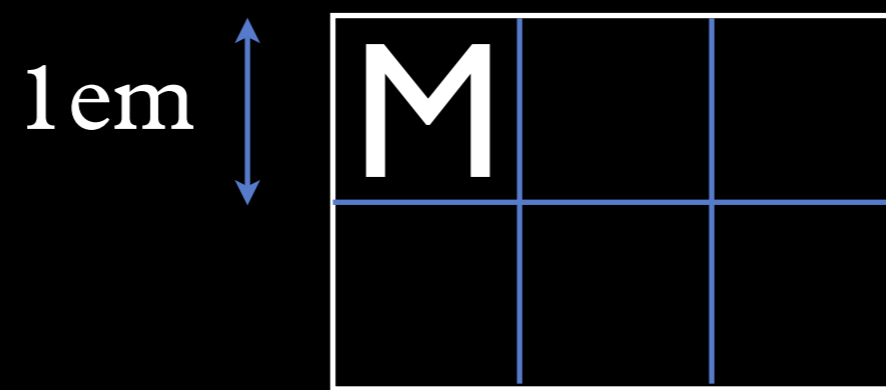
MB: So, what is the relationship between type and layout? Let's begin with the building block of a grid; the unit.



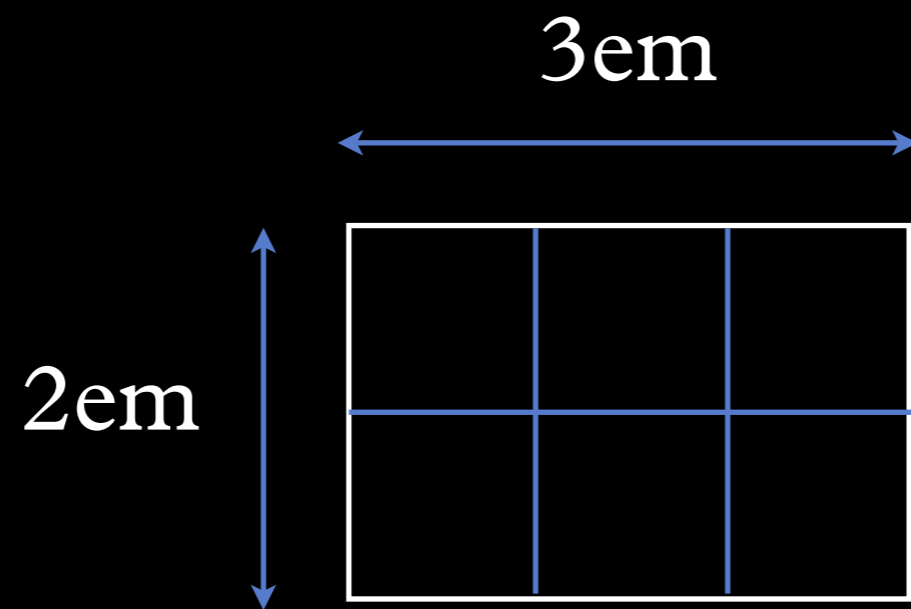
MB: This unit is based on a rational ratio of 2:3, which is loosely based on the Golden Ratio (ϕ) of 1:1.618.



Broken down into six blocks.



MB: Lets give it a relational measurement in terms of typography. So, one sixth of this unit is 1em in dimensions.

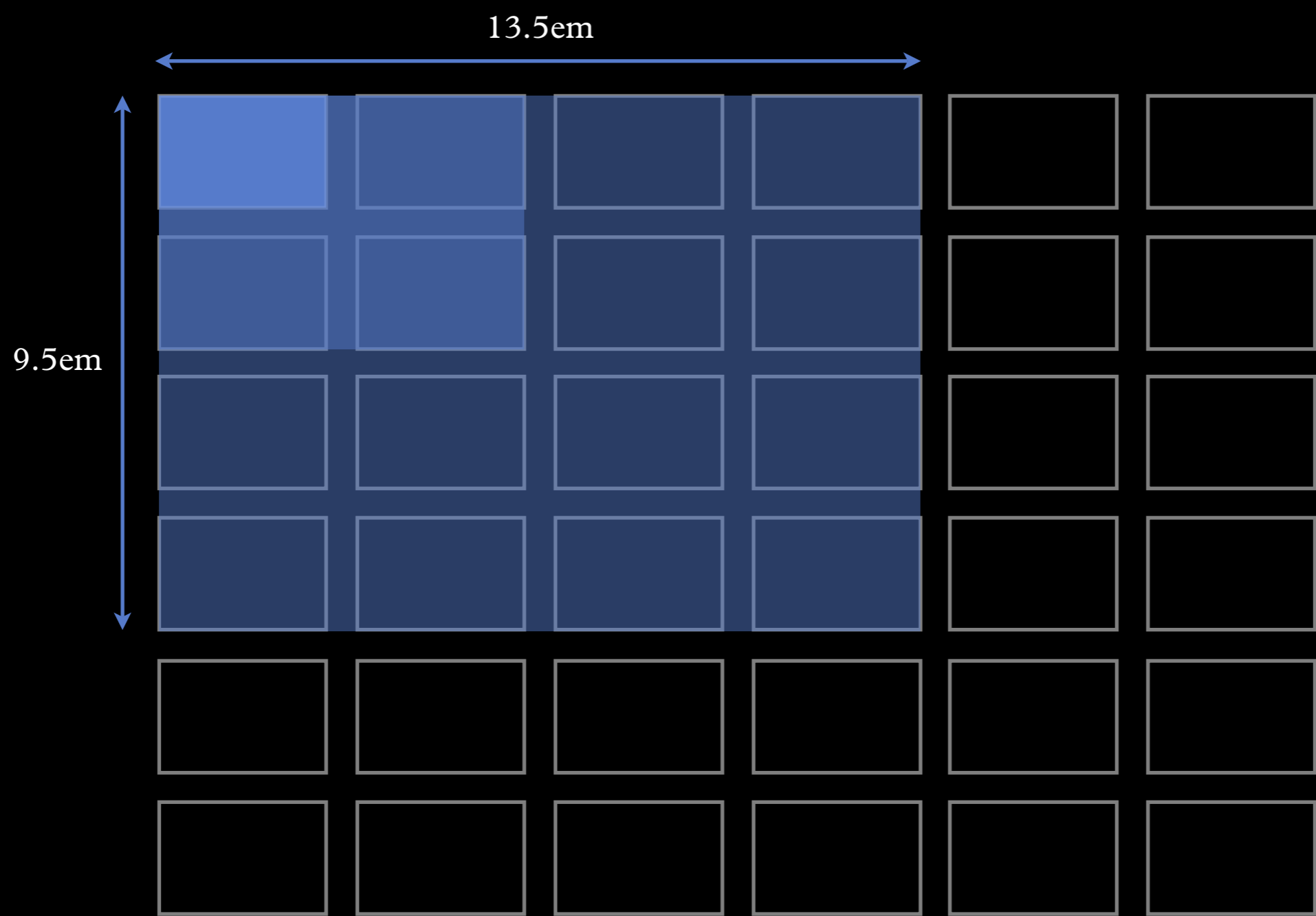


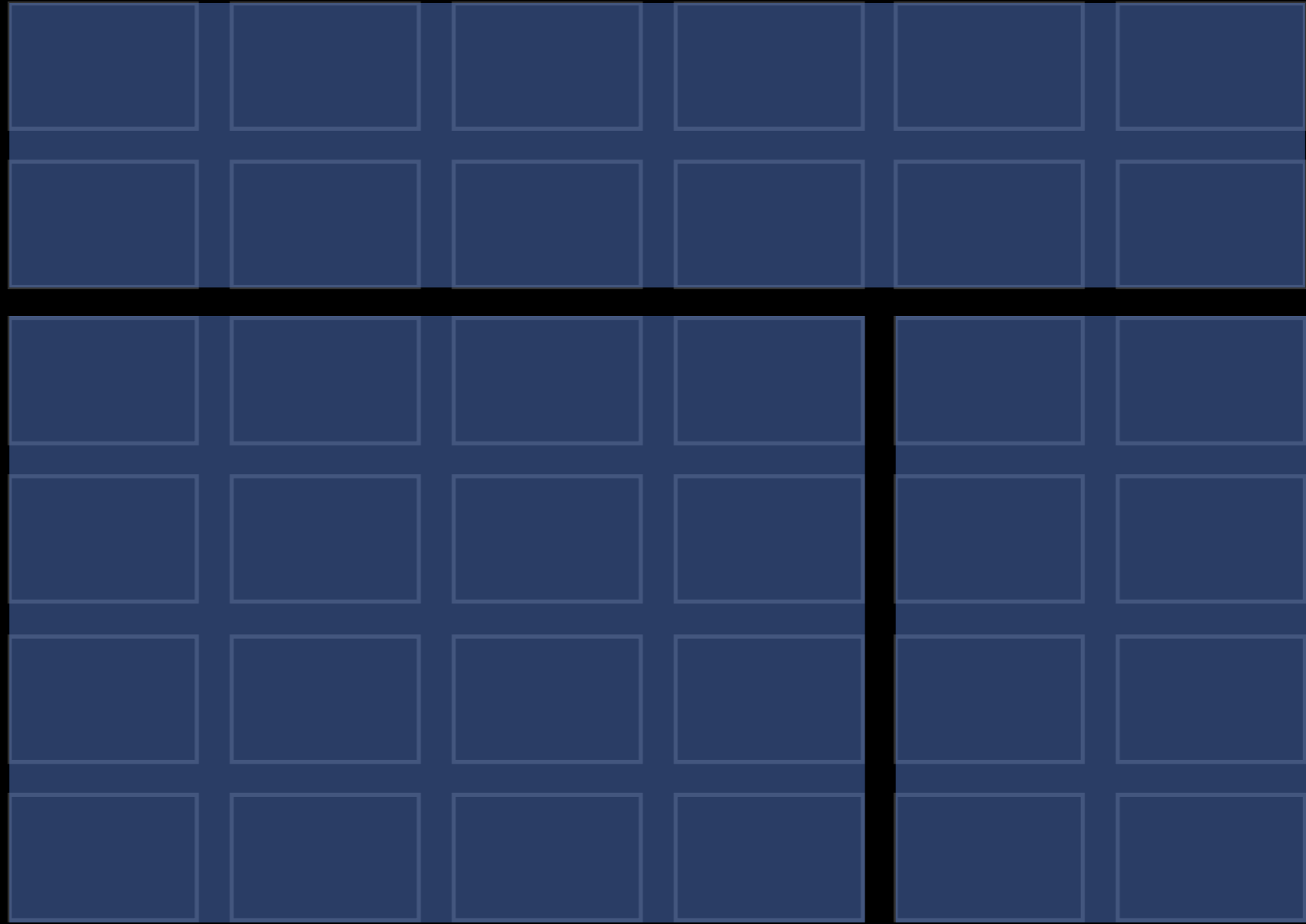


MB: We extrapolate out the units and add 0.5em gutters.



Then you can combine blocks.





Let's make a simple grid structure.

Indent or center verse quotations

When setting verse, whether on the web or otherwise, the primary concern is not to deprive it of its “chosen form”, including matters of spacing and visual structure, but to distinguish verse quotations from surrounding

We add in some type over the grid. The type size is 1em. Therefore, there is a direct relationship between the type size and the placement of elements on the grid.

Indent or center verse quotations

When setting verse, whether on the web or otherwise, the primary concern is not to deprive it of its “chosen form”, including matters of spacing and visual structure, but to distinguish verse quotations from surrounding

As we take away the grid...

Indent or center verse quotations

When setting verse, whether on the web or otherwise, the primary concern is not to deprive it of its “chosen form”, including matters of spacing and visual structure, but to distinguish verse quotations from surrounding

The space that is left in between the elements of type are not decided upon arbitrarily. They are related to the unit, which is in turn related to the type size.

```
body {  
    font-family: verdana, arial, helvetica, sans-serif  
}
```

RR: The fonts that are installed on most people's machines are few, but actually well designed for display on the screen, so embrace them. The standard font stack the comes out of Dreamweaver and just about all HTML & CSS editors is inappropriate.

Verdana

The quick brown fox jumps over a lazy dog.

The quick brown fox jumps over a lazy dog.

Arial

Verdana appears much larger than Arial, so Arial is not a suitable back-up for Verdana. Try Tahoma instead (or Candara which we'll mention shortly). If it's not suitable, don't specify it.

Frutiger	0123abcdfigHJKI
Helvetica Neue	0123abcdfigHJKIm
Arial	0123abcdfigHJKIm
Helvetica	0123abcdfigHJKIm

```
body {  
    font-family: Frutiger, "Helvetica Neue", Arial,  
    Helvetica, sans-serif;  
}
```

Why is Helvetica Neue before Arial which is before Helvetica? Because Helvetica Neue a standard install for OS X and it's hinting for digital display, particularly at smaller sizes, is much better than standard Helvetica.

Align corporate typefaces
Align corporate typefaces

Calibri	0123abcdeHJKlmnopQRStuv
Cambria	0123abcdeHJKlmnopQRStu
Candara	0123abcdeHJKlmnopQRStu
Constantia	0123abcdeHJKlmnopQRStu
Corbel	0123abcdeHJKlmnopQRStuv

New Microsoft Typefaces shipping with Vista. Note the ligatures and numeral cases. Can't be done in CSS.

```
@font-face {  
  font-family: "Plantin Std";  
  src: url(http://linotype.com/plantin.ttf)  
  format("truetype"); }  
h1 { font-family: "Plantin Std", Georgia, serif }
```

What can be done in CSS is this. Web fonts. At least in Safari. The Georgia is there for browsers not supporting web fonts. Legal – and potentially aesthetic – issues.

1 H																2 He	
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 Ln	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	*	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	**	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Uub	113 Uut	114 Uuq	115 Uup	116 Uuh	117 Uus	118 Uuo

RR. With typography it's the small details that add up to create the greater whole.

1 H																2 He	
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	79 47 Ag	48 Cd	49 Ln	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	* *	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	** **	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Uub	113 Uut	114 Uuq	115 Uup	116 Uuh	117 Uus	118 Uuo

1 H																2 He	
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	* La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	** Ac	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Uub	113 Uut	114 Uuq	115 Uup	116 Uuh	117 Uus	118 Uuo

1 H																	2 He
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg								29 Cu			13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	* La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	** Ac	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Uub	113 Uut	114 Uuq	115 Uup	116 Uuh	117 Uus	118 Uuo

1 H												6					2 He
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	* La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	** Ac	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Uub	113 Uut	114 Uuq	115 Uup	116 Uuh	117 Uus	118 Uuo



MB: So who is responsible for the current state of web typography. Designers? Engineers? Front-end coders? Information Architects? Authors?

It's all our fault.

Richard Rutter Clearleft.com

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