

Tape your P2  
milestones to  
the wall

# Imbalance in Interaction Design

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CS 247

THANKS TO SCOTT KLEMMER AND MANEESH AGRAWALA

# Balace is good; uniformity is not

- Balance: all design elements average each other out to a sustainable center of mass
  - In visual attention
  - In task importance
  - In features
- Uniformity: even and symmetric placement of importance and attention



# High-level

info scent, location, neg. space

# Medium-level

grids, responsive

# Low-level

colors, typography, components

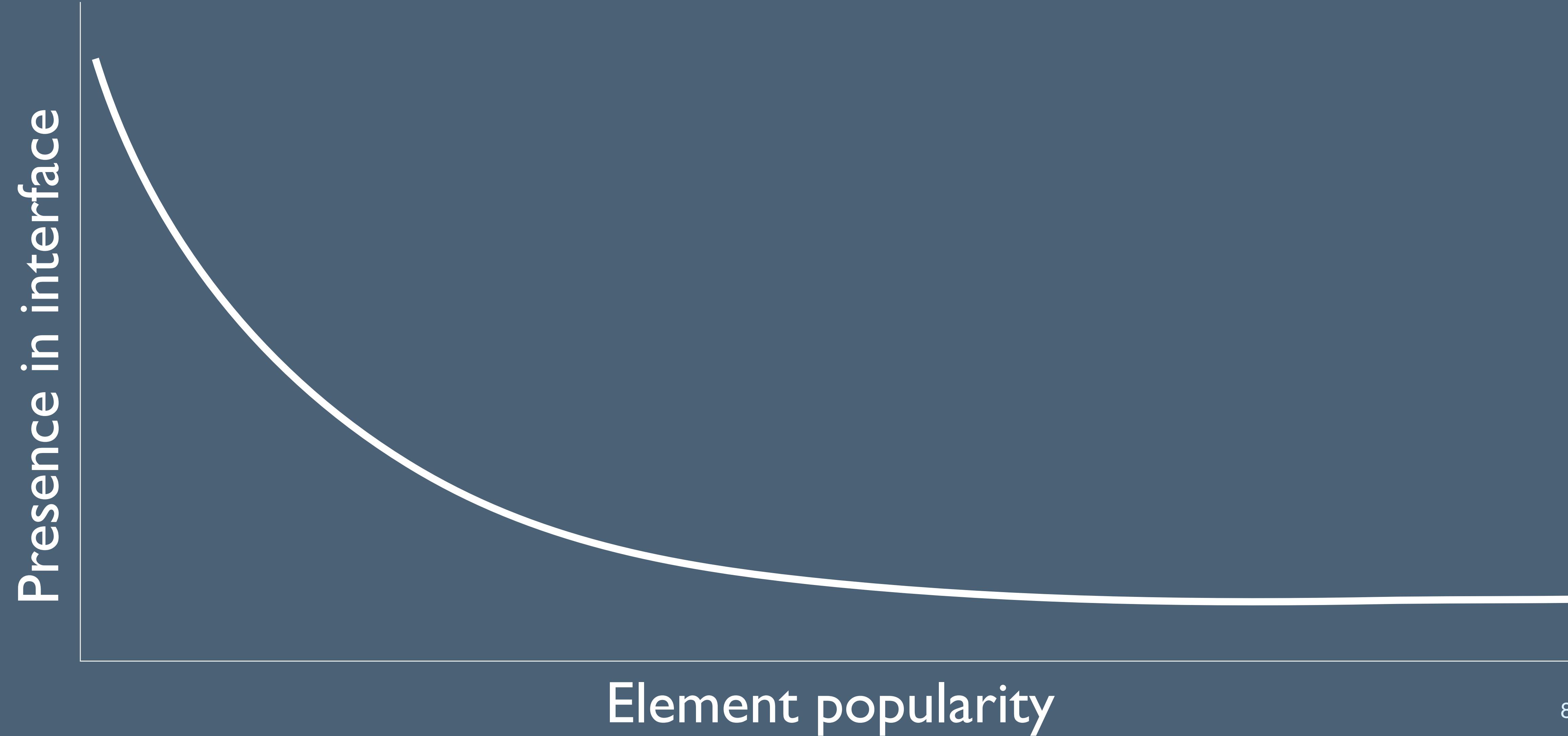
# 80/20 rule

We are the 80 percent.

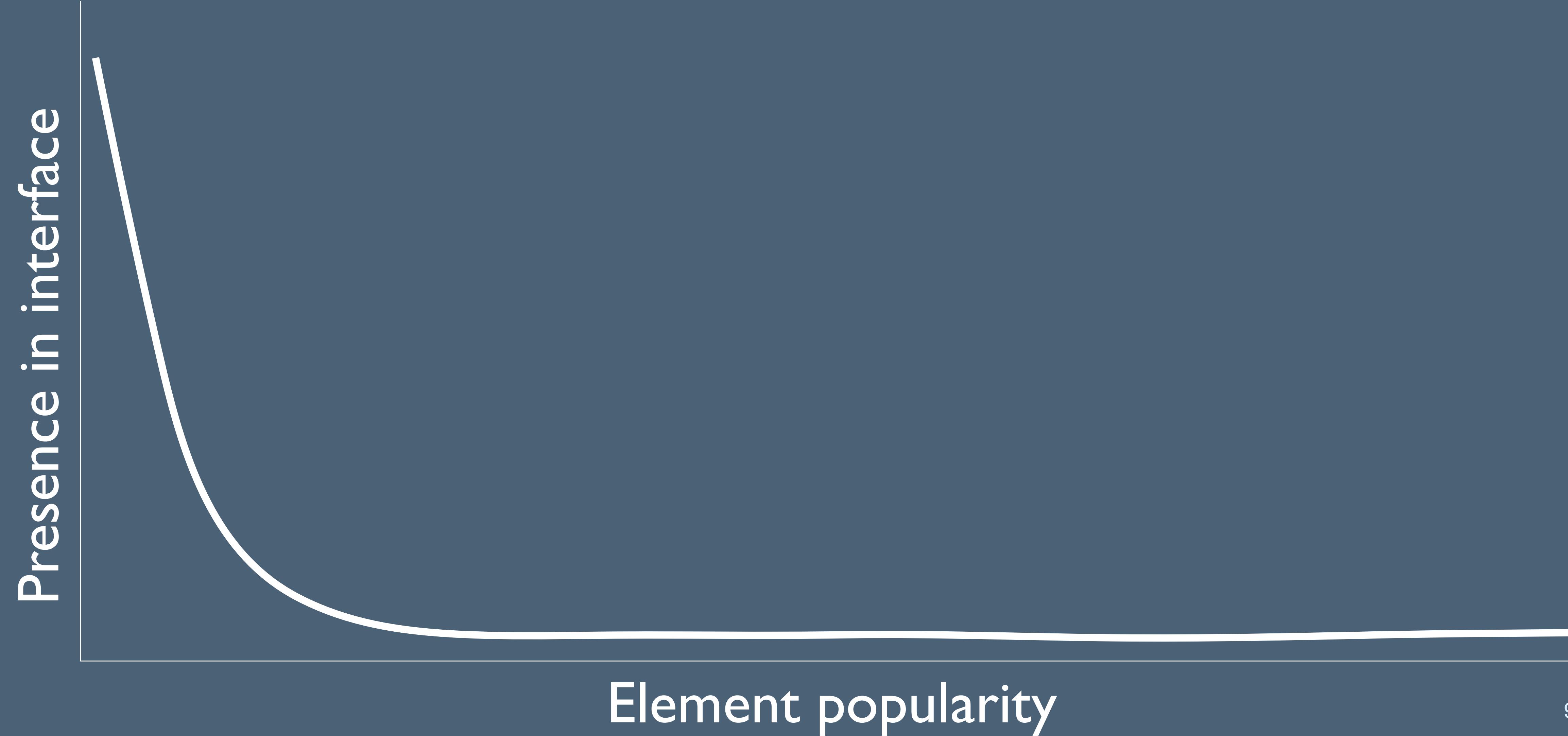
# 80/20: What's important?

- The 80/20 rule: 80% of the effects of a system are caused by 20% of the variables in that system.
- In other words: 80% of peoples' use will be focused on 20% of the features.
  - Be clear with yourself: what is in the 20%?
  - How do you amplify those elements and de-emphasize the others?

# Too uniform in emphasis

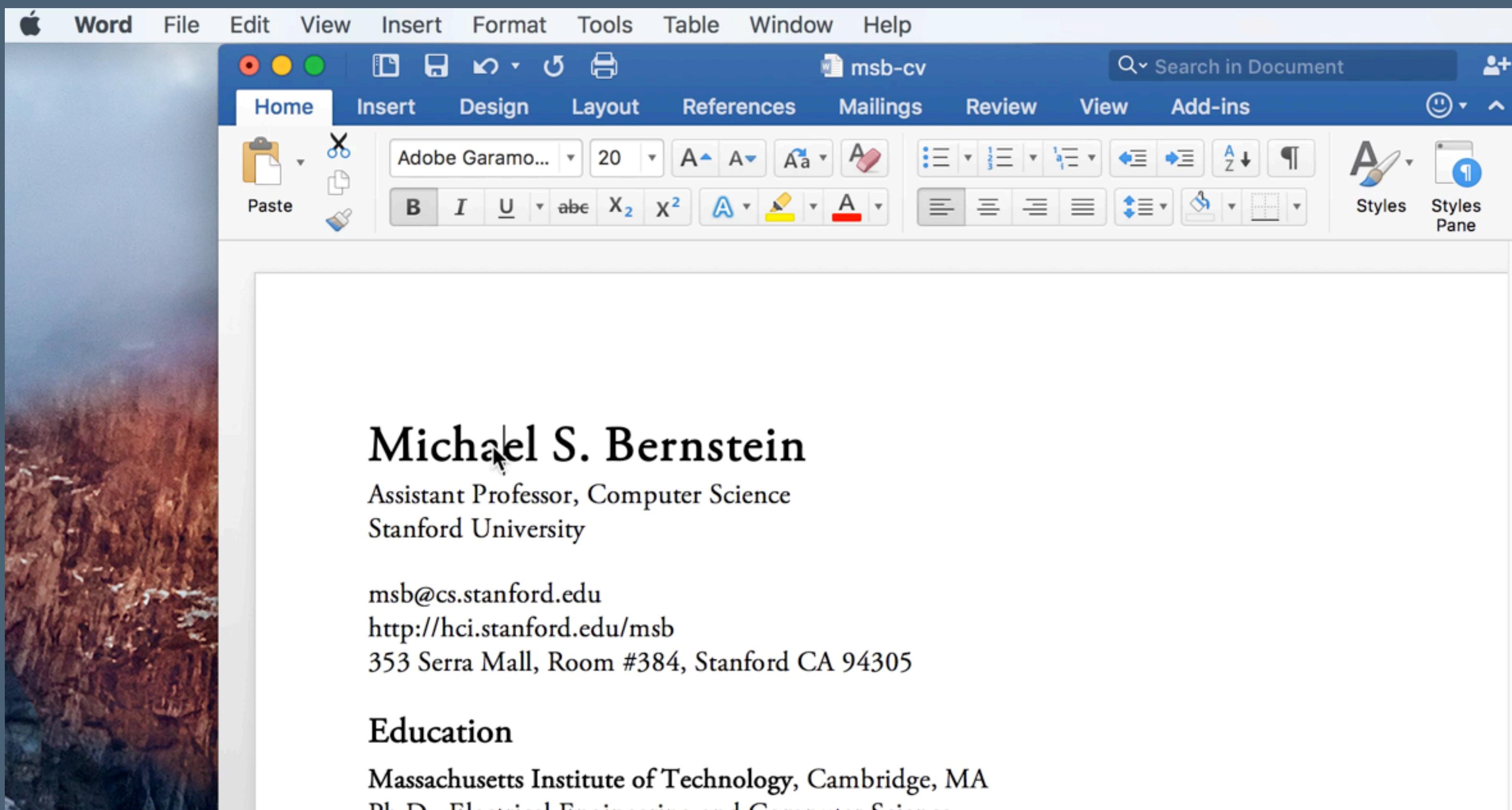


# More 80/20-aligned

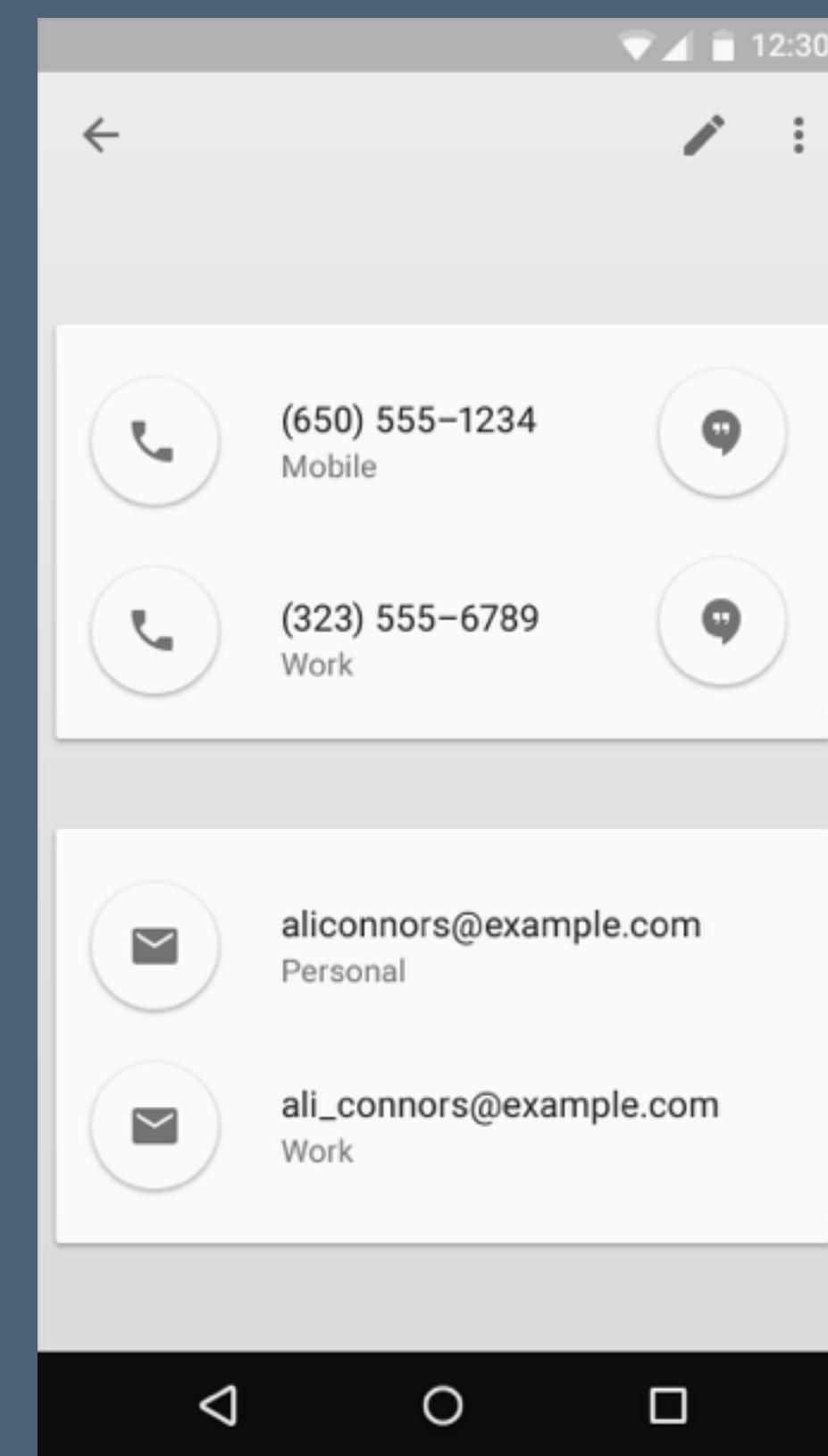
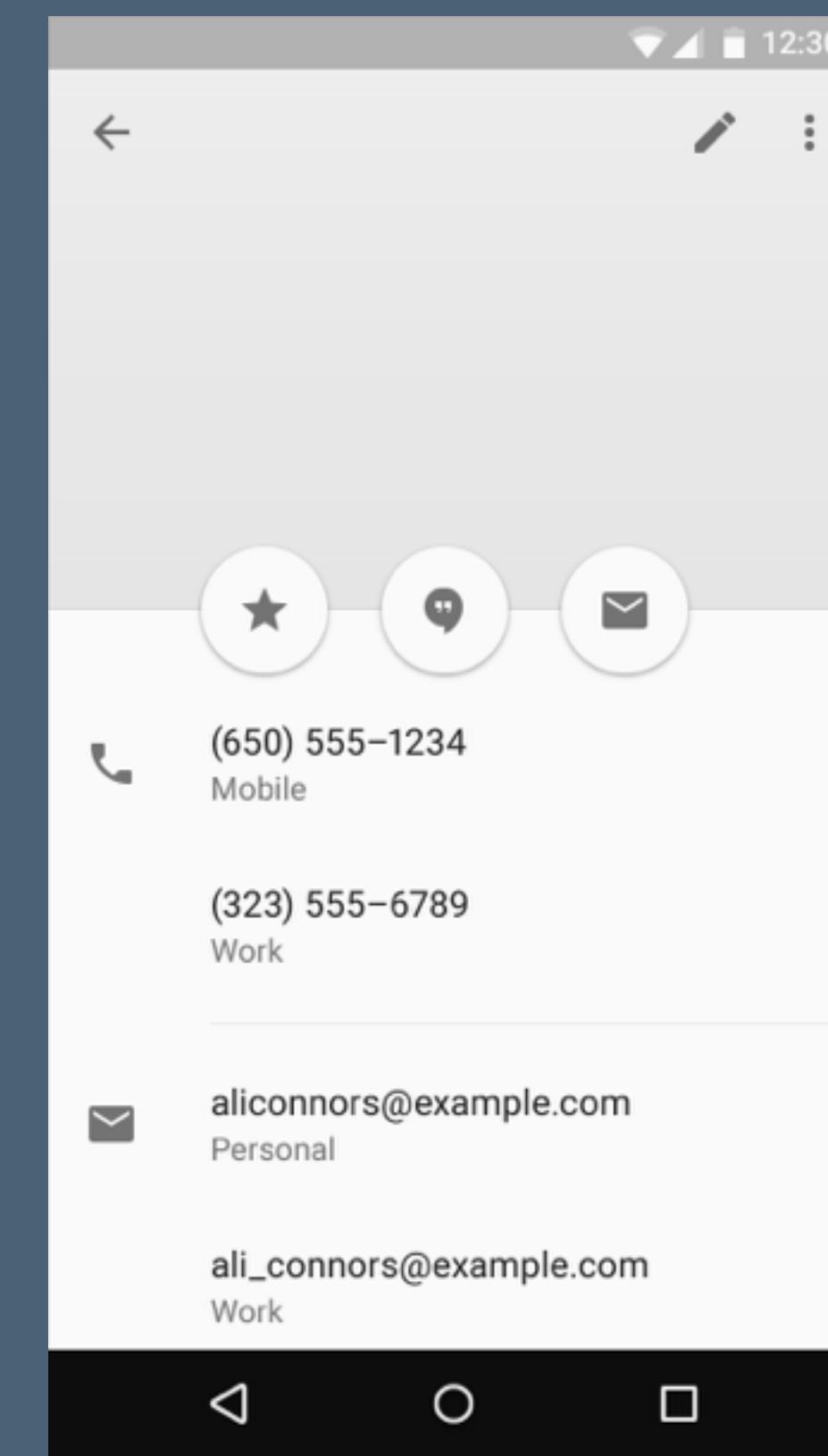
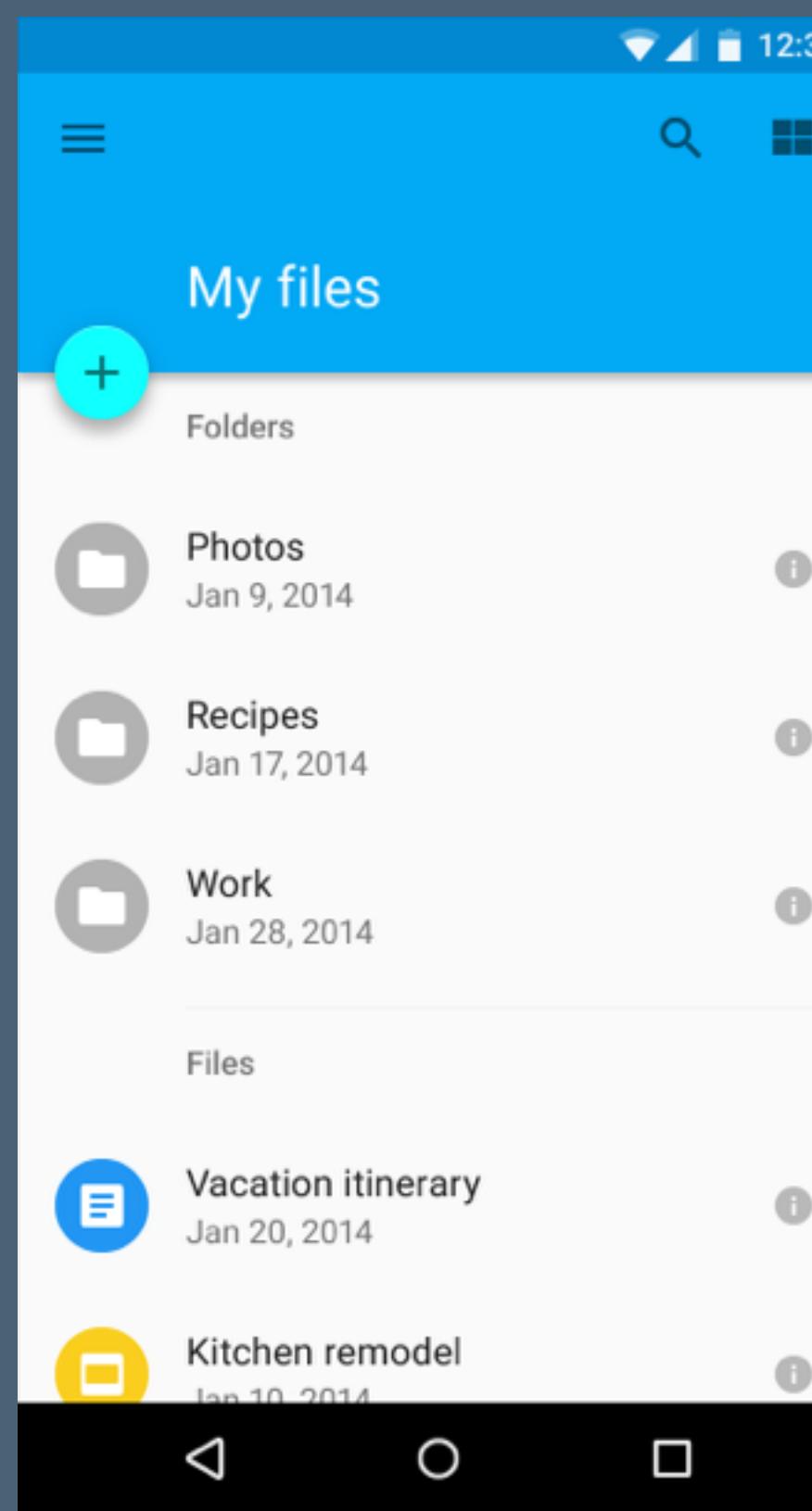


# Another perspective on 80/20

- Make that central 20% functionality easy, then make the other 80% possible



# Main goal: front and center



Do: one clear main action

Don't: multiple main actions

# Violations of 80/20

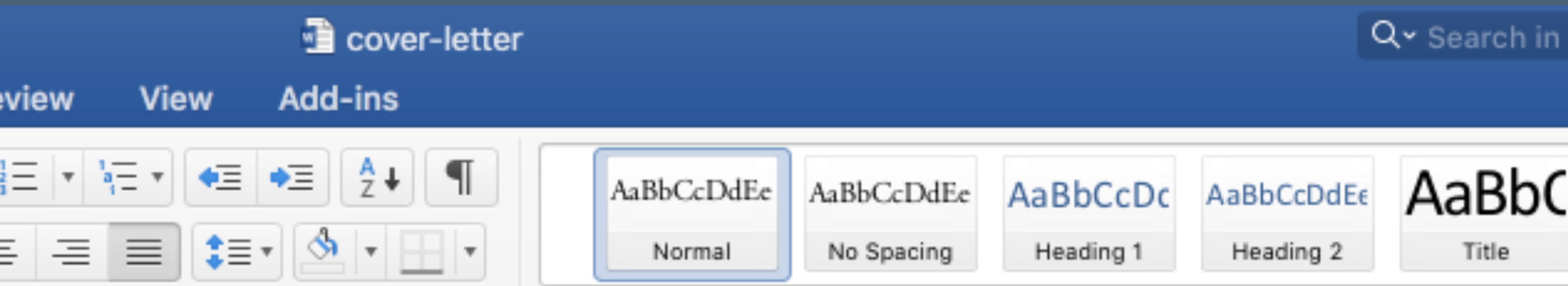
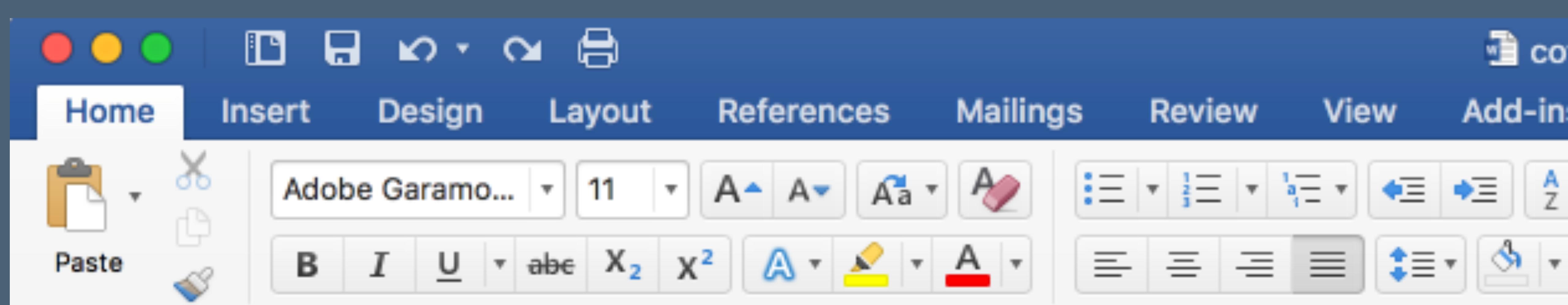
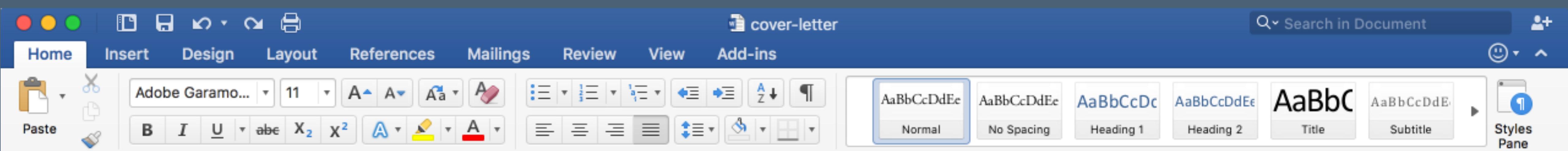
- Edge casers: every team has one member like this
  - “But what if the user wants to make the text small caps efficiently? It’s so inefficient.”
  - Be open to a discussion of how common the case is across all your users.
- Power users often live in the 80%. Unless you’re making a power user tool, stick to accelerators, customizations, and advanced menus to support them.

# Activity: What's the 20%?

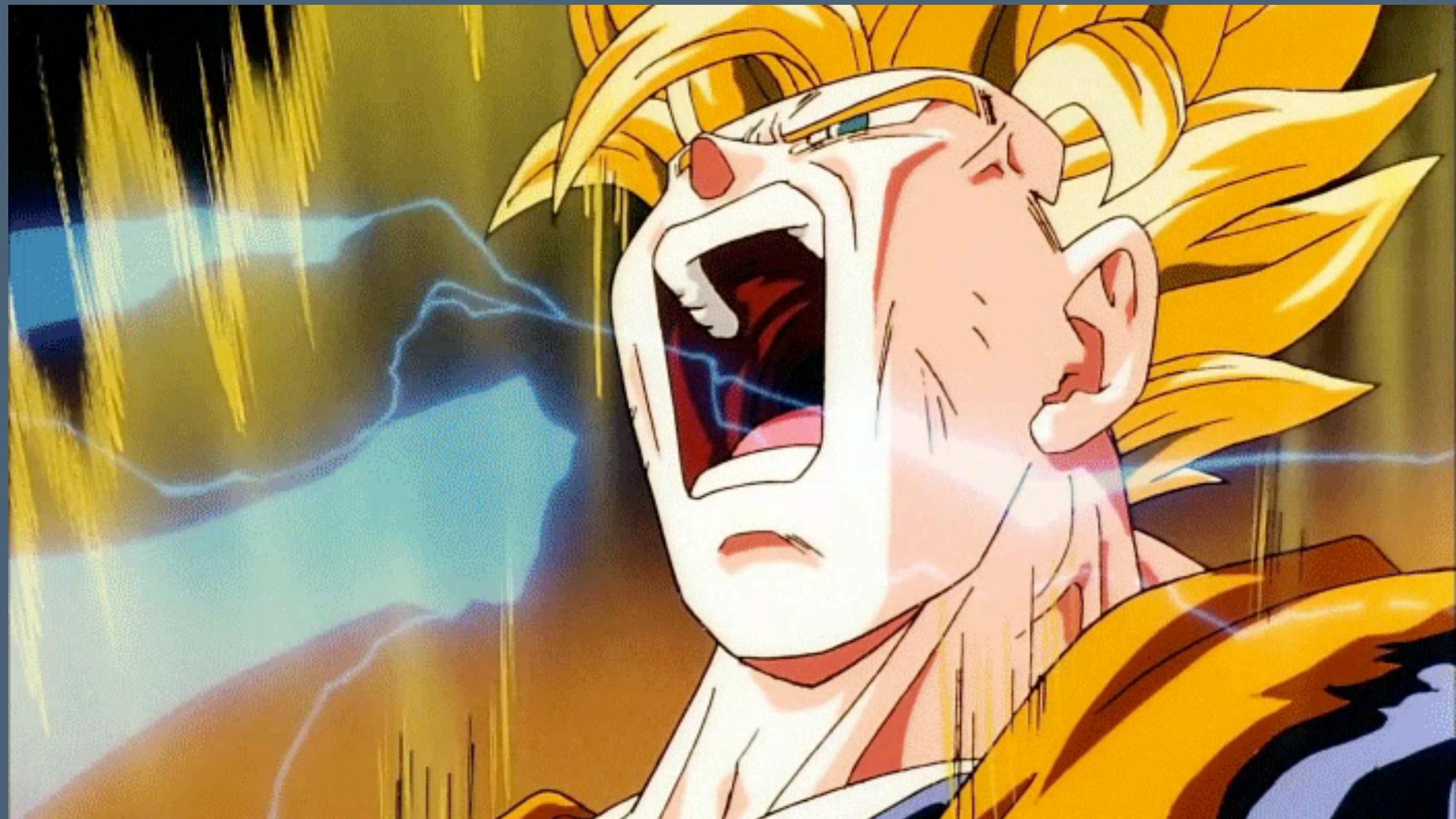
This is what's in the home ribbon tab for Microsoft Word. (Don't look!)

Design the layout. What would you put where? With what emphasis? What would you remove?

- Cut
- Copy
- Paste
- Format paint
- Font
- Point size
- Bigger font
- Smaller font
- Upper/lowercase
- Format erase
- Bold
- Italic
- Underline
- Strikethrough
- Subscript
- Superscript
- Text effects
- Text background color
- Text color
- Bullets
- Numbers
- Multilevel list
- Left indent margin
- Right indent margin
- Sort A–Z
- Show paragraph marks
- Left align
- Center align
- Right align
- Full justify
- Paragraph spacing
- Shading
- Border



# Energy and tension



# Uniform weights: little tension

- Some things must be small, so that others may be large



Example from Sean Adams, Stanford Lynda

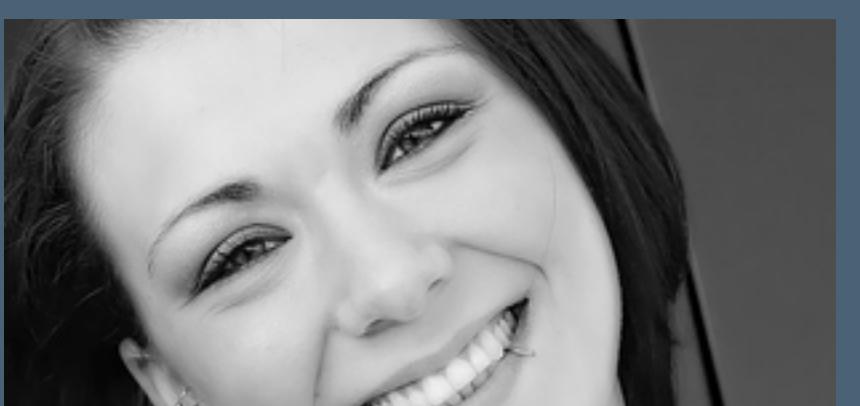
# Simple grids: little tension

- Tension requires elements that are not entirely predictable or repeated.
- However, they must still balance.

# Play with the grid

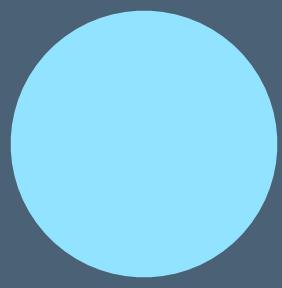
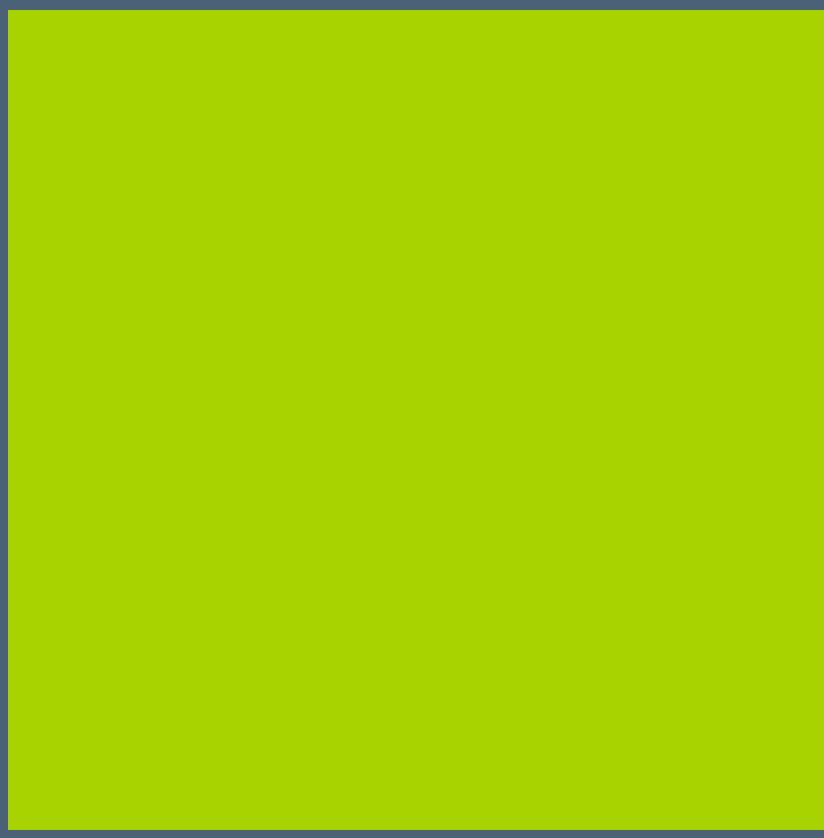


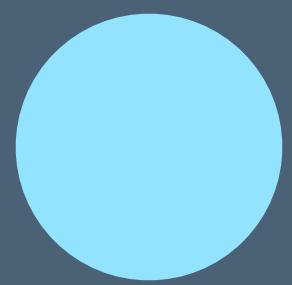
# Play with the grid

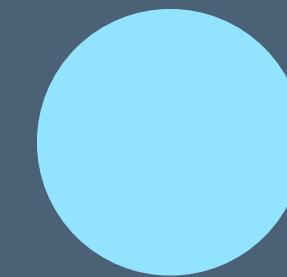
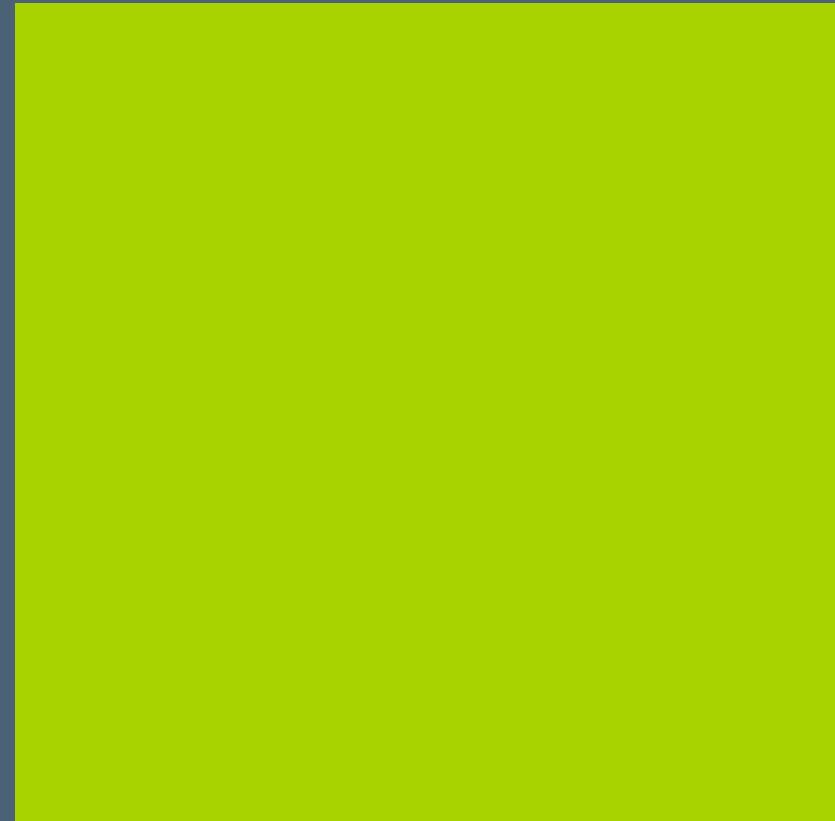


# Balance

- Create tension by breaking the grid, which puts extra weight in some parts of the design.
- Counter that tension to maintain overall balance in the design.







# De novo vs. patterns

“I’ll just write it myse—”  
“NO STAHP”

# What you already know

- Utilize reusable design patterns, (almost) never reinvent them



Autocomplete

[ui-patterns.com](http://ui-patterns.com)

[Design patterns](#) » [Techniques](#) » Module CSS Tabs

## Navigation breadcrumbs

# Resist the temptation

- It may seem like a good idea to develop your own icons for your design
- It's typically not a good idea
- Good icon design is hard

# Easy to find well-designed icons



The Noun Project

500px	500px	
■	battery-1 (alias)	
□	battery-empty	
■	battery-three-quarters	
📅	calendar-plus-o	
⌚	calendar-times-o	
chrome		
contao		
fonticons		
gg-circle		
a	amazon	
■	battery-2 (alias)	
■	battery-full	
👔	black-tie	
📅	clone	
cc	creative-commons	
○	genderless	
✋	hand-grab-o (alias)	

Font Awesome

# Utilizing years of refinement

- The native HTML user interface components are bland, incomplete, and do not carry modern affordances.

Button:

Reset button:

Single-line text input field:

Multi-line text input field (textarea):

  
//

<http://www.cs.tut.fi/~jkorpela/www/testel.html>

The following two radio buttons are inside a **fieldset** element with a **legend**:

Legend

Radio button 1

Radio button 2 (initially checked)

Check those that apply

# UI toolkits

- Capture today's best practice

Name	Double-Line Header	Rating	Signed Up ▾
 John Boo	ok		15 Sep, 8:56 AM (2013)
 Michael Robinson	ok		15 Sep, 7:12 AM (2013)
 Alexander Robson	Blocked		15 Sep, 4:34 AM (2013)
 Jannifer Pinsker	Blocked 24h		15 Sep, 2:08 AM (2013)
 Bob Robson	ok		15 Sep, 8:56 AM (2013)
 Michael Robinson	Suspect		15 Sep, 7:12 AM (2013)

## EXAMPLE

Default   Primary   Success   Info   Warning   Danger   Link

```
<!-- Standard button -->
<button type="button" class="btn btn-default">Default</button>

<!-- Provides extra visual weight and identifies the primary action in a set of buttons -->
<button type="button" class="btn btn-primary">Primary</button>

<!-- Indicates a successful or positive action -->
<button type="button" class="btn btn-success">Success</button>
```