## Please ask questions via the mobile app!





## Engage



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## DESIGN FOR A COMPLEX REALITY



"If good design tells the truth, poor design tells a lie, a lie usually related to the getting or abusing of power."

**ROBERT GRUDIN** 

### The missing design proof

### **Deceptive design** VS.

### Incorrect design

### Delivery Options

### Standard Delivery

Update Price

\$

Tickets will be sent by first class post

In some cases (such as when the event is happening soon) we are only able to offer a box office collection or a print at home service.

Cancellation Protection covers cancellation resulting from accidents and unexpected illnesses. Full details of our Master Policy are included in the terms and conditions. If you do not require this Cancellation Protection, please untick the box below.

I require Cancellation Protection for my tickets (additional cost £3.00) and I agree to the terms and conditions.

### Your Details

Title	Email Address
First name	Confirm Email
Last name	Telephone







### 0 0 List of cognitive biase W en.wikipedia.org/wiki/List\_of\_cognitive



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### List of cognitive

From Wikipedia, the free encyclopedia

Cognitive biases are tendencies to think in certain ways. Cognitive biases can lead to systematic deviations from a standard of rationality or good judgment, and are often studied in psychology and behavioral economics.

Although the reality of these biases is confirmed by replicable research, there are often controversies about how to classify these biases or how to explain them.<sup>[1]</sup> Some are effects of information-processing rules (i.e. mental shortcuts), called *heuristics*, that the brain uses to produce decisions or judgments. Such effects are called *cognitive biases*.<sup>[2][3]</sup> Biases in judgment or decision-making can also result from motivation, such as when beliefs are distorted by wishful thinking. Some biases have a variety of cognitive ("cold") or motivational ("hot") explanations. Both effects can be present at the same time.<sup>[4][5]</sup>

There are also controversies as to whether some of these biases count as truly irrational or whether they result in useful attitudes or behavior. For example, when getting to know others, people tend to ask leading questions which seem biased towards confirming their assumptions about the person. This kind of confirmation bias has been argued to be an example of social skill: a way to establish a connection with the other person.<sup>[6]</sup>

The research on these biases overwhelmingly involves human subjects. However, some of the findings have appeared in non-human animals as well. For example, hyperbolic discounting has also been observed in rats, pigeons, and monkeys.<sup>[7]</sup>

### Contents [hide]

Open "http://en.wikipedia.org/w/index.php?title=List\_of\_cognitive\_biases&action=edit" in a new tab

- Wikipedia, the free encyclopedia							
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biases							

### "Agile" all the things!

### The wrong tools



### How did we get here?





### http://wikipedia.org/





http://flickr.com/photos/adactio/



### Responsive design



# Fragmentation of screen sizes is just one of many symptoms

### Mobile first

### **Offline first**



### But wait, there's more!



### http://macrumors.com/





### http://pcmag.com/





### http://androidpolice.com/





### http://androidpolice.com/



### The "tweeting fridge"-problem



### http://wikipedia.org/







# The upcoming generation will exclusively use mobile devices

### The upcoming generation will no longer distinguish between online and offline

# It's a blurry mess but at least it plugs into the internet.

# Blaming the tools

### "Men have become the tools of their tools."

**HENRY DAVID THOREAU**
(WARNING: Metaphor ahead)



# — And that's pretty much it.\*

(\*Slight exaggeration for effect. Please don't send me angry emails.)

# Just kidding, we still have box models.





### A Visual Web Design Process for Clients & the Responsive Web

Style Tiles are a design deliverable consisting of fonts, colors and interface elements that communicate the essence of a visual brand for the web.

They help form a common visual language between the designers and the stakeholders and provide a catalyst for discussions around the preferences and goals of the client.



**RESPONSIVE DESIGN** 

STYLETILES

C Reader

Fonts T

### WHAT ARE STYLE TILES?

Style Tiles are similar to the paint chips and fabric swatches an interior designer gets approval on before designing a room.An interior designer doesn't design three different rooms for a client at the first kick-off meeting, so why do Web designers design three different webpage mockups?

## We need new tools

# Prototyping as Tool for Strategic Design

# "We can only see a short distance ahead, but we can see plenty there that needs to be done."

**ALAN TURING** 

# A design proof

## Work across silos

# Support short iterations

**Involve the user** 

# Involve designers early-on

# Enable sustainable solutions, not just another product

# The 10.000ft view



## Production

## Business prototype

The rules



# Every step of ideation must be followed by a step of validation.



# Design should happen as close as possible to the client.



# Constant change is not only anticipated but supported by all used tools.

# Prototypes don't have to be dead ends.



# The expectation

# Allow for high development speeds

# Adapt to change

## Increase transparency

# Simplify variations

The process

# Prototyping





### Concept

## Prototyping





# A word on education

# Prototyping using Web Technology



Enabling Innovation



- 1. Web technology (HTML, CSS, JavaScript)
- 2. Meta languages (Haml, Slim, Sass, CoffeeScript)
- 3. Development stack built on interpreted languages (Ruby, JavaScript)

## Transparency

- 1. Deployed to publicly available servers with no dependencies on other systems
- 2. Accountability of the design
- 3. Accessible through modern and widely available browsers / no prerequisites
- 4. Higher availability of experts
- 5. Lower learning curve to build the skillset up
#### Variations

- 1. Different takes on features support for branching and merging through SCM (Git)
- 2. Visual variations for e.g. map skinning, app skinning or condition-based permutations
- 3. Variations of UI features per device/client

### **Extending the browser**

- 1. Multi-screen prototypes
- 2. Various input methods (touch, indirect, sensory)
- 3. Communication between devices (e.g. location sharing via a socket server)
- 4. Technology embeds



#### Validation

- 1. Tangible design process
- 2. Present design intent clearly or even bypass steps like wire framing
- 3. (Very) short iteration cycles
- 4. Enable user testing or validation early on
- 5. Possible to utilize web analytics to track user behaviour, detect potential pitfalls and identify opportunities from data with less resources

Example

#### Requirements on the stack

- 1. Flexible
- 2. Extendable
- 3. Modular
- 4. Convention over configuration







Ruby
Middleman
Rack



#### **Client instances**

HTML
CSS
JavaScript
SVG templating

#### **Client Instances**

WS Server

JavaScript
Node.js
Express
Einaros/WS
API/Access





- 1. Mark-up
- 2. Styles
- 3. Functionality





#### Shared resources

- 1. Versioned
- 2. Isolated
- 3. Development using Bundler
- 4. Distributed as Ruby Gem via Github









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# 

### SIL





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