Grids Are Good
(Right?)

March 10, 2007
SXSW Interactive
Austin, TX

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Subtraction.com

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About Khoi

I’m the **Design Director** for **The New York Times Online**.

I’m the author of **Subtraction.com**, a personal weblog where I write about design, technology and other subjects.

[nytimes.com](http://nytimes.com)  
[subtraction.com](http://subtraction.com)
Remembering back to the last set of on-the-street sketches I did in Paris, I made sure to bring my little Moleskine pocket book and a pen with me just about everywhere I went last week. I managed to knock out several pages of drawings, the highlights of which I’m posting here. There aren’t as many as I’d like, but I came up with some stuff I was happy with.

I had a good time with these doodles; I always do have a good time doodling. I don’t know exactly why it takes traveling all the way to Europe for me to actually do something I’m so much. Well, I guess the obvious reason is that I’m usually networking when I’m in Paris, and when I’m in New York, I usually am working. Funye what a little bit of free time can do for one’s own artistic pursuits.

On my brief trip through London and Paris, I started thinking about the idea of touristic usability and that was awesome. In it’s got right syllables and I just made it up.

Aside from a slightly absurd extension of our professional design vernacular, there’s actually a real idea behind this phrase. Given any new city, there are certain things that should be easy for tourists to comprehend without translation.

These things might include: how and where to use the subway or bus, how and where to buy tickets for public transportation, how to make a call at a public phone, how and where to hail a taxi, where to expect upon entering and leaving the airport, how and where to find postal services, how and where to find a police station, etc.

Of course these are things you can find in any decent tourist’s guide, and any sensible traveler will pack such a book. But it struck me, while doodling through my first trip to London is seven years (and even, to an extent, on my third visit to Paris in less than twenty-four months), that these are things that should be inherently usable, as well.

Illustrate Me for Halloween!

It’s no trick. I have a Halloween treat for all you Illustrate Me fans out there: for once, I’m publishing a new entry in this ongoing series early. That’s right, no weeks-long delay this time. Before the last day of October even closes out, this month’s archive has been beautifully illustrated by Ray Friedman, an illustrator from rural Illinois. You can see it right now in all its gruesome glory on the October archive page.
About Mark

I’m the **Founder** of a tiny design consultancy **Mark Boulton Design**.

I also write about design and whatever else takes my fancy at [markboulton.co.uk](http://markboulton.co.uk)

[markboultondesign.com](http://markboultondesign.com)
What is up with Flow?
February 13, 2007
I've had a few people over the past months contact me and ask what has been happening with Flow. Well, we've still working on it, but as one of the developers, Keenan, states on his blog,

While it is achievable to ship new products in a short amount of time, as we have seen with companies like Zmobile and Corsair Systems, there are always going to be times, certainly in the early stages, where final Pad Work must take priority.

Enters right, especially for business which is only six months old.

Since returning from snowboarding a month ago, I've been consumed with Real Work and everything else, including the book, has been put to one side. Such is the cut, as I'm learning, business.

That said, Flow is coming along and as I'm writing this, I am working on the template whilst a couple of guys at Beaujole are working on the Buckhead. It's coming along, slowly but surely.

Posted in: Design, Business

And the winner is...
February 15, 2007
Me. As I foretold the name ‘Mark Boulton Design’ over six months ago, technically, I am the winner. Harsh!

However, to show I am a fair Northerner, I've decided to award the prize to the runner up, the stuffin' his face with humble pie.

Congratulations Chris Gilbees, who suggestion—point 12—was top of the list for most of the week. There's one iPod shuffle in the colour of your choosing on its way to you.

Once again, thanks for all the suggestions. If anything, it makes me realise my original choice wasn't so bad after all.

Posted in: markboulton.co.uk

A naming competition
February 09, 2007
Anyone who has ever been in a band will know how difficult naming the band can be. It's no different for a new business.

I find naming incredibly difficult. It really isn't one of my strong points. Unfortunately though, on Thursday, I had to register myself as a new company name and I'm completely devoid of inspiration. So, I thought I'd build a competition to find me a good name. Easy, yes, I suppose. Thing is, I'm totally stuck with finishing off the book and a mountain of client work, so any ideas for about an hour or two has not been a productive use of my time.
From Dots to Design

- Any two or more marks on a single plane is a design.
The grid is the most vivid manifestation of the *will to order* in graphic design.
A Brief History of the Grid
Looking for Reason

Divining architectural proportion from nature.

Leonardo DaVinci, “The Vitruvian Man” 1492.

Le Corbusier, “Modulor” 1948.
Right Up to the Modern Day
Ornamentation

From this…

Rational Design

...to this.

Theo Ballmer, "Neues Bauen" 1928. Poster for German Werkbund exhibition.
Rationalism became the new imperative for design.

Out with decoration and formalism, in with logic and standardization.

Jan Tschichold, “Die neue Typographie” 1928.
Instructions for the standardized layout of A4 letterhead.
Modernists looked to build a new aesthetic by

• Deriving beauty from the innate qualities of the **machine**

• Championing **standardization**

**Sound familiar?**
There is a **strong overlap** between what motivated grid usage nearly a century ago and what motivates grid usage today.

- Deriving beauty from the innate qualities of the **browser**
- Championing **standardization**
Paul Rand, IBM Annual Report, 1975
J. Müller-Brockmann

Tonhalle-Quartett, 1955.

Juni-Festwochen Zürich, 1959

Juni-Festwochen Zürich, 1962

Musica Viva, 1968
Massimo Vignelli for National Park Service

Unigrid as a solution to large-scale design and production of many different publications.
Grids on the Web
‘Inventory’ Display
Frequently Asked Questions

Can I still use my Crate and Barrel paper Gift Certificates or Store Merchandise Credits as a form of payment?

Yes. You can use a Crate and Barrel paper gift certificate or merchandise credit at any Crate and Barrel store or with mail orders; however, they cannot be used for payment online. We apologize for any inconvenience this may cause you. You may also call us at 800-967-6696 to place a phone order. If you place a mail or phone order you must send in your paper Gift Certificate or Merchandise Credit to the address listed below. Please reference the order number if a phone order is placed. Your order will be processed upon receipt of the Gift Certificate/Merchandise Credit.

Crate and Barrel
PO Box 3219
Naperville, IL 60566

If you would prefer to convert your paper gift certificate into a plastic Gift Card or your Merchandise Credit into a Shop Card, please mail your certificates to the address indicated above. Please also include your name and mailing address. Gift and Shop Cards may be used as payment online, over the phone, at a store or by catalogue mail order.

Related Questions
How do I pay for my purchase?
What is the difference between a Gift Card and a Shop Card?
Can I use a CB2 Gift/Shop Card at Crate and Barrel?
Can I use my Crate and Barrel Gift/Shop Card at CB2?
Can I use my Land of Nod Gift/Shop Card at Crate and Barrel?

Ask a question, or enter keywords: Search →
Looking for more information about a specific product?

Contact Us
Still have questions or comments? Please contact us via email. You may also call us 24 hours a day at 800-967-6696 or fax us at 630-527-1404. We look forward to serving you.
Main Page
### Article Comments

With horizontal hierarchy.

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Date/Time</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andy</td>
<td>February 4, 2007</td>
<td>&quot;Britain is a high growth country whose unemployment vastly undercuts France’s by 8% per cent. With one third of over-60s in full-time work and 23 per cent of young people (15-24) unemployed...&quot;</td>
</tr>
<tr>
<td>Bobby</td>
<td>February 4, 2007</td>
<td>The article is typical lefty drivel. France has unemployment, high taxes and is moribund. Obviously in need of a bit of Thatcherism, like UK was in the 70’s. Rail on Margaret Sorkin!</td>
</tr>
<tr>
<td>JustTheHobbitman</td>
<td>February 4, 2007</td>
<td>What planet does Mary Riddell come from?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In France:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. The trains work.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The health service works.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Education works.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. The truly independent “determinate” works.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. The overall standard of living is higher, oh I know that the GDP is higher in this UK, but what is most important is the way it is distributed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. The minimum wage is higher than it is in the UK.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. France has an indigenous auto industry, the industry in the UK is foreign owned.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Frenchman on unemployment are certainly better of the English on the lower economic scale.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. The unemployment in France is structural, owing much to the fact that French productivity per hour worked has increased at a higher rate than in the UK, and unfortunately no rental planning provided for the unemployment that it would cause, hence the 4 weeks standard vacation and the 33 hour week: higher rate than in the UK as a partial remedy. In the UK and also the U.S.A. the fruits of productivity increases since the 1970’s have gone to the top managers and the shareholders, that these countries have such obscene salaries for those at the top. In the U.S.A. in some industries the C.E.O’s get as much as 430 times the salary as their lowest paid workers, and the UK is catching up. Just think the C.E.O. will receive more for 2 hours work than the lowest paid worker will get for working a whole year. France bashing will get you nowhere, I suggest that you Brits learn enough French to get around and then go and make a visit, you’d be surprised how many knowable people don’t return to the UK. As for the French expatriates in London, well there will always be those who who think that there is room at the top for them, sort of like some minority concentrating on sports rather than education in the hope that they “will make it big”. As the Aussies used to sing in W W 2, Ballyhoo is a failure, Take me back to Australia Aussies in the place for me.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offensive? Unsuitable? Email us.</td>
</tr>
<tr>
<td>Jaehked</td>
<td>February 4, 2007</td>
<td>Vive la France.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offensive? Unsuitable? Email us.</td>
</tr>
<tr>
<td>fortytynner</td>
<td>February 4, 2007</td>
<td>If the French follow the Thatcher/Bin Laden agenda they must be totally &quot;you&quot;. You don't know what you've got till it's gone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offensive? Unsuitable? Email us.</td>
</tr>
<tr>
<td>jeremynjanes</td>
<td>February 4, 2007</td>
<td>@ AndyV &quot;I can’t help but feel that being unemployed in France is a much more dignified experience than being in some minimum wage, no prospect, split shift, burger flipping job in this UK.&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offensive? Unsuitable? Email us.</td>
</tr>
</tbody>
</table>
Let’s Build a Grid
The Brand
What Should We Do?

Not

YAHOO!
A Good Problem

Rudimentary but unimaginative use of grid.
Rather...

Yeeaahh!
yeeaahh.subtraction.com
Requirements
Where to Start

Every design solution begins by defining the problem and establishing constraints.

• 1024 x 768 screen

• Big Ad Unit
Screen Resolution

- 1024 px wide by 768 tall
‘Natural’ Browser Size

- Approximately 974 px wide by 650 px tall
Canvas Area

- Less left and right margins
- Approximately 960 px wide by 650 px tall
The Big Ad

The most useful ad unit to design for is the Big Ad.

336 px wide by 280 px tall as established by the Internet Advertising Bureau.
Other Ad Sizes

A design based on the Big Ad will also accommodate the width of the other popular ad unit sizes.

- Big Ad width: 336 px
- Medium Rectangle: 300 px wide by 250 px tall
- Half-page: 300 px wide by 600 px tall
The Utility of Constraints

Ad units complicate things, but they’re actually very helpful because they serve as **fixed constraints**.

**Constraints are the mother of design invention.**
Units
Units & Columns

**Units** are the basic building blocks of a grid. They’re all uniform.

**Columns** are the groupings of units that create the visual structure of the page. They are not necessarily uniform.

In this example, four units are combined to create a single column.
In general, we want to create units in multiples of three or four.

Twelve is ideal, because it’s a multiple of three and four.
Twelve Units Can Combine into 3 Columns…

Three columns of four units each.
Two columns of six units each.
Into 4 Columns…

Four columns of three units each.
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

Six columns of two units each.
Unit and Column Math
First Try
Nonconducive Size

Unfortunately, three Big Ads will *not* fit within our 960 px width.
Formula

Canvas - ((Total Units -1) x Gutter) ÷ Total Units = Unit

950 - ((16 -1) x 10) ÷ 16 = Unit

(Don’t worry about doing it this way.)
Round-up the Ad Column

Round up the ad unit column to an even 340 px width.
Divide the ad column into two units of 165 px each, with a 10 pixel gutter.

\[(340 - 10) ÷ 2 = 165\]
Extrapolate Units

Yields 5 units of 165 px each for a total width of just 865 px.

These could be subdivided into 10 units but a 10 unit grid is difficult to work with.
Second Try
This time round up higher to 350 px width.
Divide the Ad Column

Divide by three this time, with two 10 px gutters, for 110 px units.

\[(350 - (2 \times 10)) \div 3 = 110\]
Extrapolate Units

Yields 8 units of 110 px each for a total width of 950 px.
Subdivide the Units

Eight units is a good number, but we can subdivide it even further into a 16-unit grid for added flexibility.

These units are 50 px wide
A 16-unit grid allows us to create two equal columns in the left region.
Creating Smaller Columns

And to subdivide the right region into 2 or 3 columns.
We can also carve out 2 units at the left to create a left-navigation.
Third Time’s the Charm
Round-up the Ad Column

For a tighter look, we can round up the ad unit to 338 px.
Divide the Ad Column

Divide by five this time, with four 7 px gutters, for 62 px units.

\[(338 - (4 \times 7)) ÷ 5 = 62\]
Extrapolate Units

Yields 14 units of 62 px each for a total width of 959 px.

Fourteen is a strange number, but sometimes that makes things more interesting.
Consolidate Units into Columns

Allows the left region to be consolidated into 3 columns.
Left Navigation

Also allows for a slightly wider and more substantial left-hand navigation column.
The Grid Is Done

Time to design.
Yeeaaahh!
Use the balance of the logo area for a search region.
The Box Model
Using a grid isn't quite as simple as just lining elements up along its edges.
Let’s typeset three elements on a 9-unit grid.

The instinct is to left-align each right on the edge of each column.

<table>
<thead>
<tr>
<th>Tacos</th>
<th>Chicken Parmesan</th>
<th>Hot Pockets</th>
</tr>
</thead>
</table>
Add Grid Lines

| Tacos | Chicken Parmesan | Hot Pockets |

Divide the columns with simple rules.
Visual Tightness

Such strict adherence to the grid causes visual tension.

| Tacos | Chicken Parmesan | Hot Pockets |
### Another Problem

What happens when type needs to be inset inside a box?

<table>
<thead>
<tr>
<th>Tacos</th>
<th>Chicken Parmesan</th>
<th>Hot Pockets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lasagna</td>
<td></td>
</tr>
</tbody>
</table>
In digital media, those boxes are often behavior. That is, they may or may not appear persistently. When they’re not there, it can cause visual misalignment.
Correcting Alignment

The answer is to assume some sort of inset for all elements.

Tacos  |  Chicken Parmesan  |  Hot Pockets

Lasagna
This achieves visual consistency up regardless of whether text is inset, and allows breathing room next to the grid lines.
<table>
<thead>
<tr>
<th>Tacos</th>
<th>Chicken Parmesan</th>
<th>Hot Pockets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lasagna</td>
</tr>
</tbody>
</table>
The Box Model

It’s actually useful to use the **CSS box model** as a model for imagining the visual space around any element.
The Box Model in Practice

Text

COLUMN

GRID LINE

Text
Yeeaaahh!
Also need to add search options: Web, Images, Video, Local, Shopping and More.
Options Aligned on the Grid

Admittedly, probably not the most usable display, but it’ll do for now.
Roll-over Behavior

Note the roll-over state aligns with the grid.
Navigation (and Framing)
Left-Hand Navigation Column

Consolidate two units to form the left-hand navigation column.
Nav Items in Place
Visual Grouping through Rules

Add rules between most nav items and to visually combine multi-item groups like Small Business and Services together.
Items and Rules

Take a closer look at the placement of rules.
Every box should be laid out using the same principles as used in framing.

Padding for all sides should be visually equal. But only the top, right and left padding should be mathematically equal. The bottom should be taller.
Visually Balanced

The result is visually balanced.

Text
Applicable to All Elements

The illusion of visual equality is enhanced when elements are stacked.

Text

Text

Text
## Items and Rules

Even multi-item groups should be treated the same way.

<table>
<thead>
<tr>
<th>Photos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate</td>
</tr>
<tr>
<td>Sports</td>
</tr>
<tr>
<td>Tech</td>
</tr>
<tr>
<td>Travel</td>
</tr>
<tr>
<td>TV</td>
</tr>
<tr>
<td>Yellow Pages</td>
</tr>
<tr>
<td><strong>SMALL BUSINESS</strong></td>
</tr>
<tr>
<td>• Get a Web site</td>
</tr>
<tr>
<td>• Domain Names</td>
</tr>
<tr>
<td>• eCommerce</td>
</tr>
<tr>
<td>• Search Listings</td>
</tr>
<tr>
<td><strong>YEEAHH SERVICES</strong></td>
</tr>
<tr>
<td>• Downloads</td>
</tr>
<tr>
<td>• Health</td>
</tr>
<tr>
<td>• Kids</td>
</tr>
<tr>
<td>• Mobile</td>
</tr>
<tr>
<td>• Voice</td>
</tr>
<tr>
<td>• Yeeaahh! Broadband</td>
</tr>
<tr>
<td>• Yeeaahh! Global</td>
</tr>
</tbody>
</table>
Widgets
Hidden Functionality
Carve out a layer across the top and shift navigation down lower.
Dress Up the Layer

Yeeaahh!

Add a light yellow layer and divide up the area into equal areas — except the number of units don’t easily divide.
Asymmetry Isn’t Bad
Add Icons

Icons from IconBuffet.com.
Odd-size Column for Weather
Remaining Widgets

Horoscope, local info and radio.
Users have learned to regard colorful imagery in far right column as advertising.
The Story So Far

Welcome back, Janine

- Horoscope for Sagittarius
  - Rebellion will be on your mind today and everyone will seem like a good target for your frustration. More...
- Local Info for 10009
  - Traffic, Events and More...
- Yeeaahh! Radio
  - Today's big hits: Justin Timberlake, Beyoncé, Nelly Furtado and More...

Yeeaahh! - click here to discover more
Features Area

Consolidate seven units into a Features marquee area.

Tabs for four main areas: Features, Entertainment, Sports, Life.
Tabs

Tabs are off the grid.

Let tabs be tabs.
Image Sizes

Consolidate three units into a 200 px width. Height is 120 px.
Breaking out of tabs for more interest.
Other Stories

Proportional photo regions below.
A Use for the Spare Unit

Large ‘More Stories…’ area.
Nearly Complete

With images in place.
Add More Interest

Shift tabs up to ‘pop’ them.
Headlines & Other Modules
Replicate Tab Structure
Flow Headlines in a List
Appraise the Overall Effect

Problems parsing the Headlines tabs from the marquee above.
Embellish with a Subtle Background
Similar Approach for Markets Area
Not necessary to stick too closely to the grid here.
Simple, Familiar

Straightforward lists. Can we make it more interesting?

Yahoo.com

NYTimes.com
A Different Orientation

Change orientation to change up display.
Sibling Sites